

# Group Decision-Making – Language and Interaction



GOTHENBURG MONOGRAPHS IN LINGUISTICS 32

Group Decision-Making – Language and Interaction

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Dissertation for the degree of Doctor of Philosophy in Linguistics  
Göteborg University 2006-09-16

Second edition

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Layout: Therése Foleby

ISBN: 91-975752-6-7

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# Abstract

The dissertation investigates group decision-making from a linguistic perspective, which means that the linguistic interaction in group decision-making is put in focus, but also that linguistic methods are used to perform the investigation. The main research questions are i) what are group decisions, ii) how are group decisions made, linguistically, and iii) how does group decision-making relate to other social activities?

The dissertation has five main parts. The first is a survey of previous research on group decision-making, including work done in social-psychology, communication research, linguistics and argumentation analysis. The second part of the dissertation is an analysis of the concept of decision, where dictionaries, thesauri and corpora are used as empirical input. The third part is a study of argumentation in group decision-making, where one well-established theory of argumentation analysis, pragma-dialectics, is discussed critically, and merged with a modern theory of language. The fourth main part of the dissertation concerns interactional patterns – a corpus of decision-making conversations is scrutinized, and patterns are extracted and discussed. The fifth and last of the main parts is a study of word frequencies in the group decision-making corpus, where methodological problems are discussed, and a number of measures based on word frequencies are presented.

The results of the dissertation include the survey of previous research on group decision-making, a concept analysis of decision, as well as a new model for argumentation analysis. Some more specific results are that there is considerable variation among the groups as regards the way decisions are made, although group decisions always are oriented around proposing-accepting. In addition it was found that the language in group decision-making is often quite advanced and that arguing is an integral part of group decision-making.

*Keywords:* group decision-making, argumentation in conversation, arguing, decision, interactional patterns, word frequencies, corpus linguistics, concept analysis, concept determination



# Acknowledgments

Many people have generously lent me their help in the creation of this book. Leif Grönqvist led me by the hand through the swamps of statistics. My supervisor, Jens Allwood, laid my half-finished ideas bare, and forced me to think them through. Staffan Larsson and Stina Eriksson helped me realize how difficult it is to achieve inter-coder reliability for communicative acts. Jan Einarsson gave me important background information about some of the recordings I used. Cajsa Ottesjö provided me with recordings, and along with Elin Almér, Stina Eriksson, Peter Juel Henriksen and Cecilia Alvstad she gave me valuable feedback on the text. Therése Foleby, with the limited means I gave her, made the book considerably more beautiful and pleasant to read. Numerous people at the Department of Linguistics at Göteborg University have helped me penetrate the mysteries of group decision-making, through many department seminars.

Thanks, all of you.





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# 1. Introduction

## 1.1 Group decision-making

The phrase *group decision-making* may sound very formal, important, and almost ominous. Men in dark suits meet around mahogany tables to make decisions about the future for thousands of people. Heads nod slowly, stern faces turn, a heavy gavel strikes.

However, group decision-making is really about arranging to do things with other people. Two friends who meet on the street and decide to go for a pint later in the evening, a married couple choosing wall-paper for their living room, or a small football team making a decision not to participate in a regional tournament 300 km away. Of course, the example of the men meeting around the mahogany table is also a case of group decision-making, but the point is that group decision-making is something that we all do, most every day – we use language to make decisions with other people.

One may ask if group decision-making is not in itself more interesting than the language and communication of group decision-making, but the way I see it, there is no real conflict. Language is the primary expression for, and means through which we make group decisions, and we need to understand communication in group decision-making in order to understand group decision-making.

## 1.2 The aim of this study

In this study, I will investigate and describe group decision-making from a linguistic viewpoint. This means that the language used in group decision-making will be investigated and described, and also that linguistic methods and theories will be used to study group decision-making as a whole. Group decisions are part of the social microstructure that forms the basis of the macrostructure of society, and studying social microstructure is closely linked to studying language and communication. In this thesis, I shall use linguistic methods to investigate the social microstructure, and more specifically I shall investigate group decision-mak-

ing by studying the language used in group decision-making. The following questions describe the research focus of this study.

- What are group decisions?
- How are group decisions made, linguistically?
- How does group decision-making relate to other social activities?

Group decision-making can be assumed to be quite different in different cultures, but in this investigation I shall not attempt a cross-cultural comparison, but limit the study to Swedish culture. I expect many of the findings to be valid for other cultures as well, but comparison with other (future) studies will be necessary to find out precisely where the cultural borders of group decision-making lie. However, despite the monocultural approach of this study, it may still be of interest for intercultural research on group decision-making. Since much of the previous research done on group decision-making is made on US American groups, this study is interesting because it is done on Swedish groups. Further, the linguistic approach used in this work is well suited for intercultural comparisons, and it could thus be used as a basis for comparison in later studies of group decision-making in other cultures.

(This aim is described in more detail in section 2.6, p. 39 ff. and 3.5.3, p. 108 ff.)

### 1.3 Rationale

Group decision-making is very common, people engage in it all the time, primarily through linguistic interaction. At the same time, many of the most important social structures around us are controlled by group decisions (at least in western democracies) – laws are made, taxes are set, and people get hired and fired; just to mention a few things that can be decided by groups. Group decisions are therefore of general interest.

It is also interesting to see how group decision-making is done linguistically. Language is the primary tool for communication, and studying the linguistic communication in decision-making groups should lead to increased understanding of group decision-making. Apart from the direct goal of better understanding of a specific human activity, this could in turn help people avoid or solve problems involved in group decision-making, i.e. potentially improving decisions and groups.

Finally, my own personal interest in group decision-making has a very functional and normative background – why do people sometimes get stuck in group decisions? Even unimportant decisions like where to go for a beer on a Wednesday night can take ages. From this arises a general curiosity about group decisions. What are they? How are they performed?

## 1.4 Outline

The present investigation of group decision-making starts in chapter 2 with a survey of previous research. It provides an overview of the existing research on group decision-making, as it is being done in social psychology, (speech) communication research and argumentation analysis. It also contains a description of the relevant linguistic theories used in this dissertation. At the end, I describe a model of group decision-making that relates the different varieties of previous research on group decision-making to each other, and explains how the parts of this study relate to this.

After the background chapter the concept of decision will be analyzed, in chapter 3. This is intended to clarify what group decisions are, and how the concept is related to other, neighboring concepts.

As the model of group decision-making at the end of the background chapter will show, a group decision may be preceded by argumentation. Chapter 4 discusses a linguistic approach to argumentation analysis. An existing and well-established model for argumentation analysis, pragma-dialectics, is examined critically, and combined with the linguistic and communication-oriented theory of activity-based communication analysis. The resulting model is used to analyze an example conversation containing argumentation.

The actual decision-making is also worth some attention, and chapter 5, titled *Interactional patterns*, deals with this. A corpus of transcribed recordings of conversations where people make group decisions is used as the empirical basis, and interactional patterns are extracted.

The final study, chapter 6, investigates the language of group decision-making using word frequencies. The measures and word lists are generated from the corpus used in chapter 5, and these are compared to two other activity types.

In chapter 7 the different parts of the dissertation are discussed together, and general conclusions are drawn.

## 1.5 Translation

This work contains a lot of examples and excerpts from Swedish corpora, all of which are translated into English. Translations are always tricky, and since much of the material is spoken language, the translations are often more difficult than usual – colloquial and interactive language can be very difficult to understand even before it has been translated, and important cues may be lost in translation. I have tried to make the translations easy to understand, which sometimes has led to translations that deviate somewhat from the literal meaning of the originals. The focus has always been to clearly show the point of the example or excerpt.

For people with no knowledge of any Scandinavian language, appendix 8 contains a brief introduction to the Swedish language.



## 2. Previous research

### 2.1 Introduction

In this chapter I shall give an overview of the previous research done on group decision-making and its language. Group decision-making has been studied in several academic disciplines, and as a whole it can be considered a fairly well-established research field. Among *social psychologists* it is studied as a sub field of the more general *small group research*, and among *communication scholars* as one type of group communication. These scientific disciplines are rather young, since investigations directly focusing on face-to-face interaction between human individuals did not start until the early 20th century. However, less explicitly, group decision-making is studied in *argumentation analysis* and *rhetoric*, with a much longer history, dating back about as far as scientific records goes, to early Greek antiquity.

Other relevant research has been done by linguists interested in group communication in general. The present work subscribes to the view that group decision-making is a part of the social microstructure that constitutes the foundation of the macro structure of society, and the sociological/linguistic research direction of *ethnomethodological conversation analysis* studies how this micro structure is created and upheld. Other researchers have approached spoken, face-to-face interaction with somewhat different theoretical frameworks, e.g. Jens Allwood (Activity-based Communication Analysis), and several researchers connected to Association Theory, such as Henri Tajfel, Howard Giles and Nikolas Coupland (Thanasoulas 1999). Erving Goffman, though primarily a sociologist, developed theories that have become widely used among linguists (Lemert and Branaman 1997).

This chapter presents work done on group decision-making in these scientific fields. The main reason for this is to give an overview of a field that is scattered over several academic disciplines, and to show the background to which this dissertation connects. The presentation starts with a description of the explicit research on group decision-making made in social psychology (2.2), in which we find the first cases of modern group decision-making research. Somewhat later, communication scholars started to show an interest in the subject, and their research is presented in the subsequent section (2.3). Linguistic theories and

studies relevant for communication in group decision-making are presented after that (2.4), and in 2.5, relevant research in argumentation analysis is described<sup>1</sup>. Finally, section 2.6 provides a comparison between the research in all of the above academic fields.

## 2.2 Group decision-making in social psychology

### 2.2.1 Roots

The research done on group decision-making in social psychology, as we shall see, is not directly concerned with the *communication* in group decision-making, but social psychologists were the first ones to study group decision-making explicitly, and the foundation they lay have influenced most of the later research in this field. The study of human interaction in a very general sense has, of course, a long history in rhetoric, sociology, political philosophy and other disciplines, but investigations focusing directly on face-to-face interaction between human individuals did not start until the early 20th century. At that time, social psychologists in the US started posing questions and seeking answers to why certain groups worked “better” than others. Dashiell (1935) reviews several studies under the heading “The Effect of Group Discussion on the Individual’s Work”, the earliest from 1914. One important factor fueling these studies was a discussion in the US about the efficiency and reliability of the jury system. The discussion emphasized normative questions such as what kind of groups produced the best results. Another factor seems to have been an urge to show that democratic systems were better than authoritarian/fascist ones (Dashiell 1935:1132; Frey 1996:22; Davis and Verlin 1982:2).

These early studies were done as experimental (social) psychology, and were typically based on people’s estimation of the length between two taps on a table, the number of beans in a jar, or something similar. The correctness of their estimations could be measured before and after discussions. Some efforts were made to create more naturalistic experiments (Dashiell 1935:134), but on the whole these studies used rather artificial settings.

During the 1940’s and 1950’s, theories were developed that tried to explain the results of these studies. Four of the more influential ones, *field theory*, *social systems theory*, *social exchange theory* and *interaction theory*, are presented below.

### 2.2.2 Field theory

The first theory attempting to explain group decision-making was Kurt Lewin’s *field theory*. It was not designed to study decision making specifically, but rather it

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1. *Decision theory* may sound like a field of great relevance for the present project, but decision theory is a framework for prescribing which decisions to make in difficult choice situations. It has very little to do with interaction in groups.

was a general psychological theory expanded to work on group dynamics. In field theory, the relevant factors for understanding an individual's behavior are captured in the concept of the *life space* of an individual, i.e. 'the relevant physical and social facts in [the individual's] surroundings (...) represented in the way [the individual] perceives them'. (Lewin 1952:196). When two or more individuals interact, their life spaces become interdependent, and the sum of the life spaces is the life space of the group.

In practice, it is often impossible to model each individual of a group, and so the life space of a group is modeled directly, as a *social field*. Lewin explains the idea of a social field in the following way: 'this means that the social happening is viewed as occurring in, and being the result of, a totality of coexisting social entities, such as groups, subgroups, members, barriers, channels of communication, etc' (Lewin 1952:200). Any event within such a field is seen as a result of forces in that field. Lewin gives an example from investigating the level of aggressiveness in a group of boys. A force working towards more aggressiveness could be a wild game the boys are playing, and a force working against aggressiveness could be friendship between members.

The theory is highly abstract and does not specify which factors are relevant for understanding a group or an individual, nor how different factors affect each other, and field theory did not catch on very well. However, somewhat later, Lewin's work spawned research that perhaps was not directly connected to field theory. One such "spin-off" came from the claim made in field theory that the degree of interdependence between the life spaces of the members in a group depends on group cohesion, i.e. how much the members commit themselves to the group and the group task. Research on *group cohesion* took place in the 1950's and 60's (Frey 1996:23).

Another claim made by field theory was that one of the factors involved in the creation of group cohesion was the requirements that the environment put on the group. This led to research on *communication networks*, that is, how and with whom members of a group communicate. Frey (1996:23) writes, 'Although some differences in group problem solving were found among the networks, later studies showed that with practice each network was as effective as the others'.

The third important influence of field theory was on *leadership research*. The theory argued that the actions made by and in a group "locomote" the group towards or away from its goal, and leadership research started investigating how the leader of a group "locomoted" the group (Frey 1996:23-24).

### 2.2.3 Social systems theory

The second theory on group interaction to develop was social systems theory, and the most influential version of this was developed by Talcot Parsons (Ridgeway 1983:37 ff). Similar to field theory, social systems theory viewed groups as holistic units based on interdependence among members. The basic idea of the

theory was that groups must satisfy certain functional prerequisites, or they break down. Ridgeway identifies four such basic needs in her presentation of the theory:

- *Pattern maintenance*  
*The cultural and behavioral patterns that give the group its distinctive character must be maintained. In small groups, this means that the individuals must share a commitment to maintaining the groups distinctive identity.*
- *Adaptation*  
*A group must successfully relate to its environment (both social and physical), overcoming environmental threats and obtaining from the environment needed resources.*
- *Integration*  
*The group must develop rules for coordinating the activities of its various parts and achieving a certain sense of cohesiveness.*
- *Goal attainment*  
*Groups have to develop a sufficient organization and control over their behavior to at least minimally accomplish the tasks of goals for which the members have joined together.*

(Ridgeway 1983:44-45)

The prerequisites listed here clearly overlap with each other: keeping a distinctive character for the group (pattern maintenance) must be relative to the environment, and thus overlap with the goal of adaptation, and the goals of integration and goal attainment overlap in that they both concern organization of the parts of the group. Further, integration may be a part of or a means for achieving pattern maintenance, since a certain sense of cohesiveness ought to be necessary to “maintain a distinctive character” for the group. Similarly, it may be necessary to “develop rules for coordinating activities” in order to “successfully relate to the groups environment”, which means that integration is a means to achieve adaptation. The fourth item, goal attainment, also seems to be a very general purpose for the group, an end for which the first three items are means. This failure to keep the prerequisites separated analytically may be one of the reasons the theory did not survive in this form<sup>1</sup>.

However, according to Parsons, different groups will develop different patterns of interaction and social structures in order to fulfill these four needs, but once they have developed a set of such interactions and structures, they will be unwilling to change it. This is called an *equilibrium state*. Social systems that develop

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1. It is possible that the blame for this should be put on Ridgeway rather than on Parsons, since Ridgeway is the main source of information about Parsons' theory here. Unfortunately, I have not been able to find an overview of Parsons' theory written by Parsons himself.



mechanisms for maintaining their equilibrium when events affecting the balance occur, are the ones that survive.

Social systems theory has been criticized on several accounts (overlapping prerequisites being only one criticism), but several of its ideas have survived, primarily through Bales' interaction theory, which can be seen as a version of social systems theory. Bales' work will be presented below, but first we shall turn to a slightly peculiar theory that was developed during these early years.

#### 2.2.4 Social exchange theory

A somewhat odd bird among these early theories is social exchange theory. According to Gouran (1994), this theory developed when some researchers in the 1950's and 60's tried to explain group interaction in what can be called economic terms, in line with reinforcement theories of behaviorist psychology. In contrast to field theory and social systems theory (above), they did not view groups as holistic units, but rather as a number of interacting individuals. The theory claimed that group participants were *profit-seekers*, i.e. they tried to maximize *rewards* and minimize *costs*. Rewards were simply things that individuals found pleasurable, and costs were things that individuals found painful. According to the reinforcement theories, the more rewarding a certain behavior is, the more likely the actor is to repeat that behavior (until a satiation point is reached, where the actor tires of the behavior). In a group context, this meant that interactions that are rewarding, giving the actor something she values, are more likely to be repeated than interactions that are painful. The fact that interaction always involves at least two actors makes things a bit more complicated: other people will not participate in the interaction unless they find it rewarding too. Because of this, an actor who finds a certain interaction rewarding and wants to repeat it will have to give rewards as well as receive them, even if this requires some painful behavior (provided the reward is greater than the cost). Examples of works in this school are (Thibaut and Kelley 1959) and (Homans 1961). (Homans also participated in the development of social systems theory somewhat earlier).

Social exchange theory is most interesting when compared to the other main theories, since it does not treat the group as a whole, but tries to reduce the behavior of the group to the behavior of the individuals. This stands in stark contrast to the other theories, primarily social systems theory.

Ridgeway (1983:40) claims that social exchange theory was very influential in psychological studies of leadership emergence, member satisfaction, social influence, and the like. However, I have found very few traces of this theory in later research on group decision-making. Gouran et al. (1994) admits that social exchange theory had very little direct influence on communication research on groups, but identifies three more general contributions that it had to the general body of small group research: i) the recognition that any contribution of group interaction is part of a chain of responses and evocations (or stimuli, as they would probably phrase it), ii) the emphasis on communication being important

for shaping of developments in groups, and iii) the reinforcement of ‘the view that human behavior is law-governed and no different in that sense from the behavior of other animate and inanimate objects’ (Gouran et al. 1994:247).

### 2.2.5 Interaction theory

Returning to the main path of the root system of modern research on group decision-making, we shall now have a look at the works of Robert Freed Bales. He was influenced by field theory, but his work was more directly a form of social systems theory. He argued that groups constantly try to balance external forces (arising from task issues) and internal forces (arising from social-emotional issues), and that successful groups in this respect develop what he called a *dynamic equilibrium* (Gouran et al. 1994:248; Frey 1996:24; Bales and Strodtbeck 1951). This differed from the equilibrium state of social systems theory in that a basic antagonism between task demands and social-emotional demands was assumed by Bales. In a dynamic equilibrium the group constantly switches between task and social-emotional problems.

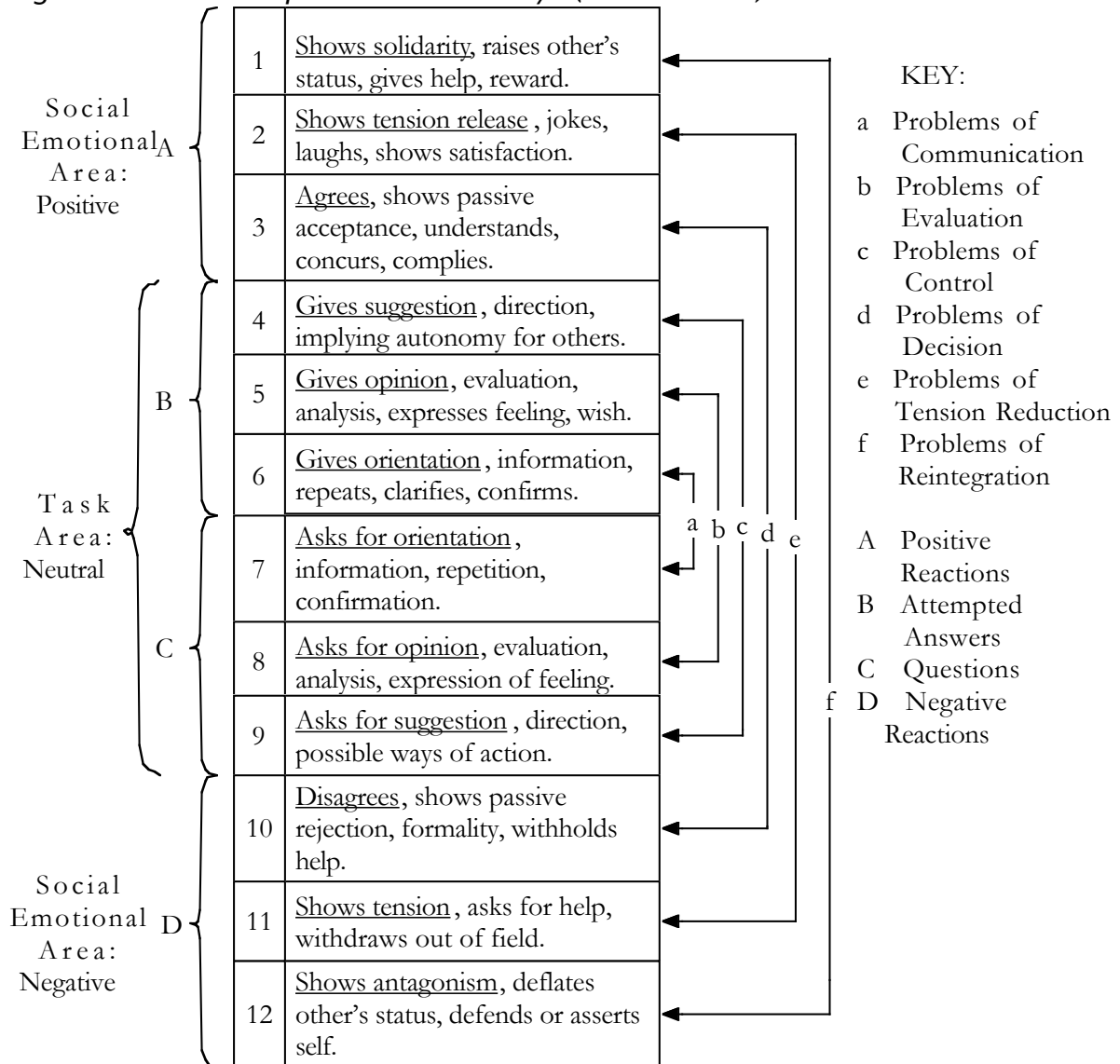
In order to study the creation and maintenance of this equilibrium, Bales developed *Interaction Process Analysis* (IPA), a method for studying small groups including a speech act taxonomy (‘an observational scheme for coding behaviors enacted during group discussion’ (Frey 1996:24)).

The IPA speech act taxonomy has been widely used in small group research, and is worth some special attention, see figure 2-1.

The theoretical basis of the taxonomy consists of two parameters, *the mode of orientation* and *the sequence of problem solving*. There are three different modes of orientation: *cognitive* (perception, memory and recall, observation of and inference about an object, and communication with social objects, etc.), *affective* (emotional and optative reactions to, and evaluations of, an object) and *conative* (decisions about an object and active, overt attempts to withdraw from, adapt to, manipulate or some other way manage an object) (Bales 1950:52). These modes should be understood as aspects of all actions, but they can be more or less focused.

The sequence of problem solving is a way to capture the intuition that some acts are more dependent on the previous act than others. *Initial acts* are rather independent acts, signaling a difficulty or a need, or being primarily expressive. When another participant reacts to an initial act, for example by trying to help with a difficulty, that is a *medial act*. The first participant then evaluates whether the medial act was successful or not in solving the problem, and reports the evaluation in a *terminal act*. An example of this sequence is someone asking a question (initial), another participant answering (medial), and the first person responding with a new question, not being entirely happy with the answer. This last step is terminal for one sequence, as well as being initial for the next sequence of problem solving.

Figure 2-1: The IPA speech act taxonomy (Bales 1950:9).



Since terminal acts can be either positive or negative, the sequence of problem solving generates four categories of acts. These four categories combined with the three categories of mode of orientation yields the twelve categories in figure 1 above<sup>1</sup>. This theoretical description gives the impression that having twelve categories is "natural", but Bales says explicitly that he experimented with many more categories, and that the main reason for choosing twelve was that the computer punch cards used at the time was limited to twelve elements.

1. Bales does not point out exactly how the twelve categories relate to the underlying parameters, but the way I understand it, 9, 4, 3 and 10 are conative acts (initial, medial, positive final and negative final); 7, 6, 2 and 11 are cognitive acts; and 8, 5, 1 and 12 are affective acts.

Bales also groups categories 1-3 with 10-12 into a *social-emotional* cluster, to be distinguished from *task-oriented* categories. This grouping is claimed to be made, ‘not according to the type of functional problem with which [the categories] deal, but according to their implication, positive or negative, for the solution of these types of problems’ (Bales and Strodtbeck 1951:488). It was mentioned initially that the basis of Bales’ theory is the understanding that external forces (task demands) must be balanced with the internal forces (social-emotional demands), and this grouping is where that theoretical basis enters the coding scheme. It is a fundamental conceptual pair in Bales’ work, and one that is very much a part of present day research. However, one immediate problem with this distinction is that social-emotional issues may be the task of a group. Let’s say a small company with only seven co-workers has decided to throw a party, in order to get people to know each other better and improve the social-emotional atmosphere. All seven co-workers gather to organize the party. How can social-emotional tasks be distinguished from task-demands in such a group?

Subsequent small group research has been heavily influenced by Bales’ method: acts are identified, categorized and then analyzed statistically. It is a standard method among outcome oriented communications scholars (see 2.3.2 below, p. 17ff.), but the precise coding schemes may differ considerably. Salazar (1997) uses a modified version of a scheme originating from Hirokawa (1990), and Beck & Fisch (2000) uses what is called *Conference Coding System* developed by Fisch (1998), to mention two schemes; a longer list can be found in (Frey 1996:29).

Studying task-solving groups using IPA, Bales identified phases that all, or at least all ideal, groups go through (Bales and Strodtbeck 1951). In the first phase the group emphasizes problems of *orientation*, in the second phase *evaluation*, and in the third phase the emphasis is on *control* (Bales and Strodtbeck 1951:485). The study spawned a significant subfield of small group research about developmental processes in group decision-making, and a number of models have been suggested. The model proposed by Bales and Strodtbeck is classified as a *unitary sequential phase* model by Poole & Baldwin (1996:216 ff). Poole (1981; 1983a) argues rather convincingly against the unitary model, proposing a model of *multiple sequential phases* instead. In such a model, different groups may follow different sequences through different phases, including returning to previous phases and iterations. One advantage of this is that it is not necessary to rule out groups that are not ideal as ‘non-full-fledged’, as Bales and Strodtbeck did.

Another type of models for developmental processes in group decision is *critical event models*, which attempt to identify key events in the decision process, see for example (Gersick 1988). This perspective is more in line with how group members tend to describe a decision-making process they have been through (Poole and Baldwin 1996:221).

A third type of model is called *continuous models*, which is the kind that Poole ultimately reaches in (Poole 1983b). Scheidel and Crowell (1964) developed a con-

tinuous model some two decades earlier, based on a kind of trial-and-error technique: one member presents an idea, and then the group discusses and possibly adjusts the idea, before it is accepted or rejected. The result is a spiraling process of introducing an idea, elaborating on it, and evaluating the result.

Poole & Baldwin (1996) also identify a fourth type of model for group decision development, *social construction models*, but admit that this category is not incompatible with the other categories. Rather, social construction models focus on the micro-level development of decisions, without denying the possibility of patterns on a more abstract level. One example of this attitude is found in (Schwartzman 1989).

Bales' work has had a profound influence on small group research, the most important perhaps being that it shifted the interest of researchers from external factors to internal processes (Frey 1996:26).

**2.2.6 Recent research on group decision-making in social psychology**  
Bales' work has been very influential; more recent research on group decision-making in social psychology can be seen as a continuation of Bales' research. The general term for the field is now *small group research*, and group decision-making is only one of the many subfields studied under this heading. Some other fields of small group research are leadership, power, status systems, norms, cohesion and social dilemmas.

The term *group decision-making* is sometimes used in a very general sense concerning almost any work performed by groups, which can be somewhat confusing. Under that heading a wide range of issues are investigated. For example, group problem solving, choice shifts, group polarization, and bargaining (negotiation) are included in the volume named *Group Decision Making* by Brandstätter et al. (1982).

One important approach to group decision-making among social psychologists has been that of *social decision schemes*, SDS. This comes in different versions, but the best known is the one that was constructed by Davis (1973). The model is a rather straight-forward way of predicting/estimating the decision of a group based on the preferences of the individual members and on the social decision scheme used. A social decision scheme is simply the rule for how the group decision is determined from the individuals' preferences, such as the majority rule (which must be extended to handle situations where there is no majority). In this approach, group decision-making is a "black box", for which only input and output are considered. This is not to say that group discussion is ignored, since the social decision scheme may include parameters for how much the participants have spoken to each other etc. This approach does not, however, try to analyze the details of the group members' interaction.

One of the more stable findings from this research is that the opinion that is held by a majority/plurality of the individuals at the start of the discussion tend

to define the final outcome, and that this is particularly true for situations where no demonstrably correct alternative is found (Kameda et al. 2003:464). It is worth noting that for people outside this academic field the word *consensus* may mean approximately that a solution is found that everybody is happy with and that everybody has been allowed to express his or her opinion. In the context of social psychological research on group decision-making, the term is usually used for groups that are allowed to discuss before decision is made, as distinguished from situations where individuals are polled for their opinion without any group discussion, such as a public election.

The study of *manipulability of group decisions* and *group polarization* can be seen as spin-offs from research on social decision schemes, and are described here briefly: When three or more alternatives exist, cyclical majorities can exist, i.e. member A may rank the alternatives  $y > x > z$ , member B  $x > z > y$ , and member C  $z > y > x$ . If the vote first is called between y and z, B and C will form a majority in favor of z. In the second vote, between z and x, A and B will form a majority in favor of x. If, however, the first vote is called between x and y, A and C will form a majority in favor of y, and x will disappear. The member who is able to control the ordering of the voting can thus manipulate the outcome. See e.g. (Mueller 1989) for further discussion of manipulability of group decisions.

One important finding in this field is the discovery of so-called *choice shifts* or *group polarization*, first reported by Stoner (1961) and Wallach et al. (1962). These studies showed that the average group was more likely to decide for a risky alternative than its average member was. Because of the nature of the first studies it was initially called the *risky shift*, but later studies revealed that the shift could go the other way as well (the *cautious shift*) (Stoner 1968). Seibold et al. (1996) examines three major explanations to choice shift/group polarization, *Social Comparison Theory*, *Persuasive Arguments Theory*, and *Social Identity Theory*:

- *Social Comparison Theory (SCT)*  
This theory assumes that group members possess a drive to reevaluate their own preferences when hearing and thinking about other members' preferences, and that they feel either external or internal pressure to conform. Group discussion affects the group decision since it exposes members to the preferences of the other members. Choice shifts occur when external or internal pressure pushes the dynamic process of conforming in a risky or cautious direction. This bare-bones version of the theory does not explain more than that the function of the group discussion is to distribute information about the members' opinions in the group.
- *Persuasive Arguments Theory (PAT)*  
PAT claims that people hold the views they do because the arguments they have access to point to that particular view. Since not all members of a group have access to the same set of arguments, group discussion can change the set for the individual member, and thus affect the group deci-

sion outcome. If many members have different sets of arguments, but all these sets favor the same alternative, the group discussion will result in each member having more arguments for that alternative than before the discussion. This leads to a more risky/cautious decision than the individual would have made without the discussion.

- *Social Identity Theory (SIT)*

This theory puts group membership at the center for predicting individuals' preferences. As a first step, the individual perceives/defines distinct social groups, and places herself and others in these groups. The second step is to attribute representative qualities to the groups, something which will cause the described groups to be rather extreme, since their attributions have to be characteristic. The third and final step of the individual in this social identification process is to adopt the perceived characteristics of the in-group. Group discussion is then an opportunity for the members of a group to investigate how similar or dissimilar they are to the other members, and to adjust the categorizations accordingly. The second and third steps are performed as categories are updated. Because of the drive for differences between the social groups inherent in this process, group discussion may lead to more extreme groups, and thus to more extreme (risky/cautious) decisions.

Choice shift is related to the problem of *groupthink*. The term was coined by Janis (1972), and is explained as 'a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' strivings for unanimity override their motivation to realistically appraise alternative courses of action' (Janis 1982a:9). Some historical case studies classified by Janis (Janis 1982b:479) as examples of groupthink are

- British Prime Minister Chamberlain and his advisors supported the policy of appeasement of Hitler in 1937-38, despite repeated warnings and indications that it would have adverse consequences.
- US American Admiral Kimmel's group of Naval Commanders ignored warnings received in the autumn of 1941 that Japan was planning an attack on Pearl Harbor.
- US President Kennedy's advisory group had reliable indication that launching the Bay of Pigs invasion of Cuba would a) fail and b) damage US relations' with other countries, but despite that, supported the decision.

One interesting thing about this is that it is one of the few issues in the social psychological branch of small group research that typically has used naturally occurring groups and situations in studies, as opposed to laboratory experiments.

Another area of interest has been that of *unshared information*, how information that is not available to all members at the start of a discussion affects decision

outcome. Tindale et al. (2003) describes this research in some detail, and reports that several studies have shown that the likelihood of a piece of information popping up during a group discussion is a function of the number of members having that information.

At the risk of over-simplifying, both social psychologists and communication scholars can be said to try to predict and explain group output (decisions). However, where social psychologists do this by investigating input, i.e. the psychological state of members prior to the group discussion, communication scholars do it by studying the communication that takes place in the group (discussed below). Thus, most of the work done in social psychology does not concern itself so much with intra-group communication, and is of peripheral interest in the present work.

## 2.3 Group decision-making in (speech) communications

### 2.3.1 Roots

Research on group decision-making by communication scholars naturally focuses more on communication than the corresponding work done by social psychologists, and, for that reason, it is connected more directly to the topic of this dissertation. Speech communication showed an interest in group decision-making very early, albeit implicitly. It was parallel to the first studies by social psychologists on group communication that speech communication scholars adapted the philosopher John Dewey's (1910) ideas on critical thinking for group discussion (Frey 1996:21; Gouran et al. 1994:253). Dewey proposed a model for ideal 'reflective' thinking, a five step process:

- (i) *a felt difficulty;*
- (ii) *its location and definition;*
- (iii) *suggestion of possible solution;*
- (iv) *development by reasoning of the bearings of the suggestion;*
- (v) *further observation and experiment leading to its acceptance or rejection; that is, the conclusion of belief or disbelief*

(Dewey 1910:72)

Textbook authors adapted this model to group discussions, but no serious attempts were made at providing empirical evidence for its validity until the 1960's. By 1970, this branch of speech communication, influenced by social psychological work and methods, had developed into what Gouran et al. (1994:251) calls the *outcome oriented* thrust of group communication research. Outcome oriented researchers tried to find connections between the communication occurring in a group and the decisions produced by the group. Decisions were viewed as 'final choices among sets of alternatives' (Gouran et al. 1994:251), and these choices could be good or bad, in different ways.

The other main thrust of research within this field that Gouran et al. identifies is called *development oriented*. These researchers, sometimes sociologists but more of-



ten communication scholars, were more interested in the process by which decisions were created, and decisions were viewed as ideas that were modified during discussions. Since the primary interest was to understand how ideas developed into decisions, development oriented researchers were rather unconcerned with whether the decisions were good or bad in any way.

The division into these two directions seems valid for present day research on group communication as well; discussion follows in separate sections below.

### 2.3.2 Outcome oriented research

The research on group communication and group decision-making emphasizing the outcome of the communication is in spirit directly descended from Robert Bales' work. Moreover, studies using modified versions of his IPA coding scheme are not rare (Salazar 1997; Innami 1994). One theory that has been developed in this field is *functional theory*, with Randy Y. Hirokawa and Dennis S. Gouran as the main champions (Hirokawa 1988; Gouran and Hirokawa 1996). The theory can be seen as a fusion of social psychology and speech communication research on group decision-making. The interest and focus on communication between group members come from researchers in the communication community, while the interest and focus on outcomes and quality of decisions come from social psychology (although it must be said that the theory now belongs entirely to the communications field). The basic idea of the functional theory (or perspective, as it is sometimes called) is that there are certain tasks that members of a group need to perform in order to make a "good" decision. Gouran & Hirokawa (1996:56-57) cites (Gouran et al. 1993) and presents the following list of tasks to be performed by a group in order to make a good decision:

1. *to show correct understanding of the issues to be resolved;*
2. *to determine the minimal characteristics any alternative, to be acceptable, must possess;*
3. *to identify a relevant and realistic set of alternatives;*
4. *to examine carefully the alternatives in relationship to each previously agreed-upon characteristic of an acceptable choice; and*
5. *to select the alternative that analysis reveals to be the most likely to have desired characteristics.*

(Gouran et al. 1993)

The influence of Dewey's model of reflective thinking (see p. 17 above) is clear.

There have been quite a few investigations trying to provide empirical support for the functional theory; (Gouran and Hirokawa 1996) cites 16 such studies. An ambitious example is (Hirokawa 1988), where a series of three studies were made with the overt purpose of testing the functional perspective. There have also been a number of studies of failed decision-making (or low quality decisions) that support the functional perspective in the way that a failure can be explained

in terms of the group not having performed the necessary functions (Gouran 1984; Gouran 1987; Gouran 1990).

The heritage from Bales in outcome oriented research is most clearly visible in the abundant use of coding schemes such as IPA (p. 11 above). Typically, transcriptions of recorded group discussions are annotated according to a scheme, and then statistical analyzes are made on the basis of these annotations. An example is (Innami 1994), which is also representative in the way the unit of coding is handled: the idea of a ‘thought-unit’ is taken adopted from (Scheidel and Crowell 1964), defined as ‘the smallest ideational contribution’. They introduce this concept after criticizing Bales’ (1950) system for being too crude, asserting that Bales only talks about ‘single acts’, without specifying how an act is identified.

From a linguistic viewpoint, it is surprising that the concept of though-unit is not discussed more. It is far from obvious what ‘the smallest ideational contribution’ is. For example, in a noun phrase like ‘a big brown bear’, is there no ideational contribution in ‘brown’? The entire treatment of acts in this area does indeed come across as quite naïve. Linguists working in the field of pragmatics have long been aware of the complexity of acts and the concept of action, and there is a substantial amount of literature on the subject. I find it quite strange that the people working in the outcome oriented branch of small group research have managed to stay ignorant of this.

Without going into too much detail on this topic, it should be pointed out that i) a contribution can serve more than one purpose at the same time (parallel multi-functionality), ii) several acts can be performed after each other in a single contribution (sequential multifunctionality), and iii) a single act can span several contributions, even across speakers. Parallel multi-functionality is illustrated here:

**A: Mummy, I want ice cream!**

**B: Do you want me to get angry?**

Here B’s contribution is a question at the same time as it is a threat.

Sequential multi-functionality is perhaps more obvious, as in the following example:

**A: Would you like some more tea?**

**B: Yes, thank you, but only half a cup, please.**

Here B’s contribution consists of first a feedback, then a thanking, and finally a request.

A final example will illustrate how a single act can span several contributions:

**A: How many pots do you need?**

**B: The plastic ones?**

**C: No, the paper pots.**

**B: About twenty.**

Here A, B and C collaborate to create the question that B finally answers. (It can be divided into sub acts.)

A further discussion of communicative acts can be found in (Allwood 1978) and (Allwood 1996a).

Hirokawa (1994:543) lists three problems that have been facing researchers in the functional school: '(a) defining what a function is, (b) identifying the "true functions" of communicative utterances and acts, and (c) linking the functions of utterances causally to group performance and other group-level outcomes'. Similar claims are made in (Gouran and Hirokawa 1996), while Gouran (1999:16) reduces the issue to a matter of validity: how do we know that certain utterances serve the specified function, as opposed to being correlated to it? Again, the functional school seems to be unaware of the work done in linguistic pragmatics, where the functions of utterances and acts have been discussed at great length.

### 2.3.3 Development oriented research

The development-oriented branch of group communication research is dominated by *Structuration Theory* (ST), a social theory developed by Anthony Giddens (1984). ST seems to be the foremost theory among communication scholars interested in small group research. While functional theory has its roots in psychology, ST comes from sociology.

Through ST, Giddens tries to find a middle ground between the sociological traditions that try to describe objective properties of society on the one hand (Giddens calls these traditions structuralist and functionalist), and the sociological traditions that try to describe society from a subjective, interpretative angle on the other hand (called hermeneutic by Giddens) (Giddens 1984:2). He places human acts in the center of the theory, implying that these are the junction between the hermeneutic, individual, subjective perspective and the functional, societal, objective perspective. Human acts are performed by motivated agents, and can be described and understood from their subjective viewpoint. But the acts are performed in *social systems*, using *structures*, that can be described and understood "objectively". Any kind of social entity that can be understood as a unit is a social system. The social entity is typically a group. More precisely, the social system is the activities of the members of such a group, while the rules and resources that are used to perform these activities, are structures. *Structuration*, finally, is how structures are used in systems.

This is all rather abstract, and Giddens also explains the concepts with Ferdinand de Saussure's conceptual pair *syntagm* and *paradigm*, terms which may be more familiar to a linguist. Giddens calls systems syntagmatic, situated in time-space, while structures are called paradigmatic, 'the properties which make it possible for discernibly similar social practices to exist across varying spans of time and space and which lend them systemic form' (Giddens 1984:17). Poole et al. (1996:117) describes structuration in a more easy-to-grasp way as "the process by

which systems are produced and reproduced through members' use of rules and resources".

Again, linguists may be more used to the term *conventions*, as well as more familiar with how conventions are strengthened by use. For example, it may be the case that a meeting of a bible discussion group usually starts with prayer. For each meeting where this is the case, it becomes easier for the members to follow the convention and start with prayer, and doing so the convention is strengthened, making it even easier to start with prayer the next time, and more difficult to depart from the convention. In ST terms, the bible discussion group is a system, and the rule to start each meeting with a prayer is a structure that is employed and reproduced each time it is used.

An actual example of how ST is used to investigate group dynamics is found in (Barley 1986). The paper reports a study of how work practices developed in two different hospitals when a new kind of technology was brought in, computer tomography scanners. Although the preconditions in terms of previous experience and available resources on the two sites were quite similar, quite different patterns of cooperation between physicians (radiologists) and technology assistants (radiological technologists) developed. In one hospital, the expert physicians who started to use the scanners had little interest in explaining the reasons behind the different types of scanning and tests that the technologists were asked to perform, which made it impossible for the technologists to form a more coherent view of how scannings should be done. The result was a pattern of cooperation where the technologists were reduced more or less to being typists, entering computer commands at the request of physicians. This was not very efficient, and after some organizational turbulence, physicians inexperienced with CT scanners were set to work with the technologists that were considered 'least incompetent'. In that setting the passive role of the technologists that the established pattern of cooperation included left the inexperienced physicians in charge of the scanning, at the same time as the acknowledged inexperience of the physicians made them willing to consult the technologists on technical matters, who were more competent in that area. The result was greater confidence for the technologists and a pattern of cooperation where the physicians and technologists worked closely and continuously switched roles as teachers/learners.

At the other hospital, the initial expert radiologist usually explained the reasons behind his instructions to the technologists, which made them i) more competent and ii) expect such explanations. After some time, routine scannings were left to the technologists by the radiologist, a degree of independence that was unheard of in other departments. When inexperienced physicians replaced the expert, they had difficulties upholding the authority that their position in the hospital hierarchy prescribed due to their incompetence with the technology relative to the technologists. This lack of authority was uncomfortable to technologists as well as to physicians; to avoid the discomfort the physicians left more and more of the work to the technologists. Thus, a pattern of cooperation arose

where the physicians were not present at all in the scanning room, and images were delivered to the physician's office.

Barley's main method for the study was direct observation of examinations, during which the researcher sometimes taped conversations and always took notes. Sometimes separate interviews with participants were performed, where their interpretations of the events were recorded directly or immediately after.

One kind of information that was taken down in the field notes were the occurrence of *scripts*. This is a concept taken from (Goffman 1959; Goffman 1967), and it occurs in slightly different versions under the names *schema*, *frame* and possibly others (Allwood 1986). A script is a pattern of interaction that displays the essence of the participants' roles (Barley 1986:83). An example taken from (Barley 1986:93) is called 'blaming the technologist', and consists of three steps: i) the physician states or questions a perceived problem, ii) the physician insinuates or claims that the problem is the technologist's fault, iii) the technologist claims that the problem lies with the technology, and iv) the physician rejects that claim. The following exchange is an example of an instance of 'blaming the technologist':

*Excerpt 2-1. From (Barley 1986:93).*

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*Rad = radiologist = physician, Tech = Technologist.*

---

- |   |   |
|---|---|
| 1 | Rad: ( <i>Brusquely</i> ) This is pretty bad. The films on the last patient are pretty dark. Can you do anything about it?  |
| 2 | Tech: I don't know.   |
| 3 | Rad: What do you mean you don't know?   |
| 4 | Tech: The problem is either in the processor or the camera there. I don't know how to set them. Dr. X. knows how to set the camera. Maybe we should get him to come over and set the camera and I'll rematrix them. |
| 5 | Rad: ( <i>Pointing to diagonal lines though the basal portion of the brain in a head scan</i> ) Is this all artifact here?  |
| 6 | Tech: Yes. There's nothing you can do about it.   |
| 7 | Rad: Why not? You mean there's nothing you can do about it?   |
| 8 | Tech: I believe it's all bone artifact.   |
- 

Barley counted occurrences of this kind of scripts in his field notes, and used these as a basis for some statistical analyzes supporting the otherwise rather subjective description of the processes taking place at the two hospitals.

The example given here on research based on ST is representative of the way ST research often stays on an abstract level, discussing models for describing how structures affect each other. If low-level scrutiny of the actual communication in a group is done, it starts with coding the communication with a predefined set of categories, often speech acts, but as the Barley example shows, larger units can be coded as well. This coding is seldom problematized in any other way than discussing inter-coder reliability.

### 2.3.4 Bona fide groups and the naturalistic paradigm

During the 1990's the experimental heritage from social psychology was challenged by the notion of Bona Fide Groups and the Naturalistic Paradigm. The Bona Fide Groups perspective was proposed by Linda Putnam and Cynthia Stohl (1990). According to this perspective, groups should be studied and analyzed in their context. The two main underlying characteristics are that real groups have 'permeable and fluid boundaries', and are 'interdependent with their context' (Putnam and Stohl 1996:149). These characteristics are developments of two initial observations:

- *Individuals are members of more than one group at a time*  
The membership of one group can affect the membership of another group. For example, a person is likely to be treated differently in the local housing committee when it is discovered by other members that she is an elected official in the current government. Or, a person who is member of a peace organization may feel uncomfortable when the executive board of the company she is also a member of decides to cooperate with the national defense. Sometimes this multiple membership can be more directly used, e.g. when an young member of a political party committee is asked by the other members of the committee how young people would react to the idea that is being discussed.
- *Groups work with other groups and people*  
What goes on in a group is not strictly the business of the members of that group. In a larger organization, many groups cooperate to reach an overall goal, and tasks, responsibilities and authority are negotiated continuously. The members of one group are members of other groups, or have been members of other groups, or will be members of other groups, or know members of other groups, and communication takes place between members of different groups continuously.

Moreover, Putnam and Stohl (1996:149) indicates group identity as being an important factor to include in analysis. To a varying degree, members have a sense of belongingness, loyalty and commitment to the groups to which they belong. This affects the other factors (the items above), and it is a dynamic phenomenon, changing character and strength. Furthermore, members of groups view and understand groups and their relationships in different ways, and may interpret these in conflicting ways, which also may affect the workings of the groups.

Somewhat later, Lawrence Frey (1994) put forward the Naturalistic Paradigm, in the same spirit as Putnam & Stohl's Bona Fide Groups perspective. Frey argued against the traditional methods with investigations such as laboratory studies of "zero history" groups:

- Research should be performed in real world settings (in situ).
- Researchers should use the inter-subjectivist view on truth: assume that phenomena in the world are, or are experienced, in the same way for/by

different people, and that true propositions are such that can be accepted/verified by several people, ideally anyone.

- Real groups should be studied, not groups created artificially for a given study.
- The focus of the research should not only be on how decisions are made and problems are solved, but also on how group identity is created and sustained, how new members are socialized, how social support is provided, how high quality interpersonal relationships are developed, and how changes in group process are made.
- Groups should be studied using phenomenologically oriented case studies employing qualitative methods.
- Researchers play a role in the groups they study, and this must be recognized.

(Adapted from (Gouran 1999:20).)

Gouran (1999:20) claims that these views set the stage for many subsequent studies in the 1990's, without giving any direct references. This interest for studying naturally occurring groups is perhaps strengthened by influence from studies in the ethnomethodological tradition (see section 2.4.1 below, p. 23 ff.).

## 2.4 Linguistic research on group communication

Linguists have not been very concerned with group decision-making; this work is indeed an attempt to bring linguistics into this field. However, linguistics *has* been concerned with group communication in general, and it is from that branch of linguistics that I will try to build a bridge to group decision-making. I shall therefore give a brief introduction to the kind of linguistics that is most relevant for research on group decision-making, including what little linguistic research on group decision-making that actually has been done.

### 2.4.1 Conversation Analysis

#### **Background**

In the 1960's, sociologist Harold Garfinkel, a student of Talcot Parsons, developed a framework for studying human interaction, and named it *ethnomethodology* (Garfinkel 1967; Garfinkel 1972). This was further developed, and given a slightly new direction, during the 1970's by Harvey Sacks, Emanuel A. Schegloff and Gail Jefferson into a type of conversation research often referred to as *Conversation Analysis, CA* (Sacks et al. 1974). It should be noted that not only linguists engage in CA, but also researchers from other disciplines, with agendas outside of linguistics. The term *Conversation Analysis* is somewhat unfortunate, since conversation is analyzed and studied by linguists outside CA, but this usage is quite

established by now. Apart from using the acronym CA, initial capitals will be used for the term in this work to signal its name-like character.

Ethnomethodology came about as a reaction to the type of sociology that was prevalent in the 1930's, -40's and -50's, represented by Parsons' social systems theory (see 2.2.3 above, p. 7 ff.), with what Heritage (1989:36) calls 'premature imposition of inadequate theoretical categories and frameworks on complex empirical data'. Whether this characterization is a fair criticism or not I cannot say, but it does explain the aversion towards theory that still prevails in CA, and the difficulty finding general theoretical statements in the writings of Harold Garfinkel, who prefers to give examples of analyzes. It also explains the strong emphasis on empirical data within CA, and the ideal of letting data "speak for itself".

However, key concepts of Garfinkel's ethnomethodology are *commonsense knowledge* and *practical reasoning*. Members of society continuously create, recreate and maintain social structures, through and in everyday interaction. In CA, this is taken up and adjusted somewhat, with a few other ideas added. Heritage (1989:22) describes CA by giving a four item list of fundamental assumptions:

- *Interaction is structurally organized.*  
Everyday interaction may seem unstructured and accidental, but CA assumes that this is an illusion, and that all social structure in fact starts in everyday interaction. A prime example of this is the study of turn-taking done by Sacks, Schegloff and Jefferson (1974).
- *Contributions to interaction are both context-shaped and context-renewing.*  
Contributions to an interaction cannot be understood outside of their context; the immediate linguistic context as well as the more general activity to which the contributions belong. At the same time, a contribution immediately becomes part of the context of neighboring contributions, and part of any larger, more general structure.
- *These two properties inhere in the details of interaction so that no order of detail in conversational interaction can be dismissed a priori as disorderly, accidental or interactionally irrelevant.*  
As a part of the focus on empirical data, CA researchers have been unwilling to remove data on theoretical grounds; rather, they want to be open to all details being part of the structured interaction. Thus, the careful scrutiny of interaction is done through recording conversations (audio or video), and then producing a detailed transcription of it, including not only uttered words, but also pauses, laughter, prosody, or anything else that is considered part of the interaction.
- *The study of social interaction in its details is best approached through the analysis of naturally occurring data.*  
Since potentially anything and everything can influence interaction, only naturally occurring conversation suffices when trying to understand



everyday interaction. Experimental or role-play settings will necessarily be different from ordinary conversation in many ways that may affect the interaction.

### **CA research on group decision-making**

CA researchers have done little work in the field of group decision-making, although it has not been left completely untouched, see for example (Firth 1995), (Boden 1994) or (Anderson et al. 1987). Scott Jacobs and Sally Jackson have applied CA methods in argumentation analysis, described below (2.5.5 p. 37 ff.). The clearest case of CA researchers entering the field of group decision-making is that of Marjan Huisman (2001), who applies CA methods and thinking to group decision-making in an overt attempt to bring these ideas into ‘the “mainstream” thinking about decision making’ (Huisman 2001:84).

Huisman stresses three issues about group decisions. Firstly, she argues that group decisions are not clear-cut and well defined events, but that participants ‘recursively formulate situations, events and actions (i.e. states of affairs)’ (Huisman 2001:83), and implicitly or explicitly assess these states of affairs. A group decision is then, according to Huisman, ‘a formulated future state of affairs that is positively assessed by relevant participants’. A natural question is then how participants ever know that a decision has been made. In other words: how much positive assessment is needed and from which participants? Huisman’s second point in her description of group decisions is that different groups use different norms for establishing the existence of a decision. The third thing stressed by Huisman is that formulations of future states of affairs are subjective, depend on situated interactions and are open for interpretation. This means that there is considerable room for skilled participants to phrase descriptions of future states of affairs in a way that generates more support from other members. This is hardly surprising, but it is a topic that has been avoided by communication scholars and social psychologists. Huisman’s work is discussed further in section 5.7.

### **CA research in fields adjoined to group decision-making**

Although research on group decision-making with CA methods has been limited, many CA researchers have done work in neighboring fields. Negotiation and workplace interaction are two such fields. For example, Wasson (2000) investigated politeness in some US American business meetings and how this was related to consensus, and Candlin et al. (1999) studied the discourse of enterprise bargaining in relation to institutional structure. Boden (1994) is cited frequently as a pioneering work in the area of work-place conversations, while Firth edited a volume in 1995 (Firth 1995) in which a number of CA studies on negotiation were collected. I consider these works as peripheral to the present topic, since they do not show any particular interest in group decision-making.

### 2.4.2 Activity-based Communication Analysis

As mentioned in the previous section, conversation and conversational language can be studied without using the particular theoretical and methodological framework of Conversation Analysis. The linguistic theory that will be used in this work is called Activity-based Communication Analysis, ACA. It was developed by Jens Allwood, who, working from a linguistic perspective, built a theory of communication in general, not group decision communication in particular. In a way similar to Giddens Structuration Theory, Allwood emphasizes action, complementing it with cooperation, as the basis for understanding communication.

Allwood first laid out his framework for linguistic analysis in his doctoral thesis *Linguistic Communication as Action and Cooperation* (Allwood 1976), and has subsequently developed the theory in several publications, see (Allwood 1984; Allwood 1993a; Allwood 2000; Allwood 2004). At the heart of the theory lies the observation that linguistic communication always occurs in an activity with a specific purpose, and that linguistic communication cannot be understood unless it is seen as a means to fulfill the activity ends. However, social activity is, according to Allwood, not the only factor that influences communication, and it can be placed in a broader framework. In (Allwood 2004:6) five such factors are listed:

i) *Communicators are human beings*

The notion that that human communication is performed by human beings is tautological, but it is still forgotten at times. Humans are physical, biological and psychological creatures, and some aspects of our communication depend on this. For example, if a noisy environment forces a speaker to speak louder, that is dependent on our biological construction with ears and hearing. Human beings are (partially) causally driven, but must also be considered rational, motivated agents, and when communicating with each other we cooperate at least to an extent that allows us to understand each other<sup>1</sup>. For readers familiar with the writings of Herbert Paul Grice (1975), it may be useful to compare Grice's theory with Allwood's. Allwood does not rely solely on rationality and cooperation to explain communicative behavior, but agency and motivation are equally important factors. Grice's maxims of conversation, and the cooperative principle, are to a large extent consequences of these assumptions<sup>2</sup>: it is

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1. The term *rational* means 'goal efficient' here, and there is no conflict between emotional and rational. For example, if a person is in love with somebody, then it may be rational for that person to do almost anything to be close to her object of infatuation.
  2. Although Allwood prefers a different set of maxims than Grice's original (Allwood 1976:43 ff).

not rational to be insincere about what you mean when trying to make another person understand what you mean (the maxim of quality), nor to provide more or less information than necessary (the maxim of quantity) or to obfuscate the information in disorderly or unclear wording (the maxim of manner). Allwood points out that a motivated agent always has a purpose with her communication<sup>1</sup>, thus, each contribution is related to that goal (which corresponds to Grice's maxim of relevance). When communicators choose to cooperate, the agency, motivation and rationality assumptions lead to the consequence that the communicators must take each other into cognitive consideration, i.e. they must try to adjust their communication to the limitations and possibilities of their partner's cognition. For example, informing somebody about her legal rights in a language she does not understand, would in most cases be rather meaningless.

Further, if participants in communication take each other into ethical consideration and trust each other on this (which is the normal case), cooperation works even better; many inferences can be made by listeners based on this assumption, making communication more helpful. For example, even though it may be rational to lie to another person, it is (usually) considered unethical, and thus avoided. Grice's maxim of quality is thus not only explained by the communicators' rationality, but also by their being ethical.

*ii) Communicators are community members*

Human beings are also social creatures; we belong to a culture (national, regional, or other), and we speak a language. This can affect some parts of communication, for example, when a person thanks her host for a dinner she has just been served, a phenomenon common in some cultures, and rare in others.

*iii) Communicators are members of social institutions and organizations*

The sometimes very complex societies communicators live in provide them with different roles, such as *plumbers, husbands, citizens, football referees*, etc. Some aspects of communication depend on this. For example, when a plural *you* is used in an informal invitation to a party to signal that the spouse of the invited person is also invited.

*iv) Communicators participate in an activity*

As mentioned above, activity is central to Allwood's theory. The roles assigned to communicators by the current activity, for example *lecturer, goal keeper* or *customer*, influences the communication. For example, when a teacher asks a student which city is the capital of France, it is typically un-

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1. At least the intentional communication is purposeful. Communicators may give off information unintentionally (for example when being observed unknowingly).

derstood and reacted to as a way to check the student's knowledge, not as a lack of information on behalf of the teacher.

v) *Communicators communicate*

The micro-level communication also assigns roles to the participants, such as *sender* or *receiver*, and this affects communication as well.

In personal communication, Allwood also adds a sixth factor:

vi) *Communicators perform communicative actions*

Communicators make statements, requests and ask questions, and this gives them communicative act dependent roles. A person who answers a question is an answerer, someone who accepts an invitation is an accepter, etc.

Categories ii-vi can be placed on different levels. Culture, language, social institution and organization belong to the macro-level, while the social activity belongs to the meso-level. On the micro-level we find phenomena such as turn-taking, feedback, morphemes, communicative acts, etc.

### Communicative acts

As the name of his doctoral thesis suggests, Allwood does not make any sharp distinction between communicative acts<sup>1</sup> and other acts, rather, he wants to classify communicative acts and other acts according to the same principles. Some types of communicative acts happen to have received labels in everyday language (some English examples being *promise*, *assertion*, and *question*), but there is no reason to assume that this spontaneous classification fulfills the criteria of a good taxonomy (homogeneous basis for classification, mutually exclusive categories, complete, economic, lucid, and useful). Instead, Allwood suggests that the four components *intention*, *behavior*, *effect* and *context* can be used as the basis for a taxonomy of communicative acts. At a sufficient level of detail, there is no limit in practice to the number of different types of intentions, behaviors, effects and contexts that can occur in natural communication. As a result, the number of possible communicative acts is incalculable. Thus, any taxonomy of communicative acts must be limited to the aspects of action that are relevant to the purpose of the analysis for which the taxonomy is used. For example, if communicative acts are to be identified and classified in an auction, the taxonomy should be a taxonomy aimed at auctions.

### Social activities

In many cases, a prominent feature of any act will be the intention(s) behind it. Since the intention of an act in most cases is linked to the overall activity the act

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1. The term *speech act* excludes gestures and other non-speech contributions, and so *communicative act* is used instead.

occurs in, it is impossible in many cases to understand naturally occurring language without taking into account the *activity type* that the language occurs in. For example, to understand the language of an auction, one has to understand the activity type auction. Allwood (1993a) elaborates on this, and describes in detail what is meant by social activity, providing us with the following definition: a social activity is said to occur if: i) two or more individuals ii) perform mental acts, exhibit behavior or engage in action iii) in a coordinated way iv) which collectively has some purpose or function (Allwood 1993a). This definition may seem a bit too broad, since anything from one person opening a door for another person to the development of the EU will fit the definition. However, when the criteria above are fulfilled, it is likely to affect communication (and other behavior), and it becomes relevant when explaining this communication. Still, the impact of social activity on language and behavior becomes stronger as the social activity is institutionalized. Usually the most interesting social activities have received linguistic labels, and conventional procedures and roles.

Social activity is not the only factor that affects language. As mentioned above, Allwood also lists physical, biological and psychological factors (Allwood 2000). We cannot see through walls, we need to breathe, we may be angry or have difficulty understanding lines of reasoning, and such factors affect our communication continuously. Social factors other than activity are culture, social institution, language and communication: the fact that a conversation takes place in a Swedish cultural context or that it is held in a university context affects the conversation. On a more detailed and obvious level the choice of language (Swedish, English, ...) will be visible, as well as communication management phenomena like feedback and turn-taking. Another important kind of influence comes from the individual backgrounds of the participants in a conversation. Beliefs, desires, values, emotions and attitudes of each participant quite naturally affect communication.

Even so, social activity is one of the most interesting factors, and Allwood has developed a template for describing a given activity type, by providing the following parameters (Allwood 2004:7):

- *Purpose, function, procedure*  
All activities have a purpose, though sometimes the term *function* is more natural. In some cases the activity includes certain procedures that should or could be followed, each step in the procedure having a purpose/function.
- *Roles: rights, obligations and competence*  
Many activity types have a set of participant roles, each of which can be described in terms of obligations, rights and required competence.
- *Artifacts, instruments, tools and media*  
Some activity types depend on certain artifacts, instruments, tools or media.

- *Environment: social, physical*  
An activity type typically puts some minimal requirements on the physical environment, such as reasonable light and temperature conditions, and some activities may have more specific requirements on the physical environment. Fishing, for example, is hard to perform far from the sea, a lake, river, etc.

Furthermore, the socio-cultural environment may affect an activity. A Swedish auction and an Australian one may differ somewhat, for example.

As an example, the activity type Auction can be described briefly using this template:

- *Purpose and procedures*  
The purpose of an auction is to sell a number of items. The procedure for this is that each item is presented, one at a time, and the person prepared to pay the highest price gets to buy the item. For each presented item, the auctioneer suggests a first price, and invites anybody to bid. When the first bid is made, the auctioneer calls for anybody else to offer a higher price, and so on, until the highest price is found. The person who made the last bid gets to buy the item.
- *Roles*  
There is an *auctioneer*, who has to accept any bid higher than the one last given. She also has to have good knowledge of the procedures of the auction, and keep track of the bids. The auctioneer has a right to speak, and to decide when the highest price has been found. There are also *customers*, who have the obligation to let the auctioneer speak, and to respect the procedures of the auction (e.g. to actually buy the item if their bid turns out to be the highest). They have to have at least a rudimentary understanding of the procedures of an auction.
- *Artifacts, instruments, tools and media*  
The auctioneer typically uses some kind of gavel or other instrument to mark the end of the bidding for each item. A number of items to sell are necessary, and there may be a loud-speaker system, a registry and other equipment to help administration of the auction.
- *Environment*  
The auction may be held outdoors or indoors, and the area has to be sufficiently isolated from other major activities that may disturb the auction. On the social side, auctions are restricted to societies with at least a minimal degree of market economy. The precise procedures may vary between different countries and regions, different kinds of sold objects (e.g. a cattle auction may be different from an art auction), and different institutional settings.

The template is quite clear and constitutes a good tool for analyzing an activity type. It is quite general, however, and different activity types may be described rather differently under each of these headings.

In summary, Allwood has developed a general theory for human communication, which also covers the special case of communication in group decision-making. The theory puts social activity in focus, but allows other influencing factors, such as culture, social institution and individual preferences, to be considered when analyzing communication.

## 2.5 Argumentation analysis and rhetoric

### 2.5.1 Roots

When a group is about to make a decision that is of importance to its members, it seems natural that individual members try to persuade the other members that “their” solution is the right one. Rhetoric studies persuasion; in that sense it is the oldest form of study of group decision-making, dating back as far as ancient Greece. Many of the ideas from these early days are still used in modern rhetoric and argumentation analysis<sup>1,2</sup>.

One concept that has survived since Aristotle is the distinction between *logic*, *dialectic* and *rhetoric*. Logic concerns relationships between propositions, regardless of any context. An example is that of the classical syllogism:

- All humans are mortal (major premise)
- All Greeks are human (minor premise)
- Therefore, all Greeks are mortal (conclusion)

The great attraction of the syllogism is that if the two premises are accepted, there seems to be no way to deny the conclusion.

Originally, the term *dialectic* was used for a specific argumentation technique, today usually called *indirect proof*. A proposition is assumed, and then the debater deduces a conclusion that stands in conflict with the original assumption; on the basis of this conflict the debater rejects the proposition. (Aristotle used the term in a more general sense: reasoning with premises that are not evidently true.) Although primarily designed for debating, dialectic is a useful method for personal reasoning, according to Aristotle. Finding and investigating arguments for and

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1. The historical outline of classical rhetorics and modern argumentation analysis can be found in many texts. The source for this section has been (van Eemeren et al. 1996), unless otherwise stated.
  2. Persuasion can also be used in other contexts than group decision-making, for example when a sales person tries to persuade a customer to buy a product. It is obvious, however, that persuasion *often* is used in group decision-making.

against a certain view helps people understand the problem better. In that sense, dialectic is about arguing for and against.

Rhetoric, finally, is concerned with how one convinces people that some beliefs are better than others. Aristotle separated three different kinds of rhetorical speeches (argumentation situations): arguing in courtroom, for or against a particular judgment; arguing in a political debate, for or against some political action; and finally festive speeches, when a person is praised or condemned.

The classical tradition was more or less unchallenged for many centuries; it was not until the 20th century that ideas turned up that developed that tradition significantly (van Eemeren et al. 1996:51 ff). Although many thinkers participated in this process, two names stand out: Stephen Toulmin and Chaim Perelman, to whom we shall now turn our focus.

### 2.5.2 Toulmin

Somewhat simplified, the three-fold distinction between rhetoric, dialectic and logic can be summarized in the following way: logic deals with the truth, dialectics with the probable truth, and rhetoric with the claimed truth. Such a simplification has the advantage of showing the obvious relation between the three fields. By the 1950's the study of argumentation was based primarily on classical rhetoric, with influences from logic. Toulmin broke with this, and made his argumentation analysis into something closer to dialectic.

Toulmin started out with an attack on the dominant paradigm for the study of logic by criticizing its conception of validity. An argument of classic syllogistic type, 'All men are mortal, all Greeks are men, therefore all Greeks are mortal,' is held valid because of its form. Toulmin calls this kind of validity *geometrical* or *formal*, and says that logicians accept only formally valid arguments as being valid (van Eemeren et al. 1996:132). This conception of validity is, according to Toulmin, bad and he claims that a wider view on it is necessary. Most arguments outside mathematics and logics textbooks are not formally valid, yet the argumentation may be sound. An example is that of the sun rising tomorrow. It has risen every other day that we know of, moreover, we have an elaborate model for what it means that the sun rises. Even so, the only way to find out if the sun actually rises tomorrow is to wait and see. There is no formally valid way of reaching that knowledge by reasoning. To Toulmin, it would be absurd to dismiss the reasoning about the sun's rising tomorrow as invalid. He claims that 'validity is an intra-field, not inter-field notion' (Toulmin 2003), i.e. what counts as a valid argument depends on the subject. A claim about the weather must be evaluated by standards developed in meteorology, a claim about legal matters must be eval-



uated by jurisprudential standards, etc. This brings argumentation analysis<sup>1</sup> closer to epistemology, where the essential question is ‘How do you know?’.

Logicians and philosophers have heavily criticized this conception of validity, but it shows Toulmin’s focus clearly – argumentation analysis should be centered on argumentation in everyday life and in academic research.

Continuing his quest to make argumentation analysis relevant for everyday argumentation, Toulmin holds that argumentation is about justifying one or more statements. The justification may look very different depending on the situation: a doctor explaining her diagnosis to a patient, a pupil meeting accusations of cheating on a test, or a politician arguing for a certain political action, to mention some examples. Toulmin compares these different situations to different kinds of judicial cases. The kinds of evidence will be rather different in a murder case than in an environment pollution crime case. However, the legal procedures for the cases will be very similar. In the same way, different kinds of argumentation situations will have some things in common and some things that are particular. Toulmin calls the former *field-invariant* and the latter *field-dependent*. An example that Toulmin gives is that of modal terms. A modal term such as *can’t* is used in rather different senses:

- *You can’t lift a ton*
- *You can’t get 100 000 people into Albert Hall.*
- *You can’t talk about a horses ’feet’.*
- *You can’t have an aunt of the male sex.*
- *You can’t give him that small a tip – it’s not done.*
- *You can’t put the cat out in this rain.*

(van Eemeren et al. 1996:138)

In i) *can’t* means ‘incapable’, in ii) ‘impossible’, in iii) that one ought not, etc. At the same time there is a common element to all these uses that ‘rules out something-or-other’ (Toulmin 2003:27). That common part is field-invariant, while the criteria for whether the term is appropriate or not are field-dependent. In the same way, argumentation situations have field-invariant parts and field-dependent parts. The attentive reader may object to the example and say that the ruling out comes from the negation *not*, but Toulmin does not seem to have observed this, rather, he treats *can’t* as an undivided whole. Unfortunately, he does not give any other example that could make his idea of field dependency clearer.

The attentive reader will also notice that there is an inconsistency in the use of the term *field* here, and that inconsistency is present in Toulmin’s writing too.

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1. Toulmin does not speak of argumentation analysis but rather about *logic*, and wants *logic* to become more epistemological and ‘practical’.

Sometimes field (of argument) seems to be synonymous with ‘discipline’ or ‘topic’, and sometimes with ‘logical type’, i.e. whether it is a moral judgment, a fact about the world, an aesthetic statement etc. This ambiguity has been the target of heavy criticism. Still the idea that the evaluation of argumentation depends on the field has been inspiring to many later writers in argumentation theory (van Eemeren et al. 1996:160).

### 2.5.3 Perelman & Olbrechts-Tyteca

Perelman and Olbrechts-Tyteca published their theory of argumentation in French in 1958, *La Nouvelle Rhétorique: Traité de l’Argumentation*, but it took until 1969 before it was published in English, reaching a far greater audience under the name *The New Rhetoric: A Treatise on Argumentation*. Similar to Toulmin, Perelman and Olbrechts-Tyteca starts with trying to chisel out what “good argumentation” is all about. During the 1940’s Perelman belonged to the philosophical school of logical empiricism (Wikipedia 2006). According to this school, value judgments cannot be tested empirically, and should therefore be regarded as unfounded and unjustified. Consequently, argumentation based on value judgments is not rational. Perelman could not accept this, since reserving the concepts of reasonableness and rationality for statements capable of being verified by empirical observation or logical deduction would leave formal law without rational basis. Lawyers, like other language users, rarely give logically valid proofs for claims they make, but rather try to justify the claims. Perelman meant that such attempts of *justification* very well can be rational.

A crucial and central idea of the New Rhetoric is that of different audiences. It is held that justification of claims, argumentation, is always made *for* somebody. Arguments that may be considered justified by a congregation of orthodox Jews in Israel may be considered completely irrelevant by a company of avant-garde performance artists in Norway. What one person considers justification may be rejected by another person. This thinking could lead to a kind of relativism that would restrict The New Rhetoric to the traditional realm of persuasion, rendering it irrelevant for other kinds of argumentation. However, in The New Rhetoric there is an elegant solution for avoiding this: the ideal audience. A scientist arguing for his theses may do so with an audience in mind that is indistinguishable from “the concept of rationality” or an imagined “global community of scientists”, if that is preferable.

In this way The New Rhetoric can be seen as a framework for analyzing any kind of argumentation, be it scientific critical discourse, political debate or school yard quarreling. Perelman and Olbrechts-Tyteca discuss two major types of audiences, namely *particular* ones, consisting of a particular person or group of persons, and the *universal* audience, consisting ‘of the whole of mankind, or at least, of all normal, adult persons’ (Perelman and Olbrechts-Tyteca 1969:30). Argumentation that is considered justified by the universal audience is called *convincing* in The New Rhetoric, while argumentation that is considered justified only by a particu-

lar audience is called *persuasive*. Since the universal audience never can be queried, it will always be difficult establishing which argumentation is convincing and which is merely persuasive, but that is an epistemological difficulty that The New Rhetoric does not try to solve.

The New Rhetoric has been very influential in modern argumentation analysis, although it has in no way been left unchallenged.

#### 2.5.4 Argumentation and speech communication

Within the field of communication, rhetoric and argumentation analysis have not been studied as much as one would expect. This is somewhat surprising considering that Edwin Benjamin Black opened the connection as early as 1955 (Black 1955). He audited a number of classroom discussions, collecting passages that ‘made no discernible contribution to group understanding or to the co-operative deliberation of a problem’ (Black 1955:15). These passages, nineteen altogether, were considered breakdowns of the discussions, and were studied in search of causes for the breakdown. The result of the study was a set of hypotheses that Black pointed out should be tested more thoroughly at a later stage. Black generated three hypotheses from the material:

- *An individual contribution which ends on a level of communication less abstract than the level on which the discussion had been proceeding is likely to cause a breakdown.*  
In all the cases where the breakdown consisted of digression, the breakdown was preceded by a discussant descending from the general to the particular without returning to the general. This might happen without being followed by a digression, but it seems to be a “dangerous” situation. Black does not give any examples of this in his brief paper, but describes the digressions as the members becoming involved in particulars and spending time on things that obscured the ultimate aims of the discussion.
- *The absence in a discussion of a commonly accepted and sufficiently inclusive term to denote a relevant abstract process or complex ideological structure is likely to cause a breakdown.*

Another pattern found among the digressive breakdowns were that the lack of a term, or perhaps concept, that would capture some central issue, could cause the discussion to move in circles. Black’s example is a group that tried to find the best means to correct inflation. They brought up many factors involved in the process, such as dollar value, government spending, taxes, etc., but did not have a word denoting the entire process. According to Black, this general term was the key to the problem: ‘[I]t is the peculiar nature of an economic process that no single element in it can be understood apart from its function in the process as a whole. The alteration of any of the variables affects the process and all other variables within the process.’ Since the discussants had no term for this process, they had to discuss dollar value and government spending as two disparate

variables. As a result, they focused on the details, ‘to the detriment of the discussion’ (Black 1955:17).

- *The failure to explicate the major premise of an enthymeme when the premise is not perceived to be a value of the discussants is likely to cause a breakdown.*

An enthymeme is the rhetorical counterpart to a logical deductive syllogism:

Syllogism:

All men are mortal (major premise)  
 All Greeks are men (minor premise)  
 therefore, all Greeks are mortal (conclusion)

Enthymeme:

All Greeks are men, therefore, all Greeks are mortal.

There seems to be some disagreement on the precise difference between an enthymeme and a syllogism, but a rough characterization of it is that an enthymeme is a syllogism that lacks something to be formally valid, typically the major premise. In actual discussion, complete and formally valid syllogisms are rare (Black did not find any at all), and enthymemes are according to Black prone to misunderstanding (compared to syllogisms). Black discovered that when the major premise, which characteristically stated a value, was left out in the enthymeme while not being accepted or understood by the listeners, breakdown occurred in the form of misunderstandings and ambiguity.

Interesting and inspiring findings as it may have presented, Black’s article has not generated very much research on the connections between rhetoric and group decision.

In the late 1970’s and early 1980’s, Jackson & Jacobs investigated argumentation in conversation (their work is described in more detail in section 2.5.5, p. 37 ff.), and this was picked up by Seibold et al. (1981) and made into another effort to open mainstream decision-making for argumentation research, this time somewhat more successfully. Seibold et al. (1981) evaluated three modern argumentation theories, among them those of Toulmin and Perelman & Olbrechts-Tyteca mentioned above. Their method was to record discussions between university students in approximately forty groups of four students each, and then transcribe the discussions, and finally annotating the speech acts of the transcriptions according to the three theories. The authors constructed the coding schemes themselves, following the writings of the theorists as closely as possible.

The study was a preliminary test of applicability of the argumentation theories, with the explicit intention of performing more detailed studies later (within Structuration Theory) of argumentation in group decision. Because of this it is not surprising that the results were somewhat vague, but the authors concluded

that all three theories stood up well to practical application, and that they all had their respective strengths and weaknesses.

Several studies followed where argument and argumentation were placed in the framework of Structuration Theory; see for example (Canary et al. 1987) and (Meyers and Seibold 1990). The latter study includes a rather thorough explanation of how the authors see argumentation in structurational terms, but unfortunately their model remains unclear. The main reason for this lack of clarity, as I see it, is the inability to separate *arguing*, the activity performed by group members as part of a discussion, from *argument*, the argumentative propositions (or sets of them) traditionally studied in rhetoric<sup>1</sup>. The term used is *argument*, described as both system and structure, in line with the Structuration Theory. However, this seems to refer to the activity of arguing at times. For example, it is described as a ‘social practice’ (p. 285), an example is given of a ‘group leader who insists on free and unrestrained argument’ (p. 285), and it is claimed that ‘group argument is the production of interactive messages by social arguers in group discussion’ (p. 287). In other places, the term seems to refer to the argumentative propositions, for example when it is said that ‘actors [may] report why they think one argument is more rational or logical than another’ (p. 285), or that ‘[i]ntroduction of an argument in group discussion (...) reflects and reproduces’ norms ‘about legitimate and appropriate arguments’ (p. 285), or when the structurational view of argument is compared with ‘PAT’s conception of argument as members’ cognitive responses’ (p. 286). More problematically, the term is used when it could have any of the two meanings.

However, it seems more reasonable that the authors primarily have the activity of arguing in mind, as well as making more sense in structurational terms. Arguing is an activity that members of society have knowledge about, and expectations about how it should be performed. This knowledge and these expectations would be arguing-as-structure, that make members conceive of an instance of arguing as a unit (arguing-as-system). At the same time as arguing-as-structure shapes and delimits arguing-as-system, it reproduces itself, strengthening the expectations on what arguing is each time it is used.

### 2.5.5 Argumentation and conversation analysis

In the late 1970’s and early 1980’s,<sup>2</sup> Scott Jacobs and Sally Jackson used Conversation Analytical methods and theory to investigate ‘conversational argumentation’, argumentation in everyday conversations (Jacobs and Jackson 1982). They refer to their approach as *discourse analytic*, which seems to imply a rather inde-

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1. (O’Keefe 1977) used argument<sub>1</sub> and argument<sub>2</sub> to make the distinction; see page 128.
  2. I have not found any publications on argumentation by Jacobs and Jackson later than 1980’s.

pendent selection of philosophical underpinnings (they subscribe primarily to Mead, Austin and Wittgenstein (Jacobs and Jackson 1982:207)), combined with methods and concepts from CA.

Jacobs and Jackson's view of argument is somewhat different from traditional argumentation analysis, and is based on *disagreement*. To understand this view, we have to start with what they call 'a primary analytic unit for discourse analysis', the *speech act*. They use Austin's (1962) and Searle's (1969) theory of speech acts, where speech acts are defined by their *felicity conditions*, i.e. prerequisites to the proper or valid performance of a speech act. Felicity conditions can be used to analyze relations between speech acts, in particular because they specify what beliefs a speaker is committed to by performing a certain speech act. A speech act performed with the words 'what time is it' could for example commit the speaker to having a wish to know what time it is, and a speech act performed with the words 'it's half past nine' could commit the speaker to be able to show evidence for the claim that the time is half past nine'. Thus two speech acts can be related through interconnected felicity conditions.

Jacobs and Jackson (1982) write that certain speech acts become conventionally paired into *adjacency pairs*, a concept introduced by Sacks and Schegloff (1974). Familiar examples of such pairs are *question-answer*, *offer-accept/decline*, and *request-grant/refuse*. (The concept can be criticized for its claim that the pairing is conventional rather than a consequence of other factors (Allwood 2001a). However, Jacobs' and Jackson's works do not rely on this conventionality, but rather on the pairing.) The second part of an adjacency pair typically comes in (at least) two variants, and in any given situation one of these is preferred to the other. For example, after an invitation an accept is usually preferred to a refusal (see for example (Levinson 1983) for details of preference). When dispreferred second parts are used, they are often expanded, i.e. another adjacency pair is added before, inside or after the main adjacency pair, as in the following example from (Jacobs and Jackson 1982:222):

*Figure 2-2: Adjacency pair with expanded, dispreferred second.*

1	A: Would you come here and clean up this milk I spilled?
2	B: Can't you get it?
3	A: I've gotta peel these carrots.
4	B: Okay.

Here the request-acceptance pair on lines 1 and 4 are separated by the question-answer pair on lines 2 and 3.

Jacobs and Jackson call conversational argument *disagreement relevant expansion*, i.e. expansions of adjacency pairs that are used to handle disagreement.

*Conversational arguments are, first and foremost, disagreement-relevant speech events. They are characterized by the projection, production, suppression, or resolution of*

*disagreement, so that they function not only to manage cases of expressed disagreement, but also to regulate the occurrence of disagreeable speech acts.*

(Jacobs and Jackson 1982:224)

Through presuppositions and implicatures that are created by felicity conditions, any speech act can, according to Jacobs and Jackson, be disagreed with. Conversational argument is therefore a much wider term than argument in traditional argumentation analysis. The subject of the research of Jacobs and Jackson can therefore be described as disagreement management rather than argumentation in the more traditional sense.

## 2.6 Discussion

### 2.6.1 A simple model of group decision-making

In order to understand the relationships between research done on group decision-making within different disciplines, and how the present study relates to that, a model of group decision-making is needed, such as the following:

Decision-making groups consist of human beings who communicate interactively, attempting to reach a shared view concerning one or more future actions. Part of this interactive communication may consist of arguing. Based on the shared view, a group decision is made, i.e. the members choose one of the available alternatives and create an obligation for themselves or others to act according to this choice. The chosen action is intended to produce a certain result, and typically, the members of the group have public and shared intentions for this. This intended result may or may not coincide with the actually produced result.

To understand the communication in a given group, one must acknowledge that groups exist in a social structure, and constitute a social structure for the members. Cultures, habits, status hierarchies and other relations exist between group members, partly inherited from the social structure outside the group, and partly developed within the group. Further, groups exist for a reason: they perform activities. These things affect communication.

The model described here will now be used as a backdrop for a comparison of the previous research done on group decision-making.

### 2.6.2 Comparison

As described in this chapter, research on group decision-making is done in several academic disciplines, with little contact between them. The research done in social psychology and in speech communication are descendants of the same roots (Bales, Lewin), but contact between the two is rare, although it does exist. This separation is, at least in part, due to differences in interests. Social psychologists have mostly been interested in studying group members and their individual preferences and understanding, in order to try to predict outcomes, in a general behaviorist tradition. Outcome oriented communication scholars have also been

interested in final group decisions, but they have focused on the interaction in the group and how that can be managed to ensure “good” decisions. Development oriented communication scholars set out with the same interest as their outcome oriented colleagues, but they focus on how the interaction shapes the social structure of the group and the shared view. CA research on group decision-making is in its early stages, and seems to connect primarily with the established communication research, in particular the development oriented branch and the interest in social structure that is prevalent there. CA researchers come from a rather different research tradition, being more descriptive and linguistically interested, but as sociologists, their over-all goal is to understand and describe how sociological macro structure arises from the micro structure of everyday interaction. Argumentation analysis, finally, has focused on the argumentative content of the communication (and not only in decision-making groups).

However, the theoretical parallels between the different camps are considerable. The CA perspective is very close to that of Structuration Theory in the communications camp, which also has its roots in sociology. Furthermore, the recent additions to communication research of Bona Fide Groups and the Naturalistic Paradigm go very well with CA traditions, and one cannot help wondering if it is mere chance that they have appeared approximately at the same time that CA entered the arena. In any way, these two developments of group decision-making research are likely to strengthen each other.

Methodologically as well as theoretically, outcome oriented research in communications has inherited much from social psychology, and independent theory development has been slow. The scientific differences between these two camps seems to be rather small, mainly resulting from slightly different research questions, as mentioned above.

As a result of these relations, the different classes of theories set up in different disciplines are not mutually exclusive, as a whole. Structuration Theory can very well be combined with CA and the Naturalistic Paradigm, and most of the work done in social psychology seem to be compatible with the Functional Paradigm.

The only odd bird in this overview is argumentation analysis, which has not received much attention from the other disciplines, and which has not been interested in the work of the other disciplines (Jacobs and Jackson being a notable exception in that they combine argumentation analysis and CA). The theories of argumentation analysis are also closer to philosophical theories. On one hand, this makes them less interesting to the other disciplines, but on the other hand, it makes it easier to incorporate them. There have been some attempts from communication scholars to include argumentation analysis in their research, but without much effect.

In summary, research on group decision-making can be divided into three types based on the main interest:



- Researchers of the first type are social psychologists and outcome-oriented communication scholars, who are interested in finding out how groups behave as a whole, and finding what parameters are important for predicting the actual decisions made by groups.
- The second type of research is done by development-oriented communication scholars, together with CA researchers. They try to understand and describe the interaction going on within groups, and are considerably less interested in predicting decision outcomes.
- The last type of research is done mainly by argumentation analysts, who try to figure out precisely how communication is used in groups to affect decisions. The interaction coding schemes of primarily outcome-oriented communication scholars are concerned with communication content in a similar way. Thus it is not surprising that some connections between argumentation analysis and other group decision-making research are found there.

My own interest, finally, lies in how communicative content and interaction, in a social context, create a shared view and a group decision among group members. More specifically, I would like to investigate how group decisions are constituted linguistically (in interaction), and how they come about (i.e. what the preceding group discussion consists of, particularly any arguing). Understanding the social structure is essential for understanding communication, and indeed a description of the communication has to integrate a description of the social structure.

It is quite clear that the research done in the different academic disciplines could benefit from each other, and as pointed out above, there are already plenty of connections between the different research communities. However, a better awareness of the work done in other disciplines would surely improve understanding of group dynamics in general and group decision-making in particular. My hope is that the present work shall be of interest for several of the different fractions, and bring them closer together.



# 3. Concept determination

## 3.1 Introduction

In order to gain a proper understanding of what group decision-making is, I shall now make an investigation of the concept of decision. I shall start with a short discussion of what concepts are and how concepts can be investigated (3.2), before starting the actual concept determination (3.3 and 3.4). In the last section I shall discuss the results of the investigation, and set up a definition of decision. Based on this I shall further specify the aim of this dissertation.

## 3.2 Theory

### 3.2.1 Introduction

#### **What are concepts?**

Concepts have been discussed for a long time in philosophy, at least since the days of Plato. Allwood (1989) identifies three different kinds of theories of concepts: *realism*, *conceptualism*, and *nominalism*.

In *realistic* theories concepts exist independently of humans, and can only be discovered by us, not created. Plato imagined a world of ideas/concepts/forms, parallel to our own empirical world, and that idea world was not only as real as the empirical world, it had a higher degree of reality (Cooper 1996). That is a rather extreme version of realism. More moderate realists point at *some* concepts, like those of integers, and claim that they must exist independently of humans.

*Conceptualistic* theories claim that concepts are some kind of mental entities, created by humans in their minds. This is perhaps the most intuitive view, and it is common in linguistics. Aristotle's writings express a conceptualistic view (Allwood 1989:3; Rodgers 1993:12).

*Nominalistic* theories, finally, exclude concepts altogether. There are linguistic expressions and things in the world that these expressions refer to, and that is all. This might seem a bit strange, but it is clearly an advantage of these theories that they manage without such notoriously elusive elements as concepts, which

cannot be observed (at least not directly). The medieval philosopher William of Occam is a well-known representative of nominalism (Allwood 1989:3).

Rodgers (1993) makes another division of concept theories, into *entity* and *dispositional* theories. *Entity* theories conceive of concepts precisely as entities, or things, typically corresponding to some real-world entity. In dispositional theories, concepts are ‘habits or *capacities* for certain behaviors’ (Rodgers 1993:11). For example, a nurse will not be able to perform a technique ‘aseptically’ without understanding the concept of asepsis. Rodgers (1993:11) mentions the British 20th century philosopher Gilbert Ryle as a representative of this view.

Comparing Allwood’s and Rodger’s systems of classification, it seems like dispositional theories match with nominalistic ones, and entity theories correspond to realistic and conceptualistic ones (although combinations like dispositional conceptualistic theories are conceivable). Both dispositional and nominalistic theories are characterized by an attempt to avoid classical concepts in the sense of unobservable phenomena, and instead try to base their explanation of humans on strictly observable grounds.

### **Describing concepts**

Allwood (1989; Allwood 1999) presents five ways of describing concepts: *necessary and sufficient conditions*, *component analysis*, *prototypes*, *semantic fields* and *meaning potentials*.

The classical way of describing concepts is to specify the combined conditions that are both necessary and sufficient for the concept, often abbreviated into the phrase *if and only if* (iff). For example the concept of a bird may be defined like this: *something is a bird iff it is an animal with feathers*. The pitfalls with these kinds of concept descriptions are that either the conditions are necessary but not quite sufficient, resulting in the definition being too broad, or they are sufficient but not quite necessary, resulting in the definition being too narrow. An example of too broad a definition is: *something is a bird iff it is an animal with wings*, since it would include for example bats. An example of a too narrow definition is: *something is a bird iff it is an animal that has a beak and can fly*, since it excludes for example penguins. The definition of group decision given below (section 3.5.1, p. 100 ff.) is an attempt to find necessary and sufficient conditions for the concept.

In *component analysis* concepts are described using a predefined set of features or components (Allwood 1989). For example, the concept *boy* could be described in the following way:

*boy* +human  
 +masculine  
 -adult

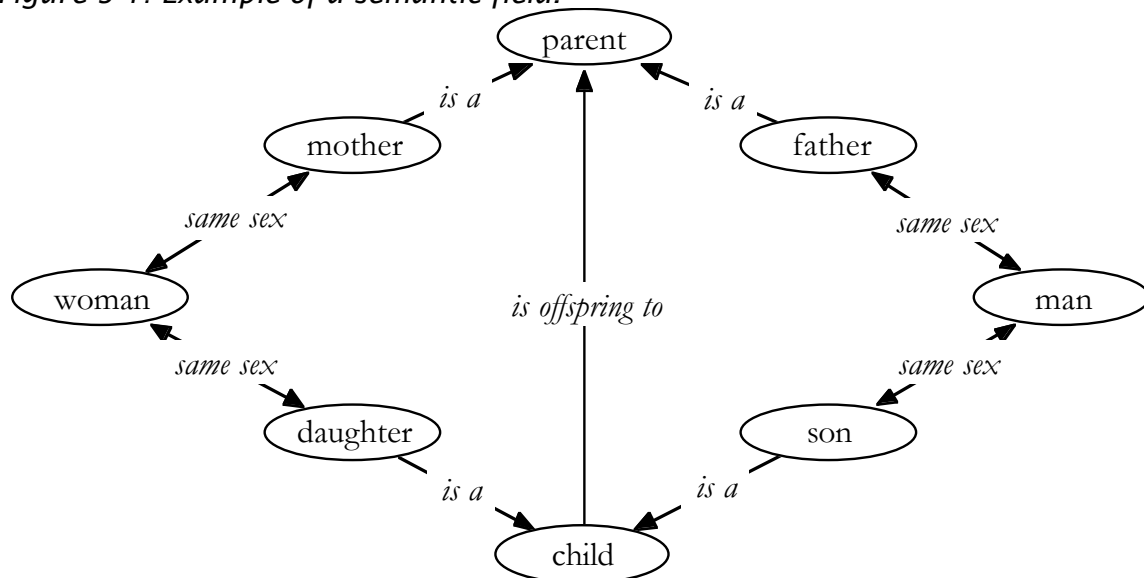
The values of the features may, as in the example, be binary (*present* or *absent*), but other values are possible, such as *optional* or *common*. One could also use values

along a scale, such as a weight interval or a number of limbs. The difficulty with this method lies of course in finding an appropriate set of features.

A third way to describe concepts is to provide examples. Rosch (1975) developed a theory where concepts are thought of as *prototype* examples, and where things belong to concepts by virtue of their similarity to these prototypes. The prototype can be the first instance of the concept that one remembers, but it may also be a more abstract generalization of all instances that one has come across. In the latter case the description of this generalized prototype may come very close to component analysis, since it will be a description of the typical features of the concept.

A fourth way of describing concepts is to describe their relation to each other, in a *semantic field*.

Figure 3-1: Example of a semantic field.



Semantic fields have great similarities with component analysis, since the selection of relevant relations (for semantic fields) corresponds to the selection of relevant features (in component analysis):

Figure 3-2: Example of describing a semantic field using component analysis.

	male	female	unspecified
ancestor	father	mother	parent
descendant	son	daughter	child
unspecified	man	woman	-

Rather than use one of these four traditional models, Allwood suggests that concepts should be described as *meaning potentials*, that is, sets of particular meanings tied to a linguistic expression. There is a strong linguistic root in this model, and

indeed, there is no strict separation between word meaning and concept in it. “A meaning potential is basically a person’s memory of the previous uses of a particular [linguistic] expression” (Allwood 19991). When the actual meaning of a linguistic expression is to be determined, cognitive operations are used to single out the relevant meaning from all the potential meanings associated with the expression. Thus, a concept can be described by describing its meaning potential and the cognitive operations that apply to it. This notion is examined further below (see 3.2.3).

### Investigating concepts

Compared to the enormous ongoing discussion in western science concerning the nature of concepts and how to describe them, methods for how concepts should be *investigated* have hardly been discussed at all. There seems to be a much greater consensus on that topic, and the methods of concept analysis are taken for granted by scientists. It is perhaps symptomatic that all the published literature I have found on the topic originates from a textbook, written for high-school students (Wilson 1963). I shall present Wilson’s work here, and then proceed to go through Allwood’s ideas on this subject.

### 3.2.2 Wilson

#### Introduction

John Wilson’s book *Thinking with Concepts* (1963) was specifically designed for US Americans preparing for entrance tests for university studies, and so it must be considered a textbook, and not a scientific publication in a strict sense. In the preface Wilson writes that the method he presents was established some thirty years ago (i.e. in the 1930’s), and it, ‘has suffered from being tied too tightly to the apron-strings of certain schools of modern philosophy’. Unfortunately, he does not give any references to these schools of philosophy, and I have not been able to identify them myself. Wilson writes that “a man’s language is only a symptom of his conceptual equipment”, and emphasizes that by ‘conceptual equipment’ he does not only mean language. This conceptual equipment is not some kind of Kantian, innate capabilities of the human cognition, but rather some kind of basic experiences and desires:

*Many of our interpretations are, no doubt, in some sense forced upon us. We grow up into a world in which, for the sake of survival, we are forced to attach a certain weight to food, warmth, physical objects, and so on: and thereby we uncritically create and accept a framework of interpretation which, for the most part, stays with us for the rest of our lives.*

(Wilson 1963:131)

The framework is described in more detail, how it includes values and attitudes, and that it is this framework that is our conceptual equipment.

Wilson's view of concept is clearly conceptualistic, in Allwood's taxonomy, he writes that when he talks about 'the concept of a thing', he refers to all the different concepts that individual humans have, and the extent to which these concepts coincide. He also writes that children start forming concepts based on their ability to discriminate and see similarity; these concepts are then adjusted and re-created in linguistic interaction with adults. Although Wilson is not very explicit when describing his view on the nature of concepts, it also seems that his view is an entity theory, in Rodger's taxonomy, since concepts according to Wilson can coincide, be formed, they can resemble each other, and people can have them. Here is a quotation:

*Thus we can talk about 'the' concept of justice entertained by the ancient Romans; but also we can talk about your concept of justice, or my concept, or Cicero's concept, just as we often say 'His idea of justice is so-and-so'. We must not, in any case, imagine that 'the' concept of a thing is a separate entity on its own.*

(Wilson 1963:54)

Here it seems that although *the* concept of justice is a generalization which is not an entity, all the individual concepts of justice *are* entities.

Wilson's focus, however, is on how concepts should be analyzed, or perhaps handled. As one might expect from a high-school textbook, his method for concept analysis is rather straight forward, consisting of eleven steps, to which I now turn my attention.

### Steps in concept analysis

#### *1. Isolating questions of concept*

Wilson starts by pointing out that questions of concepts show up among other kinds of questions, and he divides research questions into questions of *fact*, questions of *value* and questions of *concept*. One of his examples is this:

- i) Is Communism likely to spread all over the world?
- ii) Is Communism a desirable system of government?
- iii) Is Communism compatible with democracy?

Question i) is a question of fact, according to Wilson, ii) is one of value, and iii) is a question of concept. Of course all three questions depend of the definition of Communism (and in principle the other words in the sentences too), and iii) includes an element of fact as well, but we must remember that Wilson writes a textbook for high school students. Question i) is primarily a question of fact, etc. He also points out that questions may be 'mixed', i.e. they contain elements of two or more of the categories above.

#### *2. 'Right answers'*

This step is a little strange, and its purpose is not all clear. The way I understand it, however, it is about setting the expectations for the kind of answer

one is about to produce. Wilson emphasizes that questions of concept often do not have simple right or wrong answers. Different people may understand a concept in different ways, and there is not necessarily a good way of telling which way is the correct one. At the same time, concepts are not entirely relative, but there is a wide-spread core, a *stereotype* in Allwood's terminology (Allwood 1989:22).

### 3. *Model cases*

The primary method for Wilson is to consider examples, or 'cases that are or are not instances of the concept', to use his own terminology. The first case to consider should be a model case, a case of which one can say, "Well, if *that* isn't an example of so-and-so, then nothing is". By reflecting over several model cases, and what it is that makes them model cases, essential features can be separated from non-essential ones. (Cf. Allwood's prototypes, p. 63.)

### 4. *Contrary cases*

As a complement to the model cases, one should consider contrary cases, that is, cases of which one can say, "Well, whatever so-and-so is, *that* certainly isn't an instance of it". This could become a bit silly if the selected case is made completely different from the model case. For example, if one is interested in the concept of justice and uses a fish as a contrary case, little is gained. Wilson obviously has cases in mind that in some sense *could* have been instances of the concept, but are not. In his example of justice, he provides a model case for injustice as a contrary case of justice. In the terminology of traditional philosophy, he is looking for *contrary* opposites, not *contradictory* ones.

### 5. *Related cases*

Wilson writes that it is sometimes necessary to investigate related cases in order to gain an understanding of the analyzed concept. In the example with the concept *justice*, he writes that the concept of *deserving* may have to be investigated as well, since *justice* can hardly be understood without understanding *deserving*. This seems to be Wilson's popular way of saying that the entire semantic field that the concept belongs to needs to be considered.

### 6. *Borderline cases*

The fourth kind of case that Wilson uses in his model is the borderline case, i.e. cases that one is unsure as to whether they are instances of the concept or not. Such cases in some way or another strike us as odd or queer, and by considering what it is that makes them odd or queer, one can discover what the central criteria for the concept really are (Wilson 1963:31).

### 7. *Invented cases*

The fifth case type, invented cases, comes as a bit of a surprise, since all the previous cases seem to have been invented as well. At least Wilson writes nothing about using real-world cases or how to find them. However, his de-



scription of invented cases indicates that *invented* means something like ‘thinkable, but for practical reasons impossible or at least very unlikely’.

*Thus suppose we discovered creatures hundreds of miles below the earth’s surface which looked more or less like men, and had intelligence, but had no emotions, no art, and never made jokes. Would we count them as men?*

(Wilson 1963:32)

Thus, an ‘invented cases’ is a kind of borderline case.

#### 8. *Social context*

Questions of concept are, according to Wilson, not asked in a social vacuum. For that reason, the analyst should imagine the social contexts in which the question is possible or likely to be posed. *Who* asks it, *why* it is asked, *when*, etc. This should not be confused with the ‘invented cases’ that were considered in step 7 above, which also include imagining situations. Under the heading of social context the analyst should ask in what context *the concept should be used*, not which situation would be an instance of the concept.

#### 9. *Underlying anxiety*

Much like step 8, step 9 concerns the circumstances of the use of the concept. Where step 8 concerns social aspects, step 9 concerns psychological ones. What are the personal motives for the person who asks the question? Underlying motives and feelings may be relevant for understanding the concept.

#### 10. *Practical results*

If there are no practical consequences to whether a question is answered with yes or no, chances are high that the question is badly put, and should be rephrased (or replaced with another, related question). Wilson’s example is, ‘Is the whole life just a dream?’ which, according to him, does not matter at all – even if life were simply a dream, it would not change anything about how we live. “[T]his suggests that the question ... does not very well represent in words the underlying worry or doubt in the questioner’s mind” (Wilson 1963:35).

This step seems to belong to a kind of meta discussion of whether the analyst is working with the right concept or not, and should perhaps be placed in connection to step 1, where the question of concept is identified.

#### 11. *Results in language*

This header is somewhat confusing, since it puts focus on language, while Wilson’s intention with this item is really about usefulness of the concept. A concept that is so wide that most things under discussion are included may not be very useful; the same would go for a concept that is so narrow that it excludes all items under discussion. Wilson’s own example is about *democracy*, a term that can be used very widely, (‘any system of government where the people exercise some kind of control’) or very narrowly (‘any system of government where every person’s opinion have truly equal weight’). However, if

*democracy* is taken to mean one of these two things, there will most likely be a need for other concepts such as *totalitarian* and *competitive elections*.

### Discussion

Wilson's method is more than just a method of concept analysis. It addresses generally how questions of concept should be handled in critical thinking. Steps 1 (isolating questions of concept) and 10 (practical results) are about finding out what to analyze, and steps 8 and 9 (social context and underlying anxiety) may also be used for that selection. Step 11 (results in language) is a normative requirement<sup>1</sup>, and step 2 ('right answers') is not really an analytical step, but rather describes a property of concepts. What remains is the different kinds of cases to consider when analyzing a concept (steps 3-7), and in what contexts and for what purposes the concepts should be used (steps 8 and 9).

### 3.2.3 Allwood

#### Concepts

Jens Allwood (1989) developed the second theory I have found for investigating concepts. His model is a framework for *concept determination*, a term he prefers to the more traditional *concept analysis*. *Analysis* implies that the already concept exists and simply is described (in the sense of taking apart), but Allwood claims that the 'analyst' also partly constructs the concept in question (in the sense of putting together). *Determination* is a more neutral term in this respect.

Allwood's view of concepts is conceptualistic (in his own taxonomy; see p. 43 above), since he writes that concepts are created by us in attempts to 'divide the world into concepts' (Allwood 1989:11). He also calls his view dynamic, since it assumes that concepts are the results of certain cognitive processes aimed at compressing complex and dynamic information into entities better suited for our cognition. This compression includes simplification, but also usually reification and abstraction, since the products are objects with properties and/or relations.

Allwood finds evidence for the reification that takes place in the formation of concepts in natural language, where there is a strong tendency for nominalization as soon as concepts are to be discussed. We prefer to speak of the concept *yellowness* rather than the concept *yellow*, for example, or the concept *running* rather than the concept *run*.

The theory is to an extent compatible with the traditional (Aristotelian) view of concepts, since concepts are seen as abstract, mental entities, and this makes the model mainly an entity theory (in Rodger's taxonomy). However, it differs from the traditional view in two ways. First, Allwood does not require concepts to be of a single kind. Some concepts may be iconic in nature, some a set of features

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1. Normative in a 'functional' (as opposed to ethical) sense – the concepts must be useful, and not void of information.

or relations, and others may be some other kind; combinations are possible as well (Allwood, personal communication). The other difference, which also gives the model a dispositional trait (according to Rodger's taxonomy), is that it recognizes the creative process, as well as the results of concept formation. Concepts are, according to this view, created according to certain *semantic-epistemic* principles and through semantic-epistemic operations. Humans use such operations and principles on a daily basis to create, activate and change concepts.

### **Language dependency**

Allwood writes that although some concepts can be formed without language, all concepts have to be given a linguistic expression in order to be communicated. Natural language 'shapes, structures and gives cultural stability' to the cognitive operations that are used to create and manipulate concepts. In a sense, language provides a supply of ready-made concepts where the linguistic structure in some cases mirrors the semantic-epistemic operations behind the concepts. There is thus a dependency between concept and language, and a concept developed in one language/culture does not necessarily have a precise match in another language/culture (Allwood 1989:15).

Although I agree with Allwood on this issue, it should be noted that a concept can be communicated without having had a word assigned to it as name. Use of a fairly long description, accompanied by examples, is not an unusual way of communicating concepts, at least while they are fairly new (to the speaker or listener).

### **Empirical anchoring**

Allwood prescribes two ways of anchoring investigations of concepts empirically. The first is to use dictionaries and thesauri to find words belonging to the same semantic field, and the second is to use language corpora to investigate different uses of the word for expressing the concept in question. These uses include inflections and derivations, as well as compounds and phrasal relations. This empirical data sometimes more or less stands on its own, but often it has to be complemented with intuitive analysis. For example, when a set of compounds including the key word has been extracted from a corpus, an intuitive analysis is needed to see patterns in the material, and perhaps to see what is *not* there.

### **Method for concept determination**

When determining a concept, Allwood suggests the following main components:

- Analysis of the basic epistemic structure.
- Analysis of the basic conceptual structure
- Analysis of the anchoring in time-space
- Analysis of the processes and relations
- Analysis of the roles derived from process and relations

- Analysis of the properties
- Analysis of the possibilities of quantification, evaluation and modality
- Analysis of normative requirements on concept determination

Most of these steps have several sub-steps, and these will be described in detail in the determination of the concept *decision* below (section 3.4).

### Discussion

Allwood's framework is quite comprehensive, and starting the process of getting acquainted with it and using it for determining a concept is not for the faint of heart. It includes a thorough description of what can be said of concepts in general, and empirical methods for finding out what to say about a particular concept. A subset of the most important parts of the framework could perhaps be extracted for use in cases where time and space are limited.

Another problem with the framework is that the long lists of what could be said about concepts do not have an obvious theoretical foundation. Nothing in the framework explains why these lists can be expected to be exhaustive.

#### 3.2.4 Comparison of Wilson's and Allwood's theories

Allwood's and Wilson's theories are quite different in kind, partly due to the different audiences intended for the two works. Wilson's book is intended for teenage students, while Allwood's paper is written for an academic audience, preferably one familiar with traditional analytical philosophy<sup>1</sup>. However, the two works are largely compatible. Wilson's steps 3-9 (the different types of cases, social context, and underlying anxiety) can be used as a way to find values for the parameters in steps i-vii in Allwood's model (everything but normative aspects). Wilson's step 11 (results in language) can be handled under Allwood's heading of normative requirements (step viii), while Wilson's remaining steps are essentially motives for and uses of concept analysis, which belong outside Allwood's framework.

### 3.3 Method and material

In the present study, I shall use Allwood's framework primarily, complementing it with Wilson's insights when appropriate. The following steps will be performed:

- Determine the object and purpose of the determination.
- Describe the etymology of the words involved.

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1. Allwood's main paper ('Om begrepp – deras bestämning, analys och konstruktion') is also an unpublished manuscript so far, and perhaps not as thoroughly worked through as it could have been.

- Determine the basic epistemic structure of the concept.
- Determine the basic conceptual structure of the concept.
- Determine the anchoring in time-space of the concept.
- Determine processes and relations.
- Determine roles derived from process and relations.
- Determine properties of the concept.
- Determine possibilities of quantification, evaluation and modality of the concept.
- Determine the bases for a normative determination of the concept.

The second step here, etymology, is not present in (Allwood 1989) or (Allwood 1999), but can be found in (Allwood and Gunnarsson 2003). It is meant to add insights about the historical roots of the concept.

Apart from my own intuition and understanding of the words, the input for concept determination will be: i) dictionaries and a thesaurus, and ii) language corpora. The thesaurus and dictionaries will be used to find other words that denote the same or similar concepts, and corpora will be used to find examples of how people talk/write about the concept. Examples illustrating the features under discussion will be used when appropriate (using Wilson's ideas of how to work with *model*, *contrary* and *borderline cases*).

The thesaurus used is the Swedish *Svensket ordförråd ordnat i begreppsklasser* (Bring 1930), in an electronically stored text version, which allows it to be searched using a computer. The Swedish dictionary used is *Nordstedts svenska ordbok* (Allén 1990), and the English dictionary is *The Cassell Concise English Dictionary* (Kirkpatrick 1989).

The language corpora used are the following:

- *GSLC*  
The Göteborg Spoken Language Corpus (Allwood et al. 2003) consisting of 1 377 400 words, from recordings from about 25 different social activity types.
- *GP-HD*  
This is a collection of article texts from Swedish newspapers, *Göteborgs-Posten* and *Helsingborgs Dagblad*. From the latter newspaper all articles published between 1994 and 2001 (advertisements excluded) are used, and from the former all articles published between 1992 and 2001 (advertisements excluded). The resulting written Swedish corpus consists of 338 393 000 words.<sup>1</sup>

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1. Where a word is a token that contains at least one number or letter.

- *BNC Written*  
The written segment of British National Corpus (Aston and Burnard 1998) (see also <http://www.natcorp.ox.ac.uk>), consisting of 90 249 000 words<sup>1</sup>
- *BNC Spoken*  
This is the spoken segment of BNC, consisting of 10 448 000 words<sup>1</sup>

When studying the use of words in large corpora, a common and efficient method is to let the computer generate concordances in KWIC format (Key Words In Context), illustrated in figure 3-3:

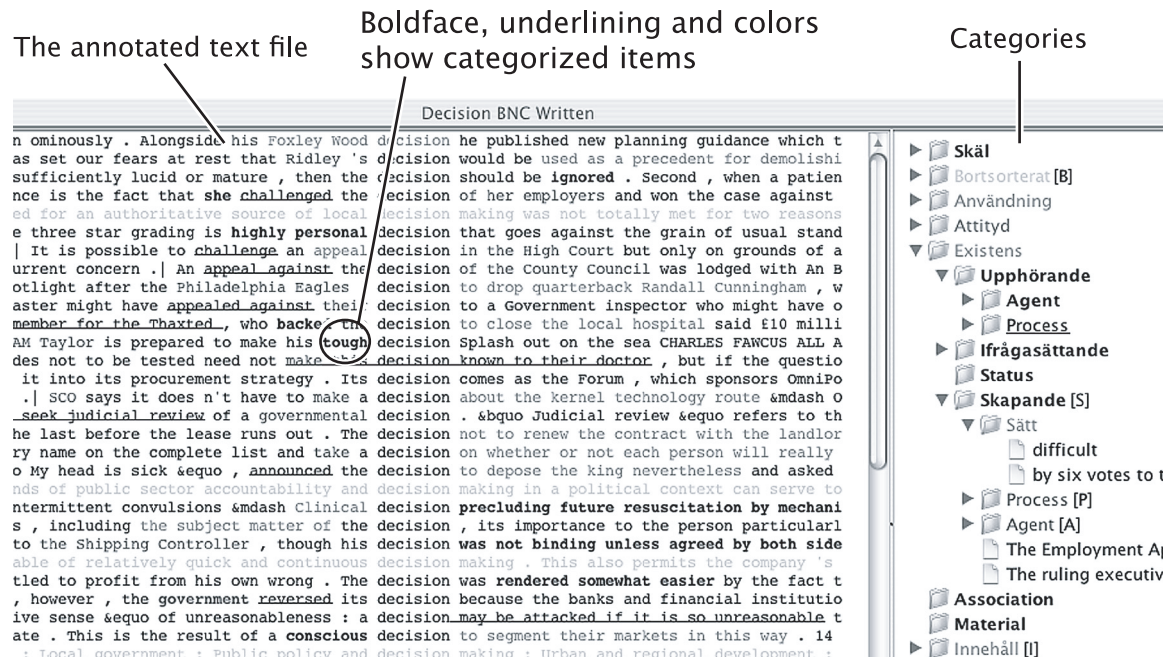
**Figure 3-3: A KWIC format concordance.**

reform NHS this need for an authoritative source of local decision making was not totally met for two reasons  
 right away that the three star grading is highly personal decision that goes against the grain of usual stand  
 pt or turn down .l It is possible to challenge an appeal decision in the High Court but only on grounds of a  
 t help to quell current concern .l An appeal against the decision of the County Council was lodged with An B  
 is back in the spotlight after the Philadelphia Eagles ' decision to drop quarterback Randall Cunningham , w  
 units , then Pubmaster might have appealed against their decision to a Government inspector who might have o  
 d , Conservative member for the Thaxted , who backed the decision to close the local hospital said £10 milli  
 'M THE BOSS GRAHAM Taylor is prepared to make his tough decision Splash out on the sea CHARLES FAWCUS ALL A  
 A person who decides not to be tested need not make this decision known to their doctor , but if the questio  
 by incorporating it into its procurement strategy . Its decision comes as the Forum , which sponsors OmniPo  
 sktop , " it says .l SCO says it does n't have to make a decision about the kernel technology route - 0  
 ch a litigant can seek judicial review of a governmental decision . "Judicial review" refers to th  
 s however to be the last before the lease runs out . The decision not to renew the contract with the landlor  
 should check every name on the complete list and take a decision on whether or not each person will really

Using *lgconc*, a program developed by Leif Grönqvist at the Department of Linguistics, Göteborg University, six concordances were generated, consisting of a random sample of 100 occurrences of each of the studied words and corpora (*beslut*, *besluta* and *bestämna* for GSLC and GP-HD). Inflections were included as far as possible (misspellings and very uncommon forms were not included). For *bestämna* a closer inspection of its concordances revealed that 24 occurrences in GP-HD and 20 occurrences in GSLC were cases of meaning 2, 'determine', see below, and were left out. This resulted in a concordance of 556 lines, divided on 6 "sub-concordances". English concordances were also produced and studied, and this is presented and discussed in section 3.4.11. (See also section 3.4.1 below.)

A special computer tool, *Leonardo*, was developed and used for analysis. A screen shot is shown in figure 3-4.

Figure 3-4: Screen shot from Leonardo.



Leonardo lets the user put words, phrases and lines of a text file into categories that are defined by the user. Occurrence counts for the categories can be produced, and the text file can be filtered for certain categories, colors can be used for marking category instances, etc.

Apart from concordances, lists of word types based on *beslut/ besluta/ bestämma* and *decide/ decision* were generated from the corpora. This resulted in information on i) what types exists, and ii) how common they are. It is of course difficult to predict all forms of the words that can occur, but both Swedish and English are fairly agglutinative, and the roots are usually preserved in the word form. Thus, a search for all word forms containing the string *decid* or *decis* can be expected to capture the vast majority of all word forms derived from *decide*, while not capturing more word forms (109, in fact) than can be checked manually for incorrect hits (such as *deciduous*).

Using such word type listings, compounds and derivations can be investigated quite thoroughly, at least for Swedish. For English the list of compounds is severely limited, since compounds normally are written as separate words (English *city map* v.s. Swedish *stadskarta*). For Swedish, the list of compounds investigated was limited to the 100 most common types, all having frequencies of at least 25.

## 3.4 Determining the concept of decision

### 3.4.1 Object and purpose of the determination

The aim of this chapter is to determine the popular concept of decision. All words and expressions that could be used as synonyms for *decide/ decision* should

be investigated, ideally, along with corresponding words in all other known languages. This is obviously impossible, and we shall therefore focus this study on the Swedish words most clearly associated with the concept of decision. Swedish is the native and first language of the author, and his understanding of the studied examples can be expected to be considerably better for Swedish than for any other language. Further, the recorded activities used in this dissertation are all in Swedish. A brief comparison with English will also be provided, since English is dominant in the existing research on group decision-making. For the same reason, focusing this study on Swedish has the benefit of broadening the linguistic and cultural empirical material for research on group decision-making.

The thesaurus used to find synonyms and words related to decision, (Bring 1930), has neither *beslut* nor *besluta* nor *bestämma* as entry words, but with the help of a variety of sources, dictionaries, thesaurus and personal knowledge of the Swedish language, the following list of (partial) synonyms was constructed<sup>1</sup>:

- *besluta, bestämma, komma överens om, enas om, säga, stipulera, avgöra, välja, gå på*
- *beslut, utslag, avgörande, val*

The Swedish words that I as a native speaker consider most associated with the concept of decision are *besluta/beslut* (verb/noun) and *bestämma* (verb). These are also the words from the list above that most frequently occur in GP-HD and GSLC (see below), with the exception of *välja* ('choose, select') and *val* ('choice, selection'), which are more common than *besluta* and *bestämma*. However, these words only refer to one aspect of the decision, and it would be difficult to say precisely how they relate to the concept of decision. For English, the words *decide* and *decision* seem to have no real competitors (*choose/choice* and *select/selection* are excluded for the same reasons as *välja/val*). The concept determination will thus be centered on these five words.

The model of group decision from section 2.6.1 serves as a focal point. Uses of the selected words that do not match that model (at least approximately) are considered cases of polysemy/homonymy, and are disregarded. This is most necessary with the word *bestämma*, which commonly is used in two other senses, described in the Swedish dictionary as shown below. (In the English translation column to the right, the word *bestämma* is left untranslated, and the reader can pick *decide* or *determine* as she prefers. Please remember that it is the Swedish word *bestämma* that is being discussed here):

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1. The Swedish word *decidera* is worth mentioning here. It is obviously a cognate to the English word *decide*, but it is very rarely used in Swedish, and the meaning seems to be rather different. It is very rare – in the Swedish corpora it only appeared 19 times, the negated form *odeciderad* included – and only used as participle (*deciderad/-t/-de*). The meaning of the word in all these cases are something like 'explicit, clear'.



<p><b>bestäm/ma</b> verb <i>-de -t, pres. -mer</i></p> <p>1 fastlägga regler eller principer för ngt: <i>man ~de att alla besökare skulle visiteras; kommunerna skall få ~ över etableringarna; eleven får ~ takten själv</i></p> <p>äv. refl. i fråga om eget handlande: <i>väljarna måste få möjlighet att ~ sig på saklig grund; hon -de sig för att göra karriär</i></p> <p>ibl. med hänsyftning på ödet e.d. &lt;vanl. perf. part.&gt;: <i>han tycktes tidigt vara ~d för något stort</i></p> <p>2 fastställa värdet (eller läget) för ngt, ofta med mer el. mindre vetenskapl. metoder: <i>~ solens avstånd från jorden; ~ en punkt med radarfixering</i></p> <p>3 ange egenskaperna hos ngn. vanl. abstrakt företeelse &lt;språkv., fil.&gt;: <i>adjektivet ~mer normalt ett substantiv.</i></p>	<p><b>bestäm/ma</b> verb <i>-de -t, pres. -mer</i></p> <p>1 to stipulate rules or principles for something: <i>it was ~ed that all visitors were to be searched; the towns will be left to ~ over the startups; the student can ~ the pace himself.</i></p> <p>also as a reflexive verb concerning one's own actions: <i>the voters must be given the opportunity to ~ themselves based on factual reasons; she ~ed herself to make a career.</i></p> <p>c) Sometimes referring to fate or something similar: <i>from early on he seemed to be ~ed for something great.</i></p> <p>2 to specify the value (or position) of something, often with more or less scientific methods: <i>to ~ the distance of the sun from the earth; to ~ a point with radar fixing.</i></p> <p>3 to list the properties of something, usually abstract &lt;linguistic, philosophic&gt;: <i>the adjective typically ~s a noun.</i></p>
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(Allén 1990)

The quotation lists three main meanings for *bestämna*, and the English word *decide* can also have meaning 2 ('determine'), as in the following example from BNC Written:

Ex 1. Lisa's fists were clenched tightly at her sides as she rode up to the fourth floor in the silent lift. As the doors opened she stepped out and glanced quickly round her at the tastefully lavish five-star décor. A suite here for one night would cost, she decided, a couple of weeks of her former salary.

Although possible, it is highly unlikely that Lisa sets the price of the suite or her former salary in this excerpt. It is more likely that she makes an estimation (specification) of the price of the suite, and compares that to her former salary.

Sometimes it is indeed difficult to tell it apart from meaning 1 above, as in this example, also from BNC Written:

Ex 2. ...and the folk who decided which movies were important and meaningful...

As mentioned above (p. 54), uses that are considered to correspond to definitions 2 and 3 were filtered out of the concordance material.

In the Swedish corpora there are plenty of compounds with *bestämna* that are based on meaning 2, a total of 9 types and 629 occurrences (inflected forms included). The number shown within parentheses after the English translations denotes the number of occurrences in the Swedish corpora. (It should be noted that the meaning of the compound as a whole may be quite removed from the basic meaning of *bestämna*.)

*artbestämna* ('determine species', 94), *artbestämning* ('determining species', 47); *genrebestämna* ('determine genre', 33); *könsbestämning* ('determining sex', 31); *positionsbestämning* ('determining position', 93); *tidsbestämna* ('determine time', 255), *tidsbestämning* ('determining time', 32), *åldersbestämna* ('determine age', 41) and *åldersbestämning* ('determining age', 35).

Compounds using meaning 1 are more common, a total of 18 types and 779 occurrences.

*bestämmanderätt* ('right of determination', 141), *eu-bestämmelserna* ('eu regulations', 55), *förutbestämna* ('predetermine', 186), *medbestämmande* ('codetermination', 264), *medbestämmandelag* ('joint regulation act', 167), *medbestämmanderätt* ('right of codetermination', 42), *områdesbestämmelser* ('area regulations', 213), *planbestämmelser* ('development regulations', 152), *självbestämmande* ('autonomy', 847), *självbestämmanderätt* ('right of autonomy', 137), *skyddsbestämmelser* ('protective regulations', 132), *strandskyddsbestämmelserna* ('the regulations for beach protection', 87), *särbestämmelser* ('special regulation', 78), *tullbestämmelserna* ('customs regulations', 47), *tävlingsbestämmelse* ('competition regulation', 87), *undantagsbestämmelser* ('exceptional regulation', 66), *ödesbestäm<sup>1</sup>* ('fated, predestined', 145), *övergångsbestämmelser* ('provisional regulation', 201).

Appendix 2 contains frequency lists for the verb and noun forms of *besluta*, *bestämna* and *decide*.

### 3.4.2 Etymology

According to *Svenska akademins ordbok* (Svenska akademien 2004), *besluta* is borrowed from Middle Low German *besluten* ('decide', 'make an agreement'). *Be-* is a prefix used to make a verb (more) transitive, among other things, while *sluta* (Middle Low German *sluten*) means 'to end, close, cover'. It is a cognate of the Latin *claudere* ('to seal'), a derivation of a root that is left in the Latin *clavis* ('key, bolt'). Classical Greek has the corresponding word pair, κλεισ [kleis] ('key') and κλειω [kleio] ('seals').

---

1. This can be analysed in more than one way. Here I see destiny as the agent, deciding what shall happen.

*Bestämma* is a common Germanic word, where the first part is the same prefix as in *besluta*. The stem *stämma* has two possible roots, either *ste*, *stem* meaning ‘stiff, make stiff, firm’, or *stämma* (‘voice’). In the latter case *bestämma* would mean something like ‘to utter approval’, and in the former case something like ‘to make firm or stiff’. It is possible that both roots have participated in the forming of the modern word, and that this is the cause of the polysemy of the word (*ste*, *stem* being the root of meaning 2 and *stämma* the root of meaning 1).

According to *The Oxford Dictionary of English Etymology* (Onions 1966), the word *decide* has its roots in the Latin *decaedere*. The stem *caedere* means ‘to cut’, and the prefix *de-* can have several functions, the most likely of which in this case is as intensifier. The relation between cutting and deciding goes via the Latin word *decidere*, (‘to cut off, cut the knot, determine’). I personally get a rather vivid image of a problem as a Gordian knot and Alexander cutting it apart in a single, decisive blow.

### 3.4.3 Basic epistemic structure

#### State or event

It is not obvious whether a decision should be seen essentially as an event or a state. Taken as an event, it is a change from a state without any obligation, to a state where there is an obligation concerning a future action. The alternative view is to see decision as a state, and then it concerns the state of obligation. Such a state of obligation could come about in some other way (for example, through tradition). In such a case, the concept of deciding could be formed with the intention of creating the state of obligation, in other words, the state conceptually precedes the event. However, obligation is a rather abstract phenomenon, and as long as the decision is understood and thoroughly agreed upon by participants, the obligation is barely noticeable (can a person be forced to do something he wants to do?). Therefore, it is possible to sit down and try to reach an agreement, without having any obligations in mind at all, and to decide without realizing that obligations have been created. I therefore favor the latter view, and consider the event more basic. What is more, the etymologies of the words reveal that the verb form is older than the noun forms; the verb *besluta* (decide) is considered the most basic form.

Still, the resulting state is closely associated with the event, and the nominalization *beslut* (which actually is more common than the verb in GP-HD<sup>1</sup>) indeed often refers to the resulting state, which is hard to distinguish from the obligation that has been reached. Since the decisions often are made by some kind of ruling body or large group of people, it is not surprising that decision results often re-

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1. There are approximately 147 000 noun and 69 000 verb occurrences in GP-HD, compounds included. In BNC Written the noun occurs 23 800 times and the verb 24 400 times.

semble a rule to be followed. Some examples of this are given here, with English translations in italics:

- Vi har inte alls några beslut på att helt ta bort familjedaghemmen.
- Gore har begärt att Floridas HD:s beslut skall gälla.
- Det ska inte löna sig att strunta i våra beslut, förklarar miljönämndens ordförande.
- *We do not have any decisions on completely removing the family child care centers*
- *Gore has requested that the decision of the Florida High Court shall be upheld.*
- *It must not pay to disregard our decisions, the chair person of the environment board explains.*

In all these three examples, the decision is similar to a rule or a law.

### Seizing decision

The expressions *fatta beslut* and *ta beslut* ('make decision', lit. 'seize, take decision') must be considered close synonyms to the verb *besluta* ('decide'). In addition, the nominalization *beslutsfattande/ beslutstagande* ('decision-making') occurs, in different forms, 852 times in the Swedish corpora<sup>1</sup>. Precise frequencies for *fatta/ta beslut* are more difficult to calculate, but out of the 100 investigated occurrences of *beslut* in GP-HD, 24 were part of one of the expressions *fatta/ta beslut*; in GSLC the corresponding number was 41. If the sample is representative for the entire corpus there are approximately 35 000 occurrences of *fatta/ta beslut* in GP-HD, and about 60 such occurrences in GSLC.

The literal meaning of *fatta/ta beslut* ('seize, take decision') implies that decisions somehow already exist, and only need to be picked up (or taken down). The primary burden of deciding could be to choose which one of the available decisions to pick up, or that the decision might somehow be difficult to hold, requiring an effort to gather and get a grip on it. I personally find the latter more plausible.

### Decision process

The compound *beslutsprocess* ('decision process'), which occurs 1 092 times in different forms in the Swedish corpora, signals that a decision can be seen as a process, an extended course of events that results in a state of commitment. In such cases, the process concerns work occurring before the actual decision is made, for example in connection with government decisions, which may be preceded by a commission, consultation procedure, opinion work, etc:

---

1. *Beslutsfattande* is tremendously more common than *beslutstagande*, with 850 occurrences vs. 2.

- Efter en lång beslutsprocess har regeringen nu givit Posten mandat att sälja Postgirot.
- I stället får vi ytterligare led i beslutsprocessen genom en mellanchef som ska förstärka analys och uppföljningsarbete.
- De bjuds inte in till förhandlingar på ett tidigt stadium i beslutsprocessen.
- *After a long decision process the government has given Posten the mandate to sell Postgirot.*
- *Instead we get yet another link in the decision process by an intermediate level manager who is to improve on analysis and follow-up.*
- *They were not invited to the negotiations in an early stage of the decision process.*

In these examples, *decision process* refers to preparations or investigations made before the actual decision.

In some cases, the actual decision event turns into an extended process, for example in political elections and similar contexts:

- När medlemsländerna närmar sig 30-talet i storlek måste beslutsprocessen ändras till någon form av majoritetsstyre.
- Parallellt med detta diskuteras en reform av unionens beslutsprocess i syfte att| garantera de större medlemmarnas inflytande inför en utvidgning österut.
- *When the number of member states approaches 30 the decision process must be changed to some kind of majority rule.*
- *Parallel to this, a reform of the union's decision process is being discussed with the intention of guaranteeing the influence of the large members in preparation of an expansion to the east.*

In these three cases it is the way the agreement is reached that takes time.

### Adjectives and participles

Apart from the participle (see below), there is no Swedish word form directly describing decision as a property, such as \**beslutig*, but there are adjectival derivations: (o)*beslutsam* [(in)decisive] describes a property of an agent, as do *beslutsför*, *beslutsmässig* and *beslutsfäbig*<sup>1</sup> ('quorate').

There are two alternative ways of forming the past participle, either *beslutad*/-at/-ade, which is used in passive constructions like *summan är beslutad* ('the sum is decided'), or *besluten*/-et/-na, which is used to describe an agent that has made a decision, e.g. *det här är något som klubben är fast besluten att genomföra* ('this is something that the club is firmly resolved to do'). The present participle, *beslutande* ('deciding'), is almost exclusively used for the body that is to decide in a certain issue or area, typically *beslutande organ* ('decision-making body').

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1. The word forms can be said to be border line cases between derivations and compounds.

The adjectival and verb forms can be derived to nouns again: *beslutare* ('decisioner') from the verb *besluta*, and *(o)beslutsambet* ['(in)decisiveness'] from the adjective *(o)beslutsam*.

For *bestämna* the verb is basic, and the noun form *bestämmelse* has received the specialized meaning 'rule, regulation'. Also the form *bestämning*, with 188 occurrences, has received a special meaning of 'specification, determination'. The form *bestämmande*, which is a more neutral nominalization of the verb, is a lot less common: *bestämna* occurs 66 157 times, *bestämmelse* 5 281 times and *bestämmande* 185 times, all totals including inflections.

The form *bestämd* can be adjective as well as participle; as an adjective it means roughly 'clear, doubtless', and can be used both for an agent that is convinced in his decision and for the actuality of a phenomenon:

- Det går inte och hålla på och tjata, säger en bestämd Bengt Gustafsson.
- Jag blev än mer bestämd att något måste hända i kampen mot våldet.
- Har ni egentligen haft någon bestämd avsikt med bomässan?
- Den handlar om fyra ungdomar som samlats i ett slags skyddsrum, ute råder en obestämd form av krigstillstånd.
- *You cannot keep on nagging about it, says a firm Bengt Gustafsson.*
- *I became even more determined that something must happen in the struggle against violence.*
- *Have you really had any clear intention with the housing fair?*
- *It is about four kids who gather in a kind of shelter, outside there is an in-determinate kind of state of war.*

In these examples *bestämd* means roughly 'without doubt or confusion'.

### Reflexives

The reflexive form *bestämna sig* occurred in 21 of 80 examined cases in GSLC (26%), and in 34 of 76 examined cases in GP-HD (45%). *Besluta* also occurred in reflexive constructions, in 8 of 100 examined cases in GSLC and 9 of 100 examined cases in GP-HD. As mentioned above (p. 57) *Nordstedts svenska ordbok* states that the difference in meaning is that the reflexive version denotes decisions concerning oneself, which seems to be compatible with the corpus data. However, it should be noted that the non-reflexive form also can denote decisions about oneself. This also means that the reflexive variants often focus the aspect of choice more than the non-reflexive variants, comparable to the English *to make up one's mind*:

- Regnet har inte riktigt bestämt sig trots allt och en kort sekund siktar vi en suddig fläck som kan vara solen.
- Men enligt hans advokat Christer Johansson har man ännu inte bestämt sig för detta.
- Hon bestämde sig efter bara några månader för att flytta.

- Men om de bestämmer sig för det kan beslut komma mycket snart, tror Ljöfström.
- *The rain has not quite decided after all and for a brief second we glimpse a fuzzy spot that could be the sun.*
- *But according to his lawyer Christer Johansson one has not yet made up one's mind about this.*
- *She decided to move after just a few months.*
- *But if they make up their minds, a decision can come very soon, Ljöfström believes.*

### 3.4.4 Basic conceptual structure

#### Introduction

Allwood identifies eight parts of the basic conceptual structure of a concept: *structural genesis, typification, instantiation, collection concept, division, quantification, evaluation* and *modality*. In the present study, collection concept and types are treated together, and modality is discussed in section 3.4.8-9 (p. 90). The other parts are discussed here.

#### Structural genesis

The concept of decision requires the ability to discern two states, delimited by the decision event, as well as the ability to perceive similarities between two decisions. In order to construct the noun form, the decision event must be reified.

#### Typification

Allwood lists five categories of types that are relevant for concepts, plus a 'non-type', or unanalyzed information unit. The five "type types" are *type, prototype, stereotype, maximal type* and *ideal type*. *Prototype* is probably what best corresponds to Wilson's *model case*, although it plays a much more prominent role in Wilson's model, which is both positive and negative. Similarly, Wilson's *related cases* correspond to a certain extent to Allwood's *type*, although *type* is restricted to similarity, while *related cases* might be any semantic relationship. Type/related cases will not be discussed more here, since different types of decisions are discussed throughout the chapter. Wilson's *contrary, borderline* and *invented cases* have no direct correspondents in Allwood's model, but fit easily into this section.

#### *Prototype, Stereotype and Ideal Type*

There is no obvious *prototype* for a decision (*model case* in Wilson's terminology), or perhaps there are many. One example might be when a person is about to vote in a public election. There are several alternatives to choose from, and election campaigns are held for several weeks or months before the election, providing information about the alternatives to the voter. The precise moment for the decision, that is, when the voter makes up his mind about it, may vary, and he

can change his mind several times. On Election Day, however, a single alternative has to be chosen.

When talking to friends and acquaintances about my dissertation topic, using the term *beslutsfattande i grupp* or *kollektivt beslutsfattande* ('group decision-making'), they almost always started talking about formal decision groups like boards and committees with a chair person, an agenda, minutes, etc. Decisions made in such formal contexts are thus probably *stereotypical*, at least for group decision. It is also prototypical for group decisions (although other prototypes are possible). Formal decisions are not treated separately here, but they do entail some conceptual difficulties, which can be illustrated by the following real world example:

I participated in a faculty board meeting at my university in October one year, where the faculty board decided which departments and subjects should be given funding for a certain kind of temporary employment. The board agreed on a principle, and it was decided that the subjects that were covered by this principle should be given the funding, and the subjects that were not covered should not be. At the following meeting, in November, one board member pointed out that there had been a mistake in the minutes for the October meeting, so that one of the subjects that was covered by the principle had ended up in the list of subjects that would not be given funding. By then, the minutes had already been signed. After a brief discussion it became clear that the decision could not be changed, rather, a new decision had to be made that over-ruled the previous decision. It is also relevant to note that nobody protested against the claim that there had been a mistake in the minutes, but everybody agreed that the subject in question was covered by the principle.

It is interesting to examine which decision actually was made at the October meeting. As mentioned, everyone had agreed that the subject in question should be given funding, which was what they said yes to at the acclamation. Even so, the resulting decision at that meeting was that the subject should not be given funding.

There seem to be two different decisions in play. One belongs to a kind of abstract, social apparatus, a game, namely the faculty board. In that game a decision is something that is written in signed minutes, I will call it an *institutional decision*. There are rules for what can be written in minutes and by whom – for example it is only allowed to write institutional decisions in minutes if the chair person at the corresponding meeting has struck his gavel in approval of the decision, which can only happen if the meeting participants have shown through acclamation or vote that they support the decision, etc. The other decision in play, the “normal” one – I shall call it *interpersonal decision* – was how to maneuver the board apparatus, or what institutional decision should be put into the minutes. A mistake was made, causing something other than what was intended to be written in the minutes, resulting in another institutional decision than the one that the interpersonal decision specified.



The precise nature of an institutional decision depends on the organization it occurs in, that is, which game it belongs to. An institutional decision in the Swedish parliament, *Riksdagen*, belongs to a game that is considerably more complex than the faculty board in my example (though there are connections between them).

The term *game* is of course influenced by Wittgenstein's theory of *language games* (Wittgenstein 1968), which is a source of and parallel to Allwood's theory of *social activities* (see p. 30). In accordance with these theories, it must be said that the interpersonal decision also belongs to a "game", the difference being that the institutional "faculty board game" is considerably more formalized and more easily perceived as a system with explicit rules, than the interpersonal "meeting game", which is controlled by conventions to a larger extent and more difficult to view as a game. The difference between the two kinds of decisions is not that institutional decisions belong to a game and interpersonal ones do not, rather, that the former are more institutionalized and formalized than the latter.

In this dissertation, I am interested primarily in interpersonal decisions, which in fact are present in formal groups and organizations since institutionalized decisions are always based on interpersonal ones.

An *ideal type* of decision concerns normative evaluations of what a good decision is. This includes how well different alternatives have been investigated, which people have been allowed to have a say in the decision, the time it took to make the decision, the alternative chosen, as well as the consequences of the decision-act. Ideal decisions are discussed more on p. 68 ff..

#### *Super, sub and co-ordinate types*

There is no obvious taxonomy into which decisions can be placed analogous to the way animal species are placed in a zoological taxonomy. On a general level, a super type for decision is *psychosocial act*, and examples of co-ordinate types are *(to) question, admit, deny, and guess*. In case of individual decisions, it is problematic to call it an act, since there is no easily observable behavior connected with it. There may be some kind of cognitive behavior (electro-chemical signals in the brain) involved in the decisions, even so, we have no way of observing these behaviors, at least not at the current stage of technical development. The term *psychosocial, intentional event* would be more precise, but also considerably clumsier.

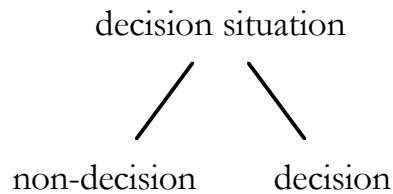
Using Wilson's idea of looking at related cases, I identified another coordinated type for decision: when a group is given set of alternative actions to choose from, and no agreement is reached<sup>1</sup>. For individual decisions this can be compared with situations where a person cannot make up his mind until the opportunity has passed. Say for example that the voter in the election example above cannot make up his mind about which party to vote for, and Election Day passes. Such situations are very much like decisions, but with a slight difference.

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1. See also 3.4.9 below for discussion of *negative decisions*.

An immediate super type for this kind of ‘non-decision’ and decision could be ‘decision relevant situation’, or just ‘decision situation’ for short, illustrated in figure 3-4.

Figure 3-5: Super type for non-decision and decision.



Sub types of decision occur in the investigated concordance material in five cases: *beslut av detta slag* (‘this kind of decision’), *ett slags beslut* (‘a kind of decision’), *någon form av beslut* (‘some form of decision’), *protokollsbeslut* (‘protocol decision’) and *principbeslut* (‘decision in principle’). The first three of these are completely abstract, but the two last are more “real”, and are of the same kind as the compound *detaljbeslut* (‘detail decision’, 25 occurrences in the Swedish corpora). It would be difficult, however, to set up an exhaustive taxonomy for these sub types.

Another way of categorizing decisions is based on the area that the decision concerns or the agent (the decision-maker): *policybeslut* (‘policy decision’), *finansbeslut* (‘financial decision’), *jurybeslut* (‘jury decision’), etc. A more complete list of the different kinds of subjects (content) and agents (decider) that were found in the concordance material can be found in section 3.4.7.

One single case was found in the concordances that can be seen as a super type of decision:

- På den punkten var beslutet en framgång.
- *Regarding that point the decision was a success.*

This example expresses the idea that the decision was (can be) in itself a kind of success. However, the most likely interpretation of the sentence is that the decision was a successful one, it is rather a property, not a super type.

The present study makes a distinction between individual and group decisions, whether a singular agent or several agents make the decision. The compound *gruppbeslut* (‘group decision’) occurs 6 times in the Swedish corpora, which implies that the distinction between individual and group decisions *is* made in everyday situations as well, but not very often. However, since the deciding agent usually is expressed (see see p. 78 ff.), it is typically completely trivial to infer which kind of decision is intended by the speaker.

Two related concepts occur in and around the scientific literature on group decision-making: *negotiation* and *problem solving*. The term negotiation is used in several senses, but one common use is a near synonym to bargaining, situations where two parties try to reach an agreement despite having conflicting interests. Such

situations are a kind of group decision-making, which makes negotiation a sub-type of decision-making.

Problem solving is a rather general term, which is applicable on many different levels. Decision-making may contain problem-solving elements (such as finding alternative solutions for a perceived problem), or it may be part of a larger problem-solving process, as when methodological decisions are needed during the course of investigating a problem in order to solve it.

*Contrary, borderline and invented cases*

We can imagine several kinds of contrary cases. One of these could be a person who is forced to do something against his will with physical force, for example when a parent picks up and carries away a screaming, protesting child.

For decision in general there is at least one borderline cases of interest. Imagine a person who has the habit of getting up in the morning at seven o'clock, taking a shower and then having breakfast while reading the morning paper. On a morning when he follows this habit, has he decided to do these particular things in this particular order? Clearly, he is not forced to do it, and he has alternatives, but he does not actively consider the options. He just does what he is used to doing. One possible analysis is that the decision in this case lies on a low level of consciousness; another is that analogous to instinctive behavior, habitual behavior does not involve will at all.

I have not found any useful 'invented case' for decision.

**Instantiation and quantification**

Occurrence of both singular and plural forms in the corpora reflects the fact that decisions are countable. The Swedish word *beslut* has the same form in the indefinite singular and indefinite plural (*beslut*), but the definite forms are different (sing. *beslutet*, pl. *besluten*). The definite singular occurs 30 340 times in the Swedish corpora, the definite plural 4 838 times<sup>1</sup>. In BNC the singular/uncountable form *decision* occurs 15 691 times and the plural form *decisions* 6 901 times<sup>2</sup>.

The number of decisions made in the world is extremely hard to estimate, but there is no reason to assume that it is infinite. The number of decision-making agents is finite, these agents have a limited life span, and it takes each agent some time to make each decision. Should one try to enumerate them, the large amount is not the only problem, however: there may be difficulty in determining what is a decision and what is not. In informal groups it is not unusual that there is con-

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1. The forms *besluten* and *beslutet* are also used for the participle of the verb (see pp. 61-2), but they are considerably less common. In a sample of 50 occurrences each of the forms, 5 *besluten* and 0 *beslutet* were participles.
  2. The Swedish and English numbers cannot be compared easily, since the morphologies of the two languages are too different. The word forms include definiteness and number in different ways.

fusion after a meeting about which decisions have been made. Some of the participants think that one decision was made, others disagree.

### Division

Taken as an event, a decision is indivisible, but seen as a process (see 3.4.3 above, p. 59 ff. above), component parts can be identified. Precisely what these parts are depends on the process.

The alternative future actions that the decision-maker chooses between, in particular, the alternative that is chosen can be a set of related actions. For example when the Swedish parliament, *Riksdagen*, makes a decision about the state budget, there is a single decision made about a large set of actions. These sub-actions can be seen as component parts of the decision. The following examples probably reflect components of decisions:

- JK anser att det av beslutet inte framgår om uppsikten över biblioteket likaväl kan skötas på något annat sätt.
- I utskottets beslut sades inget om att bidraget från Kungälv ska betalas ut först när det är klart att andra sponsorer bidrar med pengar.
- *The Chancellor of Justice is of the opinion that the decision does not specify whether or not the supervision of the library can be performed some other way.*
- *In the decision of the committee there was nothing stating that the grant from Kungälv only is to be paid when other sponsors have agreed to contribute with money.*

In both these examples, the decision seems to include several actions.

Sometimes several decisions within a single area can be grouped and seen as one large decision; this large decision will have component parts. The compound *delbeslut* ('part decision'), with 66 occurrences in the Swedish corpora, is probably used most often in such situations.

### Evaluation

The notion that decisions can be good or bad is reflected in the concordances:

- ...för att kunna "fatta bättre beslut".
- Att det är ett förhastat beslut visar ovanstående,...
- ...då kommer SJ ledningsgrupp att fatta något klokt beslut
- ... *in order to be able to 'make better decisions'.*
- *That it is a rash decision is shown by what is said above,...*
- ...*then the SJ executive group will make some wise decision*

The words *better*, *rash* and *wise* have strong normative components.

The norm for decisions can be based on at least two different things. First, the action that the decision concerns can be good or bad for a certain person or group of people. Second, the different alternative actions can be more or less well investigated and understood, making the chance low or high that the deci-

sion maker chooses the alternative that yields the desired results. The former type is probably what lies behind the reservation in the following case:

- Nordsjökonferensen för två veckor sedan beslöt att i princip förbjuda dumpning av oljeplattformar. England och Norge reserverade sig mot beslutet.
- *The North Sea conference decided in principle two weeks ago to ban dumping of oil platforms. England and Norway made a reservation against the decision.*

Here, it is most likely that England and Norway are negative towards the decision because they will face difficulties as a result of the decision.

The other type, which concerns how well investigated the options are, seems to be what lies behind the reaction in the following case, at least officially:

- Personalen på folkhögskolan har reagerat kraftigt på beslutet, eftersom man inte blivit ordentligt informerad och inte fick en chans att påverka beslutet.
- *The staff at the adult education college reacted strongly to the decision, since they had not been properly informed and had not been given the chance to influence the decision.*

In this example, the decision is considered bad because of the way it was made.

It also occurs, although not in the investigated concordances, that decisions are called *correct*:

i) Efter den delårsrapport som presenterades på tisdagen och som visade fortsatta förluster sade koncernchefen Sören Gyll till TT att det nu står ännu mera klart att det var ett riktigt beslut att lägga ned fabriker i Uddevalla och Kalmar.

ii) Peter Johansson tog ett korrekt beslut och blåste av matchen.

*i) After the interim report was presented last Tuesday, showing continued losses, CEO Sören Gyll said to TT that it is now even more clear that it was a correct decision to close the factories in Uddevalla and Kalmar.*

*ii) Peter Johansson made a correct decision and stopped play.*

Similarly, the compound *felbeslut* ('wrong decision') occurs 34 times in the Swedish corpora. There are at least two senses in which a decision can be right or wrong. In i) above *correct* means that the decision (the decision action) has the intended effect, and that it may have been difficult at the time of the decision to know what the consequences of the decision and its action would be. It is thus the judgment of the situation and the consequences of the alternative actions that are correct or not, and this correctness can be transferred to the decision. In ii) above, *correct* seems to mean how well the referee has followed the rules of the game.

In formal situations, there is often a possibility for people and groups to show their attitude towards a decision, possibly causing a change of the decision. In the concordances, this is reflected in the following things that happen to deci-

sions: *överklagas* ('appealed against'), *godkännas* ('approved'), *prövas* ('examined') and *omprövas* ('reexamined').

The actual option to decide is sometimes implicitly evaluated, using wordings such as *stor frihet att själv bestämma* ('great freedom to decide by oneself'), *rätt att bestämma* ('right to decide'), and *självbestämmanderätt* ('right to autonomy'). In all these (quite rare) cases, the opportunity to decide is considered something positive, indicating that people in general (in Swedish culture) want to make their own decisions.

### 3.4.5 Anchoring in time-space

Allwood lists nine aspects of concepts' anchoring in time and space that can be relevant: *possibility of anchoring in time and space*, *change*, *localization*, *extension*, *occurrence*, *relations in time and space*, *divisibility in time and space*, and *quantification, valuation and modality* (related to time and space). The abstract nature of decisions makes most of these sections irrelevant here, and only *possibility of anchoring in time and space*, *change* and *extension* will be discussed below.

#### **Possibility of anchoring in time and space**

A decision can quite clearly be located in time and space, at least if one does not require much precision, since individual(s) making the decision can be located in space and the event can be located in time. However, a decision is not physical, and thus it lacks spatial extension or location that is more precise.

Here are some examples of spatial and temporal location from the corpora:

- Redan i september 1992, alltså för snart fyra år sedan, fattade Banverket beslut om spårbygget Tångaberg-Varberg.
- Persson har hänvisat till den demokratiska processen i partiet och att människor först måste få studera och diskutera frågan - som han betecknat som det viktigaste politiska beslutet i hans generation.
- Bakgrunden är beslutet på miljö- och utvecklingskonferensen i Rio de Janeiro 1992 där representanter från 180 länder beslöt att utfärda ett handlingsprogram för 21:a århundradet, för att bland annat undanröja hoten mot miljön.
- *As early as in September 1992, almost four years ago, Banverket made a decision about the rail construction Tångaberg-Varberg.*
- *Persson has indicated the democratic process in the party and that people have to be given the chance to study and discuss the issue - which he has labeled the most important political decision in his generation.*
- *The background is the decision at the environmental and development conference in Rio de Janeiro in 1992 where representatives from 180 countries decided to issue an action program for the 21st century, in order to remove the threats against the environment.*

#### **Change**

A decision can be changed, that is, the obligation can be adjusted at any time until the decision action has been performed or the opportunity for acting has

passed. One might want to see each such adjustment of a decision as being a new decision, overriding the old decision.

In formal/institutional settings such changes can be more difficult, as discussed on page 63-64.

### Extension

When a decision is described as big or small, it concerns the importance that the decision action has, how many people that are affected by it, or how much money or resources it concerns.

- Frågan om var man ska lokalisera Rapport-redaktionen kan synas vara ett litet beslut...
- En rad stora beslut ska fattas under de närmaste månaderna.
- Före stora beslut måste en viktig utvärdering göras.
- *The question of where to localize Rapport's editorial office may seem like a small decision...*
- *Several big decisions are to be made during the following months.*
- *Before big decisions an important evaluation has to be made.*

In these examples, big and small correspond approximately to important and unimportant.

Another kind of extension concerns the time span of decisions. A decision can be made and cancelled, that is, come into existence and cease to exist, which makes it meaningful to speak about the life span of a decision<sup>1</sup>. The starting point of a decision is not very complicated – it is when the decision is made – but it is less obvious when a decision ends. If the decision is cancelled, there is obviously an endpoint, but if the selected action is performed, it seems a little strange to say that the decision does not exist any more. The consequences of a decision may be very noticeable for a long time. One could say that a decision does not really end when the action is carried out, rather, that it expires or becomes invalid.

There are also decisions that concern a kind of generic action, or decisions on principles. For example, a married couple can decide that the one who makes breakfast can also take the newspaper to his or her job (to read it on the bus). Such decisions are not invalidated after the first action has been performed according to it, they continue to be valid until an over-riding decision is made or something else invalidates it. (E.g. if a café opens across the street from the married couple, and they start having breakfast there together every morning, then the circumstances have changed so much that the decision about who can take

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1. To be precise, it is the obligation created by the decision that has a life span, but as mentioned on p. 59, the noun *decision/beslut* is often used in everyday language to denote the result of the event, that is, precisely the obligation that is focused on now.

the newspaper has become invalid.) Thus, the decision concerns an action type, and that type is never performed, only instances of it. One could also say that the decision concerns an indefinite number of actions, and only time will tell when the last one is performed.

Although not found in the concordances, decisions can be called permanent or temporary (*permanenta/ tillfälliga*), at least in Swedish (no occurrence of ‘permanent decision’ was found in BNC, and only a single occurrence of ‘temporary decision’). This refers to the “life span” of the decision – temporary decisions are replaced (‘superseded’) after some time by permanent decisions.

The time it takes for a decision to be made is another kind of extension, this is referred to twice in the concordances, once as *lång* (‘long’) and once as *hastigt* (‘quick, sudden’).

### 3.4.6 Processes and relations

Allwood lists nine aspects of processes and relations that may be relevant for a concept: *similarity and similarity-based semantic field, relations and processes, arity, dynamics and abstraction, basic epistemic category for possible relation and process arguments, localization, extension and occurrence in time of processes, orientation of relations and processes, properties of relations, and quantification, evaluation and modality* (of processes and relations). Only the first and second of these are relevant to the present study.

#### **Similarity and similarity-based semantic field**

One way of setting up a semantic field for a concept is to use thesauri and dictionaries to find words related to decision, and then investigate these relations. We turn to such an investigation now.

The most general synonyms have already been mentioned (see page 55), but a set of words was also found that are partial synonyms, they can sometimes be used as synonyms to *beslut/ besluta/ bestämma*. Six areas distinguish themselves among these words:

#### *Agreement*

Comment: This use appears when speaking of group decisions, focus lies on the negotiation or search for an alternative that everybody can accept.

#### Sample use:

- Det drastiska beslutet meddelades efter en rörig debatt under vilken parlamentet inte lyckades besluta om nödvändiga lagändringar.
- *The drastic decision was announced after a confused debate during which the parliament did not manage to decide about necessary changes in legislation.*

Synonyms: *avtala* (‘make an agreement’), *enas* (‘agree’), *göra upp* (‘make an agreement’), *komma överens* (‘reach an agreement’), *lösning* (‘solution’), *solution* (‘solution’)



### *Arbitration*

Comment: In many official/formal situations, a body is to decide on some issue on which many people have different opinions.

Sample use:

- Miljödomstolens beslut angående saneringen känns mycket förvånande.
- *The environmental court's decision concerning decontamination is very surprising.*

Synonyms: *avgöra* ('determine'), *avgörande* ('determination'), *besked* ('answer, instruction'), *dom* ('verdict, judgment'), *domslut* ('verdict'), *skiljedom* ('arbitration'), *utlåtande* ('statement, report'), *utslag* ('decision, ruling, verdict'), *uttydning* ('interpretation, explanation')

### *Intention*

Comment: When an agent has decided to do something, that decision will often be synonymous with an intention of the agent.:

Sample use:

- Men Frölunda hade bestämt sig för att vinna i går kväll.
- *But Frölunda had set their minds to winning last night.*

Synonyms: *föresats* ('intention'), *föresätta sig* ('to set one's mind on'), *intention* ('intention'), *sätta sig i sinnet* ('set one's mind on')

### *Rules and commands*

Comment: When people and groups with power make decisions, those decisions may concern what other people and groups must or must not do.

Sample use:

- Därefter måste regeringen formellt sett göra som riksdagen bestämt.
- *Subsequently, the government then, formally, has to do as the parliament has decided.*

Synonyms: *befalla* ('command, order'), *bestämmelse* ('regulation'), *bud* ('commandment'), *bull* ('bull'), *dekret* ('decree'), *diktera* ('dictate'), *framtvunga* ('force, enforce'), *förbjuda* ('prohibit, ban'), *förbud* ('prohibition, ban'), *föreskrift* ('regulation'), *förordna* ('ordain'), *förordning* ('ordinance'), *kungabrev* ('royal regulation', lit. 'king letter'), *kungörelse* ('proclamation'), *påbud* ('decree'), *påtvunga* ('force'), *regel* ('rule'), *reglera* ('regulate'), *resolution* ('resolution'), *stipulera* ('stipulate'), *åläggande* ('duty')

### *Selection*

Comment: Since decisions always are choices, there will be situations that focus on that aspect of choice.

Sample use:

- Tio jurygrupper – tittarna, Göteborg, Stockholm, Skåne, Sundsvall, Bergslagen, Värmland, Halland, Norrbotten och Öst – bestämmer vem som vinner.
- *Ten jury groups – the viewers, Göteborg, Stockholm, Skåne, Sundsvall, Bergslagen, Värmland, Halland, Norrbotten and East – decide who wins.*

Synonyms: *avgöra* ('determine'), *avgörande* ('determination'), *dom* ('judgment, verdict'), *gottfinnande* ('discretion'), *kora* ('choose, elect'), *skön* ('discretion'), *taga sitt parti* ('make up one's mind'), *urskillning* ('discrimination'), *utkora* ('choose, elect'), *utse* ('choose, appoint'), *utslag* ('verdict'), *värdering* ('evaluation')

*Specification*

Comment: The meaning of determination that is possible for *bestämna* makes many words that concern specification partial synonyms to *bestämna*:

Sample use:

- Att han och Anita har sommarhus på Marstrand, närmre bestämt Instön, och att de har en liten båt...
- *That he himself and Anita have a summer house on Marstrand, Instön to be more precise<sup>1</sup>, and that they have a small boat ...*

Synonyms: *avgöra* ('determine'), *fastslå* ('specify, determine'), *fastställa* ('specify, determine'), *fixera* ('fix')

In the concordances there were no metaphors or comparisons of decisions, but on one occasion *fundering* ('thought, contemplation') was held up as a kind of opposite or alternative to *beslut*:

- de är mina funderingar kring den här // den här sista punkten e ju inget beslut de e mer en fundering som var å en kan ta till sej så att säg i olika utsträckning
- *it is my thoughts around this // this last item is not a decision it is more like a thought that everybody can accept so to speak to different extents*

I understand this as saying that a *fundering* is a kind of incomplete decision, where the alternatives are still being investigated and no choice has yet been made.

A very loose association to decision is signaled in the concordances when words are coordinated (conjoined with 'and' or something similar) with *beslut/ besluta/ bestämma*, which occurred 13 times: *yttranden* ('utterances'), *sådant där* ('such things'), *mycket annat* ('many other things'), *en fråga* ('a question'), *en målmedveten politik* ('a focused policy'), *begär upplysningar* ('requests information'), *diskutera* ('discuss'), *gick samman* ('united'), *gå på vernissage* ('visit the opening of an exhibition'), *påverka* ('affect, influence'), *dominera* ('dominate'), *ta ansvar* ('take responsibility'), and *bokat in* ('booked'). Two of these are very vague (*sådant där*, *mycket annat*), and two

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1. The literal translation of the Swedish phrase is 'closer determined'.

are clearly very context specific (*gick samman, gå på vernissage*). The remaining phrases have a rather formal sound that reflects the stereotype that decisions are made in formal groups like committees and boards (see p. 64). Another thing to note is that 13 coordinations is not very many; one might wonder why it is not more common. Perhaps decisions are important enough to be dealt with on their own, without mixing them with other things.

### Relations, processes and events

Another way to investigate the semantic field of decision is to use corpora to find the semantic roles and processes that are related to decisions. Decisions are involved in several relationships, processes and events, the ones that were found in the concordances are listed below. The word *process* will be used as the general term for this. Based on the empirical material, the processes can be grouped into three broad categories, *processes related to existence*, *processes related to evaluation*, *processes related to communication*, and *processes related to implementation*. The first of these concern processes in which decisions come into existence, are modified, and cease to exist. The second category contains processes where decisions are evaluated in some way, and the third and fourth categories concern communication and implementation of decisions.

The frequencies, shown within parentheses, concern the 200 occurrences of the noun *beslut*.

#### 1) Processes related to existence (129)

Decisions come into existence ('are made'), they cease to exist, and they can be changed during their existence (see also 'Extension', p. 71 ff. above). When the decisions are expressed with the verbs *besluta* or *bestämma* the creation is obvious, but for the noun *beslut*, creation is often expressed as well. Frequently, this creation is expressed with a verb, but ownership (genitive, constructions with *ha* ['to have']) and location (the decisions "exist" in the group where they are made) are used to express this as well.

- Creation (124)

*någon fattar (ett) beslut* ('somebody takes [a] decision'), *någon tar (ett) beslut* ('somebody takes [a] decision'), *ett beslut kommer* ('a decision comes'), *ett beslut formas* ('a decision is shaped'), *ett beslut sker* ('a decision happens'), *någon står för besluten* ('somebody handles<sup>1</sup> the decisions'), *ett beslut växer fram* ('a decision grows'), *ett beslut är* ('a decision is'), *någon kommer (fram) till beslut* ('somebody comes (up) to a decision'), *någon fullföljer ett beslut* ('somebody completes a decision'), *kommunstyrelsens beslut* ('the decision of the city board'), *domstolens beslut* (the decision of the court'), *ett beslut i*

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1. The Swedish phrase *stå för* can mean 'handle, take care of', or 'be responsible for', or 'stand by for'. In the context where *stå för* appeared in this case, the word 'handle' was judged as the most appropriate translation.

*FN:s säkerhetsråd* ('a decision in the UN security council'), *besluten i projektet* ('the decisions in the project').

- Change (0)  
There are no occurrences of this in the concordances, but a directed search in GP-HD showed that there are cases where somebody *ändrar* ('changes') a decision.
- Invalidation (5)  
*någon river upp ett beslut* ('somebody tears up a decision'), *någon upphäver ett beslut* ('somebody cancels a decision'), *någon tar tillbaka ett beslut* ('somebody takes back a decision'), *ett beslut ligger kvar*<sup>1</sup> ('a decision remains'), *någon motarbetar ett beslut* ('somebody tries to thwart a decision').

## 2) Processes related to evaluation (19)

Those people who in one way or another are affected by a decision may have attitudes towards it:

- Positive (3)  
*någon stödjer ett beslut* ('somebody supports a decision'), *någon prisar ett beslut* ('somebody praises a decision'), *någon accepterar ett beslut* ('somebody accepts a decision').
- Negative (4)  
*någon är upprörd över ett beslut* ('somebody is upset over a decision'), *någon gör något i protest mot ett beslut* ('somebody does something in protest against a decision'), *någon reagerar mot ett beslut* ('somebody reacts against a decision'), *någon struntar i ett beslut* ('somebody ignores a decision').
- Other (1)  
*någon är förvånad över ett beslut* ('somebody is surprised over a decision').

In formal situations there may be special processes for handling attitudes, a kind of institutionalization of the attitudes:

- Positive (1):  
*någon godkänner ett beslut* ('somebody approves of a decision').
- Negative (8):  
*någon överklagar ett beslut* ('somebody appeals against a decision'), *någon reserverar sig mot ett beslut* ('somebody makes a reservation against a decision').
- Other (2):  
*någon (om)prövar ett beslut* ('somebody [re]considers a decision').

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1. Non-invalidation.

3) Processes related to communication (4)

Decisions are communicated in one way or another to people and organizations that are affected:

*någon berättar om ett beslut* ('somebody tells about a decision'), *någon förklarar ett beslut* (somebody explains a decision'), *någon kommenterar ett beslut* ('somebody comments a decision'), *någon meddelar ett beslut* ('somebody somebody informs about a decision').

4) Processes related to implementation (1)

Decisions are of course also implemented, or, the decision-action is carried out. This was not mentioned often in the concordances; only a single case belong to this category:

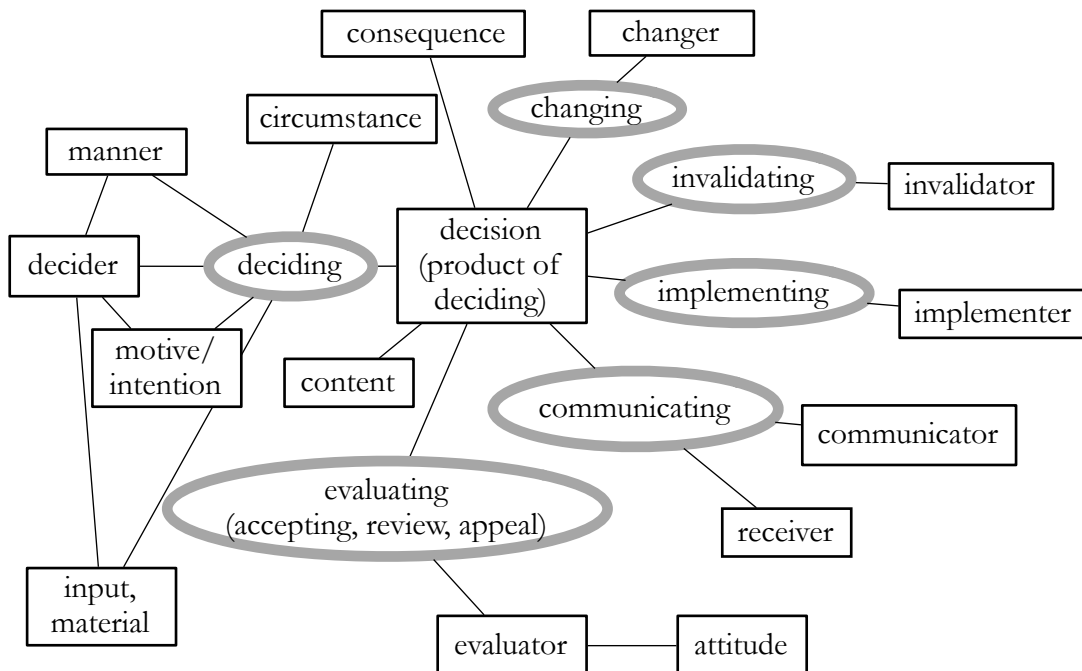
*någon motarbetar ett beslut* ('somebody tries to thwart a decision').

This example is discussed further on page 86.

3.4.7 Roles derived from process and relationships

Figure 3-6 shows an overview of the roles that were identified in the concordances. Processes are denoted by ovals, and roles by boxes.

Figure 3-6: Roles derived from processes for beslut.



The semantic roles are presented in greater detail below. The numbers in parentheses denote frequencies in the concordances or the corpora.

## Process: Deciding

### 1) Decider (present in 382 out of 556 cases)

The agent performing the decision-making, here *decider*, is often expressed in the investigated material, frequently in formal groups or organizations.

- Deictically referring expressions (169)  
*vi* ('we', 75), *man* ('you, one', 28), *jag/mitt* ('I/my', 21), *dom* ('they/them', 12), *du* ('you/thou', 12), *han* ('he', 4), *ni* ('you/ye', 2), *dom här tre* ('these three'), *någon annan* ('somebody else'), *var och en* ('each and everybody'), etc.
- Separate individuals (37)  
*fru Camillas* ('Mrs Camilla's'), *Greppets tyngdlyftare Anders Lindsjö* ('Greppet's weight lifter Anders Lindsjö'), *ledamoten* ('the member'), *miljönämndens ordförande* ('the president of the environmental board'), *människa* ('human being'), *Nordstrand*, *President Khatami*, etc.
- Informal groups (22)  
*beslutsfattare* ('decision-maker', 4), *människan* ('humankind, the human being', 2), *17-åringar* ('17-year olds'), *människor* ('people, human beings', 2), *åklagare* ('prosecutor', 2), *pensionärer* ('retired persons'), *politiker* ('politician'), *producenterna* ('the producers'), *publiken* ('the audience'), *representanter från 180 länder* ('representatives from 180 countries'), etc.
- Formal groups and organizations (154)  
*nämnden* ('the board/commission', 8), *kommunstyrelsen* ('the city board/management', 5), *styrelsen* ('the board/management', 4), *kommunfullmäktige* ('city council', 3), *beslutsgruppen* ('decision group', 2), *kommunen* ('the city/municipality', 2), *regeringen* ('the government', 3), *länsstyrelsens* ('of the county administration', 2), *socialdemokraterna* ('the social democrats', 2), *linjen* ('the line', 2), etc.

There are also indirect deciders, agents that make another agent make a decision:

- övervakningsnämnden förordnar att besluta om att omhändertagandena inte längre skall GÄLLA
- *the supervisory board directs to decide that the custodial sentences no longer be VALID*

The words *besluta/ beslut* and *bestämna* diverge somewhat regarding what kind of deciders are expressed in the concordances. In the case of *beslut/ besluta* formal groups and organizations constitute 52% of the total number of found deciders, while they are only 17% in the case of *bestämna*. With *bestämna*, the category *deictically referring expressions* dominates, showing 65% of the occurrences, which can be compared with 33% for *besluta/ beslut*. It is difficult to identify what kind of agents hide under the words in this category, but the singular expressions *jag* ('I'), *du* ('you/thou') and *han* ('he') are more common for *bestämna* than for *besluta/ beslut*. All this adds up to the conclusion that the deciders for *bestämna* more often

than for *besluta/ beslut* are separate individuals. This does not seem to be connected to the reflexive form (which is more common for *bestämman* than for *besluta*): of the 55 investigated reflexive occurrences of *bestämman* 13 (24%) had formal groups or organizations as deciders; a number too high to explain the difference between *bestämman* and *besluta*.

Several of the compounds with *beslut/ besluta* and *bestämman* found in the Swedish corpora concern deciders:

*beslutsfattare* ('decision maker', 28), *beslutsgrupp* ('decision group', 63), *beslutsorgan* ('decision body', 67), *beslutsapparat*<sup>1</sup> ('decision apparatus', 51), *domstolsbeslut* ('court decision', 261), *eu-beslut* ('EU decision', 288), *eu-bestämmelserna* ('EU regulations', 59), *fn-beslut* ('UN decision', 79), *fullmäktigebeslut* ('council decision', 265), *kommunfullmäktigebeslut* ('city council decision', 29), *kongressbeslut* ('congress decision', 174), *länsstyrelsebeslut* ('county board decision', 43), *majoritetsbeslut* ('majority decision', 571), *medbeslutande* ('co-deciding', 30), *medbeslutanderätt* ('right of co-deciding', 25), *medbestämmande* ('co-deciding', 264), *medbestämmandelag* ('law of co-deciding', 167), *medbestämmanderätt* ('right of co-deciding', 42), *myndighetsbeslut* ('authority decision', 117), *myndighetsbeslutade* ('authority decided', 25), *regeringsbeslut* ('government decision', 746), *riksdagsbeslut* ('parliament decision', 1092), *självbestämmande* ('autonomy', 850), *självbestämmanderätt* ('right of autonomy', 137), *styrelsebeslut* ('board decision', 204), *stämmobeslut* ('assembly decision', 35), *ödesbestämd* ('fated', 133).

Only once in the concordances was any property of a decider expressed, *obeslutssam* ('indecisive'). When looking at compounds with *beslut/ besluta* and *bestämman*, however, several concerned some property of the decider:

*beslutanderätt* ('right to decide', 388), *beslutsbefogenheter* ('authority to decide', 37), *beslutsför* ('forming a quorum', 32), *beslutsförmåga* ('ability to decide', 37), *beslutskraft* ('strength to decide', 110), *beslutskramp* ('decision block', 33), *beslutsmakt* ('decision power', 39), *beslutsrätt* ('right to decide', 177), *beslutsvårda* ('decision pain', 169), *beslutsångest* ('decision anguish', 167), *bestämmanderätt* ('right to decide', 141).

A conclusion of this is that decision-making is typically done by groups, often formal ones. This could be a consequence of Sweden's democratic/collectivist culture, where important decisions are left to a group of people, not a single autocratic individual. Decisions made by individuals, then, typically have little general interest, and many of the texts and conversations in the present material do not concern themselves with private matters (although some conversations in GSLC do).

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1. The word is ambiguous, or underspecified, concerning the organization that makes the decision and the procedure for making it.

The fact that Decider is mentioned so often indicates that it is considered an important role. An explanation for this is that the Decider defines the scope of the decision – a government decision has a very different scope than the decision of a local housing committee.

2) *Manner (present in 11 out of 556 cases)*

On a few occasions in the concordances, properties of the actual decision-making were expressed, that is, in what manner the decision was made:

*utan vidare* ('just like that'), *det är mycket lättare att* ('it's much easier to'), *snabbt* ('quickly'), *i linjeordning* ('in line order'), *öppet* ('openly'), *alldeles för snabbt* ('much too fast'), *efter votering* ('after voting'), *helt plötsligt* ('all of a sudden'), *till slut* ('finally'), *genom en flora av uttalanden* ('by a variety of statements'), *i folkomröstningen* ('in the referendum').

As the last two cases show, the abstract nature of decisions sometimes makes the manner rather similar to an instrument for the decision-making.

There are also quite a few compounds in the Swedish corpora that concern the manner in which a decision is made, 7 types and 867 occurrences total:

*beslutsformer* ('decision forms', 79), *beslutsgång* ('decision procedure', 198), *beslutsnivå* ('decision level', 115), *beslutsordning* ('decision order', 164), *beslutsregler* ('decision rules', 53), *beslutsväg* ('decision path', 207), *beslutsapparat*<sup>1</sup> ('decision apparatus', 51).

Looking at this, both the concordances and the compounds give the impression that a decision is something complicated and arduous, that it requires formal procedures and can go wrong.

3) *Motive, Intention (present in 16 out of 556 cases)*

The reason the decision maker chooses one alternative or another is sometimes expressed, as in the following cases:

- förslag till beslut med anledning av inkomna ansökningar
- eftesom den förra programledarn resultat va så usla så ha vi bestämt / å byta programledare
- Eftersom inte kvinnan var intresserad av 27-åringens uppvaktning så beslöt 23-åringen sig för att markera detta, genom att tala om det för "charmören".
- proposed decision on account of received applications
- since the results of the last host were so lousy we have decided / to change host for the show

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1. The word is ambiguous, or underspecified, concerning the organization that makes the decision and the procedure for making it.



- *Since the woman was not interested in the 27-year old's courting, the 23-year old decided to indicate this, by telling it to the "charmer".*

The number of motives found is small, the reason could be that they are given in a wider context than the concordances show. It could also be that specific reasons would be revealed by examining the story as a whole.

#### 4) *Input, Material (present in 2 out of 556 cases)*

In some cases in the concordances a kind of material or input for the decision is mentioned:

- ett pm skulle utarbetas / som skulle ligga till grunn för samarbetsnämndens beslut
- ... upprättar förslag till beslut med anledning av inkomna ansökningar
- a pm was to be composed / that should be input for the decision of the co-operation committee
- ... makes a proposed decision on account of the applications received

There are also some compounds in the Swedish corpora that denote input for decisions: *beslutsförslag* ('decision proposal', 45), *beslutsunderlag* ('decision basis', 728).

Describing the input involved in a decision does not seem to be important, probably because once the decision is made, the input becomes part of the decision and is clarified when describing the content of the decision.

#### 5) *Circumstance (present in 97 out of 556 cases)*

The circumstances or conditions around decision-making are mentioned as well, note the following cases:

- Under hårt motstånd beslöt föreningen att gå ännu längre och börja miljömärka el från vattenkraftverk.
- nu e de väl så här i göteborg där man ju har efter många diskussioner beslutat att man SKA stänga av vissa gater inne i stan
- Slutar vår säsong i helgen bestämmer jag mig i nästa vecka.
- *Amid strong opposition the association decided to go even further and begin to environmentally certify electricity from hydro power plants.*
- *but the situation is like this in Göteborg where it has been decided after much discussion that some streets in the city will be closed*
- *If our season ends this weekend I am going to make up my mind next week.*

A subcategory of Circumstance is Time, the most common kind of Circumstance, 78 out of 97 occurrences. It is expressed frequently (14% of the investigated cases) in the concordances, sometimes very precisely (*den 26 augusti 1996* ['August 26 1996'], *den sextonde juni* [June sixteen]), and sometimes rather vaguely (*i hans generation* ['in his generation'], *sommarbeslut* ['summer decision']).

There are also cases where the decision itself is used as a time reference:

- Att den följde direkt efter besluten om sänkta ersättningsnivåer i socialförsäkringssystemen, gav motståndarna extra bränsle.
- *The fact that it followed directly after the decisions about lowered benefits in the social welfare system, gave opponents extra fuel.*

The time aspect appears in the compounds as well: *förutbestämd* ('predetermined', 499), *förutbestämma* ('predetermine', 184).

There are several explanations about why the time for decisions is so important. First it may be because of a decision's connection to future actions – it is important to know when the decision is made in order to predict when the action is about to happen, or if it already has happened. A second explanation is that the time of the decision event functions as a reference for formal (institutional) decisions, specifying precisely which decision the sender has in mind.

Another subcategory of Circumstance is Location. Physical people who are situated at a particular location make a decision; in that way, the decision is created at a certain location. The expression of this is not very common, and typically denotes the activity or occasion where the decision was made. Here are some examples:

- Bakgrunden är beslutet på miljö- och utvecklingskonferensen i Rio de Janeiro 1992 där representanter från 180 länder beslöt att utfärda ett handlingsprogram för 21:a århundradet, för att bland annat undanröja hoten mot miljön.
- Under årets sista utdelningssammanträde beslutade styrelsen för Knut och Alice Wallenbergs stiftelse att stödja verksamheten vid tre institutioner i Göteborg.
- ...vid sammanträdet överlämnades då samrådsgruppens / vice ordförande kapten Lindskog / å brandchef å samrådsgruppens utredning angående / brandförsvaret i Växjöblocket / å där beslöts att härom göra anteckning för dagens protokoll
- *The background is the decision made at the conference on environment and development in Rio de Janeiro in 1992 where representatives from 180 countries decided to issue an action program for the 21st century, in order to remove the threats against the environment.*
- *During the last dividend meeting of the year the board of the Knut and Alice Wallenberg foundation decided to support the work at three departments in Göteborg.*
- *... at the meeting / the vice president of the consultation committee captain Lindskog / and fire officer and the commission of the consultation committee concerning / the fire prevention in the Växjö unit / and there it was decided that a note should be made about this for today's minutes...*

The reason location is mentioned so rarely (only 5 times) is probably that it is usually of little importance. A decision is abstract; the whereabouts of the group or person making the decision does not affect the decision in any significant way.

The number of cases of the Circumstance role concerning neither Time nor Location is too low (14) to make any generalizations about it.

### 6) Product

The immediate result of the event of deciding is the decision, or more precisely the state of obligation. The term *result*, however, is often used (at least in everyday language) for consequences and results of the decision-action, thus the term *product* is used here to denote the result of the decision event.

Since *decision* was one of the search terms for making the concordances, it is rather useless to analyze the presence of the decision role in these cases – it will always be present. Further, when the verb was used, the product was only mentioned as content (see below) – there was never phrasings of the type, ‘to decide a decision’.

### 7) Content (present in 330 out of 556 cases)

What is decided is of course central in decision-making; here this is called *content*. It is very often explicit in the investigated concordances, in 331 cases (60%). The Content instances found in the concordances can be said to belong to four categories: *area*, *chosen alternative*, *content detail*, and *scope*:

- Area (136)  
This kind of Content specifies the general topic for the decision without specifying which alternative is chosen:  
*om färdtjänstbevis* (‘about mobility service’), *angående deras fortsatta existens* (‘concerning their continued existence’), *detaljerna* (‘the details’), *hur mycket tid de vill lägga ner* (‘how much time they want to put into it’), *om Balkankonflikten* (‘about the Balkan conflict’), *om kvinnor i prästämbetet* (‘about women in the ministry’), *rätt och fel* (‘right and wrong’), *över oss* (‘over us’), etc.
- Chosen alternative (182)  
This kind of Content does specify the alternative that is chosen:  
*att upplösa riksdagen* (‘to disperse the parliament’), *bekosta vistelsen för en grupp* (‘to finance the stay for a group’), *att byta programledare* (‘to change host of the show’), *för att bygga ett vattenkraftverk* (‘to build a hydroelectric power plant’), *gå skilda vägar* (‘to split up’), *ställa in Sommarskolan* (‘to cancel Summer school’), etc.
- Content detail (5)  
This kind of Content concerns only part of what was decided:  
*i beslutet sades inget om att bidraget från Kungälv ska ...* (‘in the decision there was nothing stating that the grant from Kungälv is to be...’), *på den punkten* (‘in this point’), *att det av beslutet inte framgår om uppsikten över biblioteket...* (‘that the decision does not say whether the supervision of the library...’), *av misstag hamnade också Pelle Ahrnstedts namn på beslutet* (‘by mistake the name of Pelle Ahrnstedt also ended up on the decision’), *den är säkert då reglerad i något beslut* (‘surely it is regulated in some decision’).

- Scope (7)  
This kind of Content concerns who, what or which time the decision applies to:  
*beslutet om kvinnor i prästämbetet gäller alla prästerliga tjänster i Svenska kyrkan* ('the decision about women in the ministry holds for all ministerial positions in the Church of Sweden'), *den planeringsnivå vi beslutat om för 1995* ('the level of planning that we have decided on for 1995'), *Gore har begärt att Floridas HD:s beslut skall gälla* ('Gore has requested that the decision of the Florida High Court shall hold'), *dom som faktiskt har fått ett beslut* ('those who actually have got a decision'), *dom som är mest berörda av besluten* ('those who are most affected by the decisions'), *de arbetsmarknads-politiska insatser som beslutas för en arbetslös* ('the political measures for the labor market decided upon for an unemployed person'), *vi kan ju besluta ett år i sänder* ('we can decide one year at a time).

Of the compounds with *beslut/ besluta* and *bestämna* that were found in the Swedish corpora, several specify the content of the decision (42 types and 4 678 occurrences):

- Area (26 types and 3 430 occurrences)  
*biståndsbeslut* ('aid decision', 34), *brobeslut* ('bridge decision', 94), *budgetbeslut* ('budget decision', 176), *delegationsbeslut* ('delegation decision', 27), *EMU-beslut* ('EMU decision', 65), *energibeslut* ('energy decision', 37), *försvarsbeslut* ('defense decision', 680), *hastighetsbestämmelser* ('speed regulations', 65), *införselbestämmelser* ('import regulations', 72), *inriktning-sbeslut* ('decision of aim and direction', 54), *miljöbeslut* ('environment decision', 78), *områdesbestämmelser* ('area regulations', 213), *planbestäm-melser* ('plan regulations', 152), *policybeslut* ('policy decision', 54), *principbe-slut* ('decision of principle', 655), *räntebeslut* ('interest decision', 37), *skattebeslut* ('tax decision', 47), *skolbeslut* ('school decision', 39), *skyddsbestäm-melser* ('protective decision', 132), *strandskyddsbestämmelserna* ('the regula-tions for beach protection', 89), *säkerhetsbestämmelse* ('security regulation', 204), *tillståndsbeslut* ('decision of permission', 25), *tullbestämmelserna* ('cus-toms regulations', 47), *tävlingsbestämmelse* ('competition regulation', 87), *undantagsbestämmelser* ('exceptional regulation', 66), *övergångsbestämmelser* ('pro-visional regulations', 201).
- Chosen alternative (15 types and 1 170 occurrences)  
*avslagsbeslut* ('rejection decision', 51), *avvecklingsbeslut* ('decision to wind up', 30), *avvisningsbeslut* ('decision to refuse entry', 206), *besparingsbeslut* ('decision of saving', 66), *flyttbeslutet* ('decision to move', 1), *håkt-ningsbeslut* ('detention decision', 58), *investeringsbeslut* ('investment decision', 115), *konkursbeslutet* ('bankruptcy decision', 46), *nedläggningsbeslut* ('decision to close down', 132), *nedskärningsbeslut* ('decision to cut down', 45), *rivning-sbeslut* ('decision to tear down', 48), *sparbeslut* ('decision of saving', 61),

*stängningsbeslutet* ('decision to close', 86), *utvisningsbeslut* ('decision of expulsion', 131), *åtalsbeslut* ('indictment decision', 94).

- Scope (1 type and 78 occurrences):  
*särbestämmelser* ('separate regulations', 78).

The two largest categories, *area* and *chosen alternative*, both contain a wide range of subjects, and no pattern can be discerned. It seems to be possible to make a decision about anything, as long as alternative courses of action are available.

#### 8) *Consequence* (present in 22 out of 556 cases)

Consequences of decisions were expressed 22 times in the concordances, these are often synonymous with consequences of the actions that are decided, for example as in the following cases:

- Rydbeck försöker också bedöma hur stor del av Gota Banks förluster på 29 miljarder kronor 1990-1993 som beror på styrelsens beslut under 1990.
- Nära 20 000 nya taxeringsbeslut har resulterat i att företagen ska betala 2,1 miljarder kronor mer i inkomstskatt, moms, arbetsgivaravgifter och skattetillägg.
- ...vicket vi vill ha ett styrelse beslut på då för revisorernas skull...
- *Rydbeck is also trying to estimate what share of the 29 billion kronor in losses at Gota Bank 1990-1993 depend on the board decisions during 1990.*
- *Almost 20 000 new tax decisions have resulted in the companies having to pay 2.1 billion kronor more in income tax, sales tax, employer's contributions and tax surcharges.*
- *... which we wanted a board decision on for the sake of the auditors...*

Decisions are important because of the actions they concern, while actions are usually important because of their consequences. It is not strange, therefore, that Consequence is often expressed for decisions – it is what makes the decisions interesting. That the role is not present more often is probably due to the fact that the immediate consequences of a decision (and decision action) often are obvious.

### Process: Changing

#### 9) *Changer* (present in 0 out of 556 cases)

A decision can be changed, but it does not seem to be very common – as mentioned on p. 76, there were no occurrences of the Changer role in the investigated concordances. However, a directed search in the corpora revealed examples:

- Men min förseelse var INNAN man ändrade beslutet och flyttade på skylten.
- *But my offense was BEFORE the decision was changed and the sign was moved.*

It seems like decisions are not easily changed.

### Process: Invalidating

#### 10) Invalidator (present in 1 out of 556 cases)

Decisions can be withdrawn, as described on p. 76 above, but it is not a common occurrence in the investigated concordances; in fact it only occurred once:

- så att de finns ju liksom / en risk att dom så småningom river upp de här / beslutet om naturmark å sen exploaterar ytterliare å fördubblar en gång till va
- so there's like / a chance that they reverse this in a while / the decision about natural land and then exploit further and double once more you know

As for *change*, decisions seem to be difficult to withdraw. Once a decision is made, it is kept until the decision-action is performed. At that time, the decision has not exactly ceased to exist, but rather become invalid (see p. 71).

### Process: Evaluating

#### 11) Evaluator (present in 14 out of 556 cases)

As described on p. 76, it is possible to have attitudes about decisions, that is, decisions can be evaluated. In formal situations there may also be processes dedicated to handling (some of the) attitudes, such as appeals, reservations, etc. The different kinds of evaluation that were found in the concordances have already been discussed on p. 76 above.

Since evaluators were mentioned only 14 times in the concordances it is difficult to say anything certain, but 6 of these (40%) were separate individuals (including singular deictic expressions), which can be compared to 20% for the same group as deciders. These are the evaluators: *Johansson, han* ('he', 2), *oss* ('us'), *personalen på folkhögskolan* ('the staff at the adult education college'), *England och Norge* ('England and Norway'), *facket* ('the trade union'), *medlemmarna* ('the members'), *kammarrätten* ('the administrative court of appeal'), *Stena, varannan polack* ('every other Pole'), *den* ('it'), *Tomas von Brömssen, försäkringskassan* ('the Insurance Office').

If the numbers are representative, it is somewhat surprising, since formal groups make decisions so often. One explanation could be that formal groups operate within a formal system, so, either they are not affected by the decision-action, or they have opportunities to have their say on the issue before the decision is made.

### Process: Communicating

#### 12) Communicator (present in 4 out of 556 cases)

When decisions have been made they sometimes have to be communicated to parties affected by the decision. This is usually not given much attention: the affected parties read a protocol or a summary of the protocol in a newspaper or other media. Sometimes, however, the communication process is more explicit.

The communicating agent is in these cases most often expressed. The following 4 cases occurred: *Andreasson har berättat* ('Andreasson has told'), *Bois ordförande James Benson förklarar* ('Bois' president James Benson explains'), *han kommenterade* ('he commented'), *Nordstrand meddelade* ('Nordstrand informed').

One possible explanation the communicator is present so seldom is that often decisions made by formal groups are communicated in written form (for example as a press release), and then the group as such is seen as both the decision-maker and communicator. In other cases the communicator may be obvious from the situation, for example when a sports personality tells a journalist that he has decided to retire.

### 13) Receiver (present in 1 out of 556 cases)

As discussed in connection to the Communicator role above, the communication of a decision is seldom given much attention. Usually the receiver is completely implicit. In one case, however, the recipient of a decision is made more explicit:

- ... som skulle ge jurister tolkningsrätt när det gäller politiska beslut
- ... *that would give lawyers preferential right of interpretation regarding political decisions*

The interpretation of a decision is part of the reception of it, and the lawyers here are (some of) the recipients of the decision.

## Process: Implementing

### 14) Implementer (present in 1 out of 556 cases)

When a decision has been made, it can also be implemented, that is, the action decided on is performed. The agent performing this action is called an implementer here. This role occurred only a single time in the investigated concordances, moreover, it is not obvious that this occurrence should be classified as an implementer:

- *Maktkamp uppstod, och ordföranden kritiserade en del styrelseledamöter för att utåt motarbeta beslut som de varit med om att fatta.*
- *A power struggle arose, and the chairperson criticized some of the board members for publicly trying to thwart decisions that they had participated in making.*

When a decision is made, the people making the decision agree to either participate in performing a certain action, or to let that action be performed. In this example, a person is accused of not sticking to that agreement. In other words, the decision is made, that is, the obligation is created, but the decision-action is not performed accurately. Thus, the implementer is criticized for not implementing the decision correctly.

Another, and more obvious example can be found in a directed search for *verkställa*:

- Vidare föreslås att länsstyrelsen, och inte polisen, ska verkställa beslut om omhändertaganden av djur.
- *Furthermore, it is proposed that the county board, and not the police, should carry out decisions on animal custody.*

It seems the carrying out of decisions is not talked about much. Perhaps this indicates that decisions are normally carried out according to what is indicated in the decision.

### Summary of the role analysis

To summarize the above role analysis: decisions can be made by individuals, but are made more often by groups that usually are formal. However, individuals evaluate decisions more often than groups. A decision can be made about anything (as long as there are alternative actions to choose from), but it can be difficult and complicated. Moreover, when a decision has been made, it is not easily unmade or changed. The time that a decision is made can be important, but the location seldom is. The consequences of a decision are usually the same as the consequences of the action decided about. The carrying out of decisions, finally, is not discussed much, possibly because it is unproblematic.

## 3.4.8 Properties

### Relevant properties

Allwood lists seven types of properties that a concept can have, and all these are relevant for the concept decision. One limitation, however, is that *properties related to perception, emotion and cognition* are not relevant for perception, since decisions are not concrete.

In general one can say that properties for decisions are expressed quite rarely. Of 556 examined occurrences properties were expressed only 33 times.

### Properties derived from time and space

Time and space related properties are not difficult to imagine for decisions: *a new decision, a quick decision, a Brazilian decision*, etc; the relationship between decisions and time/space has also been discussed in section 3.4.5 above. Four occurrences of time-derived properties were found in the concordances:

- Localization in time  
*nya* ('new', 2).
- Extension in time  
*hastigt* ('quickly'), *lång* ('long')

A fifth case was *särskilda* ('special, separate'), which is rather vague. A *särskilt* decision can be made on a different occasion, a different location, or both.



Properties that are seemingly spatial, such as *big* and *small*, refer to the importance of the decisions, as discussed on p. 71 above.

### Properties derived from processes

The processes that decisions are involved in can give rise to properties, such as *made*, *changed* or *communicated*, but only a single case of this was found in the concordances, *överklagade*<sup>1</sup> ('that has been appealed against'), so it must be considered rare. A more directed search in the corpora reveals that it does occur for other processes: *fattade beslut*, *tagna beslut* ('made decisions').

### Properties related to emotion and cognition

Properties like *happy* and *stupid* are related to emotion and cognition, and one could imagine such properties being applied to decisions. The evaluating properties found (see below) are often related to emotion or cognition, for example *klokt* ('wise') or *glatt* ('happy'), but apart from those, these kinds of properties are rare in the concordances. The only property that was found that was related to emotion or cognition without directly evaluating the decision was the cognition related *konkreta* ('concrete').

### Properties related to roles

Properties related to roles was the most common type of the properties found in the concordances:

- Content (9)  
*[viktigaste] politiska* ('[most important] political', 6), *redaktionella* ('editorial'), *ekonomiska* ('economic'), *operativa* ('operational').
- Decider (6)  
*formell/a* ('formal', 2), *motiverat internationellt* ('motivated international'), *privata* ('private'), *centrala* ('central'), *kommunala* ('municipal').
- Motive (1)  
*affärsmässiga* ('businesslike').
- Consequence (1)  
*hårda* ('tough').

Not surprisingly, the two most common roles, Decider and Content, are also the most common property sources.

---

1. The word form can be used as past participle as well as past tense, but the context in this case made it clear that it is the participle.

### Quantification

There were no cases of quantifying properties in the concordances, but a directed search shows that they do exist: *många beslut* ('many decisions'), *få beslut* ('few decisions').

### Evaluation

Evaluation of decisions can be, and is, expressed through properties:

- General (3)  
*bättre* ('better'), *klokt* ('wise'), *överklagade* ('that has been appealed against').
- Preparation related (1)  
*förbastat* ('rash').
- Importance (3)  
*stora* ('big'), *oerhört* ('tremendous'), *viktigaste* ('most important').

Decision evaluation was also discussed above (p. 86).

### Modality

Decisions can of course be possible, actual, probable etc., but in the concordances examined modal properties only occurred as descriptions of how far things had gone in a formal process: *preliminära* ('preliminary'), *slutliga* ('final').

### Conclusion

Looking back at the decision properties that were found in the concordances, it is clear that it is not very common to describe decisions with properties; the few cases that were found in the concordances are difficult to generalize about. Allwood (1989:29 ff) writes that an expression for a property may or may not have a *marked property source*. For example a property like *furry* has the property source *fur*, while a property like *blue* has no such corresponding source. The most common properties found were those related to roles, these also have marked property sources. Beside these, however, marked property sources are rare. Again, it might be the abstract nature of decisions that makes it difficult to create properties based on its similarities to other phenomena.

#### 3.4.9 Possibilities of quantification, evaluation and modality

In Allwood's model, this is a very general heading under which several aspects of the concept can be discussed. In the case of decision, I would like to say something about the modality of the roles, and about negative decisions.

#### Modality of roles

A decision is always made by someone at a specific time, under some circumstances, in one way or another, and it is always about something. Thus Decider, Time, Circumstance, Manner and Content are necessary roles, (although they need not be expressed). Consequence is less clear, and depending a little on how this role is defined, it can be necessary or optional. If a person decides to do

nothing regarding a certain issue, one might want to say that there are no consequences of the decision. However, most people would probably agree that letting something happen or not happen also has consequences (that it happens/ does not happen). Thus it is reasonable to say that whenever we have a choice of doing something, there will be consequences of our choice, that is, our decision. Because of this, Consequence is also a necessary role.

It is at least conceivable that decisions could be made completely without Motive, although those are probably rare. Using a die or something similar to choose between given alternatives is perhaps a way of avoiding Motive, but there will still be a Motive behind the choice to let the dice decide.

It is even more difficult to think of decisions that are completely void of Input, since one at least has to know enough about the alternatives to understand what they are; that information is a kind of Input. However, one might want to define Input as information other than information about which alternatives are available, and in that case the role is optional, though probably common.

Changer, Invalidator, Evaluator and Communicator are all optional roles.

**Negative decisions and non-decisions**

A decision can be said to be *negative* if it has consequences that are negative; typically this is relative to the interests of one party:

- Ett ur folkhälsosynpunkt negativt beslut ska kunna stoppas lagvägen.
- *It should be possible to use legal channels to stop negative decisions concerning public health.*

A decision can also be *negative* in another sense, as in ‘they decided not to do it’. This can be compared to, ‘they did not decide to do it,’ which can be called a *non-decision*. More precisely, a non-decision occurs when a suggestion is rejected by one or more participants, no agreement is reached, and no obligation is created. In the case of individual decisions, this corresponds to an individual not being able to make up his mind. A negative decision, on the other hand, occurs when an agreement is reached to not perform a certain action. The following diagram shows the relevant cases:

*Figure 3-7: Negative decisions and non-decisions.*

	to act	to not act
agreement	1) <i>they agreed to do it</i>	2) <i>they agreed not to do it</i>
disagreement	3) <i>they did not agree to do it</i>	4) <i>they did not agree to not do it</i>

The prototypical decision is shown in square 1, where the participants agree to perform a certain action. (When it is necessary to separate this from negative decisions, it can be called a *positive* decision.) The situation in square 2 (negative decision) is not very complicated either, and although no such cases were found

in the sample used in this investigation, a directed search found a number of cases, such as the following one:

- Han överklagade till Högsta domstolen men HD beslöt i höstas att inte pröva målet.
- *He appealed to the High Court but HC decided last autumn not to accept the case.*

Here the High Court has considered a suggestion to take up a case, but decided not to. Standard language obviously treats this situation as a decision. Square 3 (non-decision) does not seem to be treated as a decision in ordinary language, as illustrated in the following example (also found after a directed search in GP-HD):

- Det drastiska beslutet meddelades efter en rörig debatt under vilken parlamentet inte lyckades besluta om nödvändiga lagändringar.
- *The drastic decision came after a messy debate during which the parliament did not succeed in deciding about the necessary changes in law.*

(Note that it is the decision about changes in law that is interesting here.) The action that was suggested here was to change some laws, but no agreement was reached; thus, no decision was made.

The last square, 4, is not as easy to illustrate, and it is indeed not clear that it actually exists (negative non-decision). However, a situation where a group traditionally behaves in a certain way could possibly qualify for such a labeling, as in the following invented example:

The Jonsson family has always celebrated Christmas in their cottage in the countryside. This year, the 16-year old daughter suggests that they stay in the city instead. The other ones disagree, and they all end up going to the cottage.

The situation could also be analyzed as a ‘routine, implicit’ decision to go to the cottage, or perhaps in some other way, and perhaps negative non-decision is an impossible or unnecessary category. However, until I have found and analyzed a number of such authentic situations, I leave negative non-decision as a possibility.

The distinction between negative decisions and non-decisions may be of little importance in many situations, especially when not performing the suggested action has clear and important consequences. Consider the following, invented example:

The EU and China are on the verge of a trade war, and the council of ministers gather to decide about possible sanctions against China. After some discussion it is clear that there is no good way out: if sanctions are not imposed, large parts of the EU manufacturing industry will collapse, since the cheap labor gives the Chinese manufacturing companies huge competitive advantages. On the other hand, if sanctions are imposed large parts of the EU mobile telecom industry will collapse, since 80% of their sales go to the rapidly growing Chinese market.

In this example, both a “yes” to sanctions and a “no” to sanctions can be seen as actions. Moreover, whether the council reaches a decision to not impose sanctions or does not reach a decision to impose sanctions, may for most people be of very little importance.

#### 3.4.10 Normative requirements on concept determination

Allwood lists four sections of normative aspects of concept determination. The first is *basis for evaluation*. In our case the concept determination primarily has an instrumental value: researchers of decision-making in general, I and myself in particular, could benefit from a clear understanding of what decision is. The two most important aspects of its instrumental value are, the way I see it, the *alethic* and the *cognitive* aspects. The determination should be true in the sense that it reflects the concept as it is used and understood by real world people. In addition, it should be cognitively both accessible and helpful in order to actually give a clear understanding of the concept.

Allwood (1989:38) claims that the traditional normative requirements of concept determination are the following:

- truth (correct anchoring in reality)
- consistency
  - a) internal
  - b) external
- exhaustiveness
- simplicity
- perspicuity
- fruitfulness

The requirements of truth on the one hand and simplicity, perspicuity and fruitfulness on the other correspond to the alethic and cognitive aspects already mentioned. An inconsistent determination would probably neither be true nor simple, perspicuous and fruitful. It is my belief and intention that this concept determination is consistent, both internally and in relation to other concepts.

Exhaustion, finally, is desirable but difficult to guarantee. One of the reasons for following Allwood’s model is that no important aspects of the concept should be forgotten, but it is obvious that there are more things to say about the concept of decision than what I have presented here. However, I hope that the omitted issues are not worthy of note.

Below (section 3.4.12) I will give a summary of the concept determination, that will serve as results.

### 3.4.11 English – Swedish

As discussed on pp. 55-56, I am also interested in differences between Swedish and English concerning the concept of decision. In order to discover any large such differences, a concordance of 400 occurrences of *decide* and *decision* was made from BNC Spoken and BNC Written (100 occurrences of each combination). 39 of the cases were deemed as cases of meaning 2 of *bestämning* (see p. 57 above). Most of the roles and processes found in the Swedish concordances were also found in the English concordances and vice versa, but there were some exceptions, presented below.

#### *Using*

One case found in the English concordances was a decision used as a precedent for something.

- The judge has set our fears at rest that Ridley's decision would be used as a precedent for demolishing thousands of other listed buildings.

That means that the product of the decision-making process (i.e. the decision) functions as an instrument in another process. There is nothing strange or surprising about this. A directed search in the Swedish corpora resulted in several cases of this, as in the following example:

- Dessutom används besluten i undervisningen inom vården.
- *What is more, the decisions are used in health care education.*

#### *Studying*

One case was found in the English concordances where decisions were *illuminated*.

- That leaves obvious questions about why exactly this illuminates decisions by finite human agents in worlds full of 'friction', but we would rather leave them to Chapter 6, where Game Theory will be found illuminating for thinking about international relations in an ideal-typical way.

This was part of an article on decision research, in fact, this entire thesis is another example showing that decisions can be studied and, I hope, illuminated. (No such article was found in the Swedish corpora, which is not surprising, since they contain few, if any, scientific articles.)

#### *Precondition*

Two cases were found in the English concordances where some kind of preconditions for decision-making were mentioned; one of these is presented here:

- This left it to Mr [anonymised], to come up with sufficient information to enable that decision to be made.

It is difficult to conceive of a process that do not require any kind of precondition, there is nothing peculiar about this role. A search in the Swedish corpora revealed that it occurs there too:

- Därför saknas tillräckligt underlag för beslut, enligt SGU.
- *Because of this there is not enough material for a decision, according to SGU.*

*Postponing*

One case was found in the English concordances where a decision was postponed:

- The ruling executive wanted a decision postponed to assess a review of benefits and taxation.

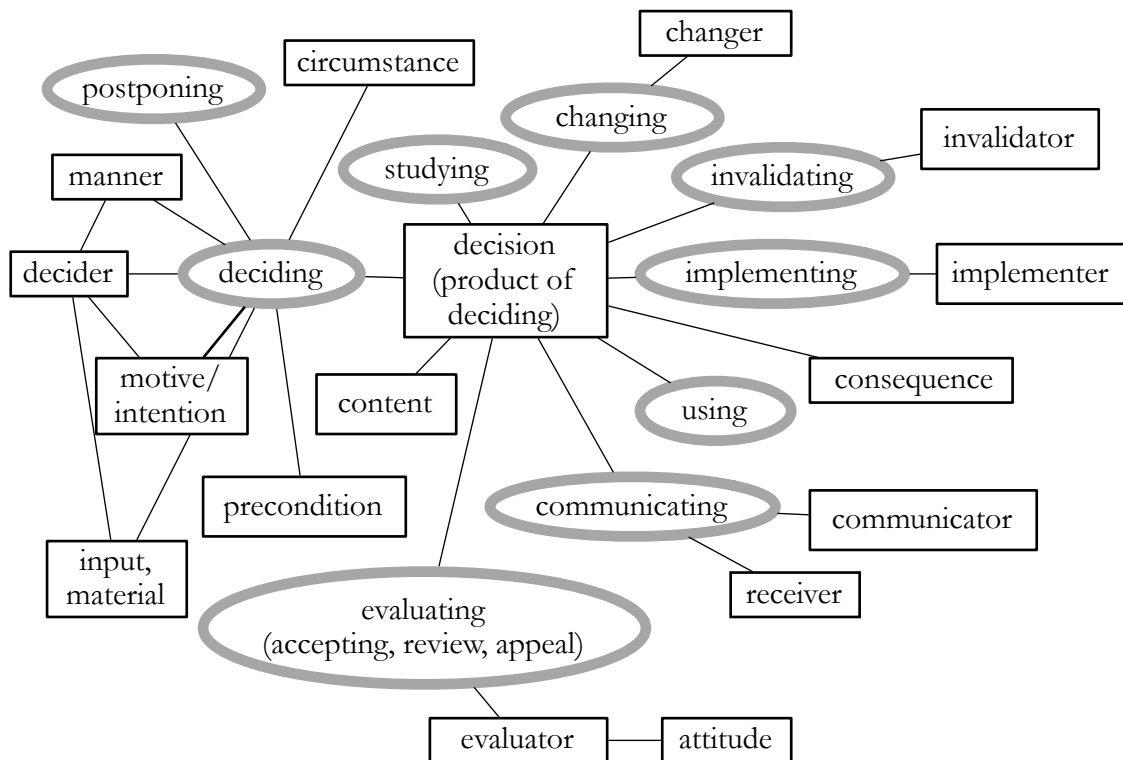
Postponing is a process that operates on the decision-making process, and considering that it has already been revealed that decision-making can be complicated and time consuming (see p. 80), it is not surprising that it can be postponed. It occurs in the Swedish corpora as well:

- Flera gånger har beslutet skjutits upp och/eller förhalats.
- *Several times the decision has been postponed and/or deliberately delayed.*

**Comparison**

The Swedish and English concordances did not differ very much, but some of the roles found in the English concordances were not found in the Swedish ones. Figure 3-8 contains all semantic roles found in the Swedish and English concordances.

*Figure 3-8: Semantic Roles and Processes found in the Swedish and English material.*



The roles and processes that differed between the Swedish and English concordances all had very low frequencies, and directed searches revealed that they do occur in both corpora. Thus, coincidence may have caused them to appear in one concordance set and not the other.

Two roles are frequent enough to compare their sub categories, Decider and Content. Both roles are present almost exactly as often in English and Swedish, but the sub categories differ somewhat.

*Table 3-1: Comparison of the Decider role in Swedish and English.*

	English	Swedish
Decider	241 (67% of decisions)	382 (69% of decisions)
Deictic. ref. exp.	126 (52% of deciders)	169 (44% of deciders)
singular <sup>1</sup>	53 (42% of deictic)	29 (17% of deictic)
plural	52 (41% of deictic)	88 (52% of deictic)
Sep. Individuals	47 (20% of deciders)	37 (10% of deciders)
Inf. groups	7 (3% of deciders)	22 (6% of deciders)
Form. groups	59 (24% of deciders)	154 (40% of deciders)

It seems that English deciders are individuals more often than Swedish deciders, 41% compared to 17%, statistically significant on the 99.99% level ( $\chi^2$ -test; see p. 227-8 for an explanation). We can only speculate about the reasons for it. One explanation could be that Swedish society is more collectivist in this aspect, with a preference for group decisions. Another explanation could be that the material in the Swedish corpora more often concerns group decisions than individual ones, compared to the English BNC. For example, the written Swedish corpus only contains newspaper texts, while the written section of BNC consists of many kinds of texts, including novels.

Turning to the content role, its distribution in the corpora is shown in table 3-2.

*Table 3-2: Comparison of the Content role in Swedish and English. See p. 83 ff. for explanations and examples of the categories.*

	English	Swedish
Content	225 (62% of decisions)	331 (60% of decisions)
Area	70 (31% of contents)	136 (41% of contents)
Chosen alternative	146 (65% of contents)	182 (55% of contents)
Content detail	0	5 (2% of contents)
Scope	9 (4% of contents)	7 (2% of contents)

1. A number of deictic expressions are ambiguous as regards number, which is why singular and plural do not add up to 100%. In order to make the figures more comparable between the languages, the Swedish correspondents to English *you* (*du* and *ni*), have been treated as ambiguous.



Table 3-2 shows that the English Content role more often than the Swedish concern Chosen alternative than Area, with statistical significance on the 98% level ( $\chi^2$ -test). It is difficult to see any reason to why this should be.

All in all, there does not seem to be a large difference in the concept of decision between (British) English and Swedish.

### 3.4.12 Summary of the empirical investigation

The results from the empirical investigation made here are extensive, and it is easy to get lost in the details. I shall therefore make a summary of the findings below.

#### “What and Why”

Ideally, all words that can be used to refer to decisions, in all languages, should be investigated, but due to time limitations this was only done with the two main Swedish words, *beslut/ besluta* and *bestämna*. Comparisons was done to the English word *decide/ decision*. The meanings ‘determine’ and ‘control’ that *bestämna* can have, have been excluded.

#### Etymology

The word *besluta* originally means ‘to end or close something’, the probable original meaning of *bestämna* can be described as ‘to utter approval’. The English word *decide* derives from a Latin word meaning ‘to cut, to determine’.

#### Basic Epistemic Structure

A decision is considered to be essentially an event here, that is, a change from one state to another. In that respect the verb *besluta* (decide) is the most basic form, *beslut* (decision) is a derivation. However, the resulting state of obligation is linked closely to the event; perhaps both the state and the event are necessary for the concept. Both the verb and noun forms are common; the noun is actually more common than the verb in the Swedish written corpus. The noun often refers to the resulting state, the obligation, often indistinguishable from the document where the decision is written, in particular with institutional decisions. In such cases *beslut* is more of an entity.

Sometimes, a decision is seen as a process instead of an event. Then, it usually refers to the work done before the actual decision. Decision as a process is rare, and the same goes for adjective forms.

For *bestämna*, the verb is basic. The most common noun form *bestämmelse* has received the special meaning of ‘rule, regulation’, and similarly the form *bestämning* has received the meaning ‘specification, determination’. The more neutral form *bestämmande* is very rare. In the same way as for the noun forms, the meaning of the adjective *bestämd* has diverged from the original verb meaning, instead connoting ‘clear, doubtless’.

Both *besluta* and *bestämna* occur in reflexive constructions, although this is more common for *bestämna*. Results support the dictionary claim that the reflexive

form is used for decisions concerning decision-maker, while it should be noted that the non-reflexive form could be used for this as well.

### **Basic Conceptual Structure**

A possible prototype for a decision is when a person is about to vote in a public election. There are several alternatives to choose from, and election campaigns are held for several weeks or months before the election, providing information about the alternatives to the voter. The precise instant for the decision, when the voter makes up his mind, can vary, moreover, he can change his mind several times. On Election Day however, a single alternative has to be chosen.

A possible stereotype for a decision is a formal group decision, with a chairperson, agenda, minutes etc. In such a situation it can be necessary to separate institutional decisions (that which is written down in minutes, signed and used to regulate an organization) from interpersonal decisions (when the participants of a meeting decide what institutional decision to make).

A general super type for deciding is *psycho-social acts*. Examples of coordinated types are *questioning*, *admitting* and *denying*. A more immediate super type is 'decision situation', which includes situations where an agent does not manage to choose from the available alternatives until the opportunity has passed.

Decisions can be subcategorized in many ways, and it is common to do so on the basis of the properties of the decision-maker or on the content of the decision, for instance 'jury decision' or 'financial decision'.

The evaluation of a decision can be made on two grounds – either the action that the decision concerns, or the decision-making process itself. The option to decide is also evaluated sometimes, as something positive.

### **Anchoring in time-space**

Decisions are located in time, and, through their decision-makers, they are located in space as well. The temporal location is far more important (i.e. more frequent in the concordances) than the spatial location.

Once made, a decision can be changed up until the moment when the decision-action is performed; in institutional settings, there are often formal procedures for making such a change. In addition, a decision can be cancelled or withdrawn. When the decision-action is performed, the decision does not really end, but rather it expires. However, when decisions concern action types, the number of actions is not necessarily specified; such a decision does not expire as easily. Rather, it continues to be valid until an over-riding decision is made, or some other circumstance renders it invalid.

### **Processes and Relations**

Decisions are related to other concepts that can be grouped into six main areas: *agreement*, *determination*, *intention*, *rules and commands*, *selection* and *specification*. In the

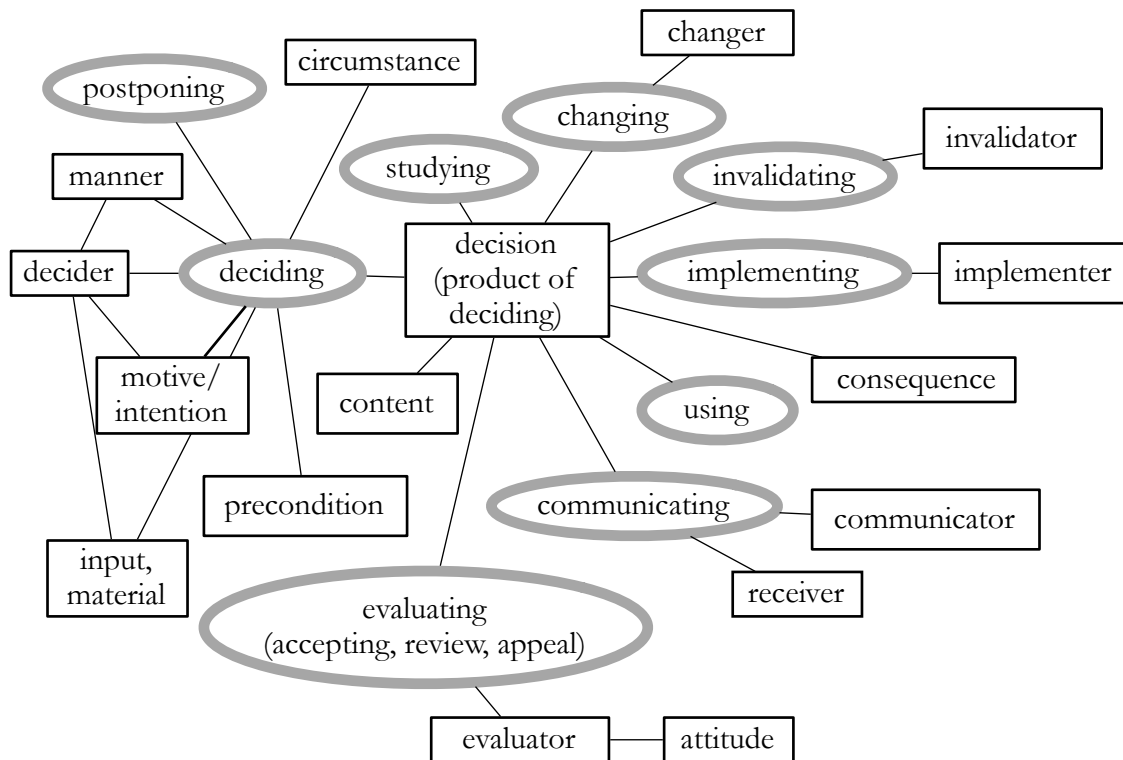
concordances decisions are seldom coordinated with other phenomena, indicating that they are important enough to be dealt with on their own.

The processes and relations that decisions were found to be involved in are the following: *deciding* ('to make a decision'), *changing* ('to change a decision'), *invalidating* ('to cancel a decision'), *evaluating* ('to praise a decision'), *communicating* ('to inform about a decision'), *implementing* ('to carry out a decision'), *using* ('use a decision as a precedent'), *studying* ('to illuminate a decision') and *postponing* ('to postpone a decision'). Deciding is the most common process, present in 62% of 200 investigated cases, with evaluation at a distant second place with a trifling 10%.

**Roles Derived from Processes and Relations**

Figure 3-8, repeated below as 3-9, shows the processes/relations and roles with which decisions are concerned.

*Figure 3-9: Semantic Roles and Processes for Decision.*



Decider and Content are the most common roles, and Time and Consequence are somewhat common as well. The other roles are more sporadic. Both individuals and groups are common as Deciders, but groups are more common in the Swedish material than in the British English material. There is no discernible pattern in the various Contents of decisions.

It is perhaps not strange that the Content of a decision often is mentioned, since Content simply specifies what the decision is, but it is less obvious why Decider is so frequent. One explanation for this is that the Decider defines the scope of the decision – a government decision has a very different scope compared to the

decision of a local housing committee. The relative frequency of 'Time' can be explained by the way that decisions are anchored in time, having a period of validity between the decision-making and the performing of the decision-event. Consequence being common is explained by decisions' tight connection to actions, and the fact that the consequences of actions are considered to be consequences of the decisions leading up to the actions.

### **Properties**

Decisions are not often described with properties, but when they are, the descriptions are usually derived from some of the semantic roles surrounding decisions, such as 'political' or 'formal'. Perhaps the abstract nature of decisions makes it unusual to talk or write about their properties.

### **Possibilities of Quantification, Evaluation and Modality**

Decider, Time, Circumstance, Manner, Content, Consequence and Precondition are necessary roles for decisions, in the sense that each decision must be made by somebody, at some time, in some way etc. (Although these roles might not be expressed when talking or writing about the decision.) Motive and Input are probably also necessary, depending on their precise definitions. The other roles are optional.

Decisions can be negative in two senses, *non-decisions* and *decisions-not-to*. A non-decision involves no agreement being reached among the participants in a group, or when an individual cannot make up his mind. A decision-not-to is brought about when a group agrees to not perform a proposed action, or when an individual makes up his mind not to perform a possible action.

### **English-Swedish**

There do not seem to be any large differences between the Swedish and British English decision concepts, but groups are more often Deciders in the Swedish corpora than in the British English ones. This is either a reflection of Swedish culture being more democratic/collectivist than the British one, or due to differences in the types of texts and conversations of the corpora.

## **3.5 Discussion**

### **3.5.1 A definition**

One important, although not strictly necessary, result of a concept determination like the one made here is a definition. This is not a way to capture the entire concept in a few short phrases, but rather a way to set up the limits for the rest of this dissertation, and to be clear about what I mean with decision here.

Of course, definitions of decision and group decision have been made before. Putnam and Stohl use a rather straight-forward and simple definition:

*A decision is a choice that group members make among alternatives available to them*

(Putnam and Stohl 1996) quoting (Fisher and Ellis 1990)

The definition is attractive in its simplicity, but I do not find this definition very clarifying. There cannot be a choice without alternatives, so the definition merely says that a decision is a choice. Geist and Chandler use a theory developed by Simon (1976), their definition is compatible with Putnam's and Stohl's, but more informative. They write as follows:

*[decision] should be viewed in terms of the alternative behavioral possibilities and consequences that individuals within the organization are confronted with at any given moment, and that decision or choice, therefore, "is the process by which one of these alternatives for each moment's behavior is selected and carried out".*

(Geist and Chandler 1984:68)

First, one should note that the word *select* is somewhat ambiguous. If it is intended to include only a conscious choice, then the last part of the description above is sufficient. However, *select* is used sometimes in a wider sense, as in *natural selection*, where conscious choice is not present. In that sense alternatives for action can be selected and carried out without a decision having been made.

Further, Simon seems to view carrying out a decision as being part of the decision. This notion is interesting, since it implies that a decision is never final until the action (which we may call the *decision-action*) is carried out.<sup>1</sup> A decision can, in principle, be changed anytime, until the decision-action has been performed, the only definite end of the decision process. However, if the decision-action is considered part of the decision, then a decision is never made until the decision-action has been performed. But, have I not decided to buy a book until I have bought the book? The idea of a decision could probably not endure if decision-actions were *never* carried out; it is likely that it is necessary that decision-actions *usually* be carried out in order for the concept of decision to survive. What is missing in the two definitions above is *commitment* to the decision-action. A person that commits to doing something without intentions to stick to the commitment violates the commitment, or one of the felicity conditions of decisions in Searle's terminology (Levinson 1983:229ff). Thus, there is a close, and well-motivated link between the decision and the decision-action. However, including the decision-action in the decision seems counter-intuitive.

Yates, Veinott and Patalano are more careful in their definition, stopping at the commitment to an action:

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1. Or, the opportunity for carrying out the decision-action has passed without the action having been carried out.

*A decision is a commitment to a course of action that is intended to produce a satisfying state of affairs.*

(Yates et al. 2003:15)

Yates and his colleagues are interested in normative aspects of group decision-making; therefore incorporating a part about intentions behind the decision-action in their definition. At least analytically speaking, the decision and the intention behind the decision-action can be kept apart. For example, two people may decide to go on a journey to Paris together, one of them for the sake of the company, and the other to find an opportunity to steal the other person's wallet. In this example the intentions behind the decision-action (to go together) are different, but I would say that there is only one group-decision. The decision is to act in a certain way, and the (personal) intentions behind that action are something else.<sup>1</sup>

Huisman, in contrast, stops short at commitment:

*[A decision is] a commitment to future action*

(Huisman 2001:70)

In my opinion, commitments for future actions can arise without decisions having been made (for example based on habit), so this definition is a bit too broad. The passive voice in Huisman's definition also implies that decisions may be made without agents, an implication I find unfortunate. All this leads to the following, preliminary definition:

- (1) A decision is an event where one or more agents choose one out of at least two alternative future actions and create a commitment to act according to it.<sup>23</sup>

- 
1. One may say that there are intentions on different levels – there is one “immediate” intention of performing the action, and one “indirect” intention concerning the results of the action. The first kind of intention is of course shared by the two companions in the example (traveling together to Paris), but in the definition above it seems to be the second kind of intention that is referred to (having company/stealing a wallet). The article speaks of results in a way that makes it clear that the satisfying state of affairs is not the immediate result of the action (being in Paris), but rather some long term effects, for example this quote: *this decision is hard because it is difficult to imagine or predict what its possible outcomes might be* (Yates et al. 2003:21).
  2. It should perhaps be pointed out that the alternative future courses of action could be to either perform an action, or not to perform it.
  3. Another way of dealing with decisions is to treat groups as single agents, which would reduce the definition of decision into something like, ‘an agent starting to follow a plan.’ Rubin (1984) seems to want to handle group decisions this way, saying that ‘groups [can] clearly act (witness the behavior of a lynch mob) and can

A problem with this definition is that it assumes that the ones who decide are also the ones who act. This is not always the case, so we need to adjust the definition:

- (2) A decision is an event where a set of agents A chooses one out of at least two alternative future actions, and a set of agents B becomes committed to act according to it.

Here, the deciders and the implementers have been separated. This adjustment makes it obvious that the term *commitment* is not satisfactory: it implies a certain amount of voluntariness, which may be common and ethically desirable, but not analytically necessary. *Obligation* is a better term:

- (3) A decision is an event where a set of agents A chooses one out of at least two alternative future actions, and creates an obligation for a set of agents B to act according to it.

It should be noted that there may very well be only a single member of A, or of B, and that A and B may be identical.

This definition requires an obligation to be created for something to count as a decision. On the other hand, some situations seem to defy this. Let's take an example:

Pem and Pom are cleaning out the garage. They have rented a large container to throw the garbage in. Pem points at a large glass bottle, saying 'Is it O.K. with you if we throw it away?'. Pom then picks up the bottle, throws it into the container, and it breaks against the metal bottom.

Here Pem and Pom clearly agree to throw away the bottle, and they have a choice, but when and where is the obligation created? The problem lies in that the action that is under discussion is also the one that is used to communicate Pom's acceptance of Pem's proposal. One solution to this could be to say that the obligation exists instantaneously (zero time lapse), but that would be rather dubious. Another, real-life, example can also be used to challenge definition 3:

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be thought of for many purposes as persons who are responsible for their actions; for example, they can be sued, go bankrupt, or be held liable for injuries' (Rubin 1984:18). Even though Rubin has a point in that groups often are thought of as actors, this view has definite problems. *Intention* is a crucial concept when analyzing action, and what would the intention of a group be, if not some union or intersection of the intentions of its participants? Further, when a group performs some *behavior*, mustn't that be through one or more of its participants? Thus, if both intention and behavior are tied to individuals, actions of a group must be fundamentally different from the actions of an individual. I find it more reasonable to define group decision as a result of interacting individuals.

*Excerpt 3-1. A850101, line 60.*

*A meeting with the board of a rural township in southern Sweden. The chairperson opens the meeting, and proposes a minutes verifier (utterance 1, from #1# to #2#).*

1	\$A: ... Bäckmåla kommun+ / kommunalnämnd / behagar härmed sammanträda // å #1# då har vi på / fördragningslistan val av justeringsman / i tur att justera / kvällens pro+ / protokoll / skulle va Bengt Alkvist #2# // något annat förslag	\$A: ... Bäckmåla town+ / township board / is hereby gathered for conferral // and #1# on the agenda we find election of minutes verifier / the person in turn for verifying tonight's min+ / minutes / would be Bengt Alkvist #2# // any other suggestion
2	\$X: nä	\$X: no
3	\$A: utses Alkvist	\$A: is Alkvist appointed
4	\$X: <1 ja >1 <2   >2 @ <1 comment: several participants >1 @ <2 event: strike of chairperson's gavel >2	\$X: <1 yes >1 <2   >2 @ <1 comment: several participants >1 @ <2 event: strike of chairperson's gavel >2

In this example there are several obligations at work: there is a general obligation by all participants to appoint a minutes verifier, and when Alqvist has been appointed, he is obliged to verify the minutes, while the other participants are obliged to treat him as a verifier (i.e. allow him to verify the minutes). However, the action associated with the group decision is to appoint Alqvist as the minutes verifier, and there is never any obligation to do exactly that. At the same time the decision is made, Alqvist is appointed, that is, the action is carried out (utterance 4). The explicit agreement (choice) performs the action. This corresponds to Austin's (1962) classic *performatives*, and is obviously a way to decide without obligation.

Both the example with the glass bottle and the minutes verifier show that the communication of choice can perform the chosen action. The definition must be adjusted to cover this case:

- (4) A decision is an event where a set of agents A chooses one out of at least two alternative future actions, and in this choice a set of agents B either acts according to the choice, or becomes obliged to do so.

This definition thus contains a disjunction (either...or) effectively creating two types of decisions, one where the decision-action is carried out through and by making the decision, and one where an obligation is created.

However, there is still one special case of decision not covered, and that is private decisions, when A and B are equal, having a single member who has not communicated the decision to anybody else. In this case it is strange to say that this person is obliged to follow the decision. For example, I may decide one day at 11 o'clock that I am going to have lunch at a Thai restaurant. At 12 o'clock,



when I go for lunch, I change my mind and go for a pizza instead. I see no obligation in this example, simply an intention to go to the Thai restaurant.

There may be cases where people create obligations for themselves. For example, I could say to myself at 11 o'clock, 'Magnus, today you should go to the Thai restaurant. You have had pizza every day for two weeks. Thai is much healthier. Magnus, I'll be disappointed with you if you fail to do this!' In such a case, it is not unreasonable to talk about an obligation for a private decision, but I see it as a special case.

Thus, we arrive at the following, our final definition:

- (5) A decision is an event where a set of agents  $A$  chooses one out of at least two alternative future actions, and either performs that action, or forms an intention to make that action happen. If a decision is made public (becomes known to others), an obligation to follow the decision arises for a set of agents  $B$ .<sup>1</sup>

When there is more than one member of  $A$ , then the decision is public from the start, so the members of  $A$  are obliged to each other to make the action happen. Similarly, members of  $B$  may witness the decision being made, and the obligation to act according to the choice may then arise in and by the choice (if the institutional structure that  $A$  and  $B$  are part of stipulates it). Further, the intention held by  $A$  to make the chosen action happen may be limited to an intention to let  $B$  perform the action.

The attentive reader may have wondered why the phrase 'set of agents' is used instead of the original 'one or more agents'. The reason is that it enables us to make certain distinctions. First we define a *group decision* as one where the first set of agents ( $A$ ) contains more than one member, and an *individual decision* as one where  $A$  contains only one member<sup>2</sup>. Further, the relationship between  $A$  and  $B$  can be used to set up a typology for decisions:

- i) *A and B are equal* [ $A = B$ ]



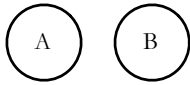
The simplest case is perhaps when  $A$  and  $B$  are the same: either an individual making up his mind about what to do (if there is only one member of the set), or a "democratic" group decision, where everybody that is to perform the action also participates in the decision. In the latter case, the

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1. The action may be generic, as discussed on pp. 71-2.  
 2. Logically oriented readers may wonder what to do with cases where  $A$  or  $B$  or both  $A$  and  $B$  are empty, and the answer is that they simply become irrelevant. The definition requires both a choice to be made and an obligation to be created (or an act to be performed), and these things cannot happen without agents.

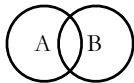
degree of democracy can vary, since the decision need not be made in consensus, nor with the principle of one-man-one-vote.

- ii) *A and B are separate* [ $A \cap B = \emptyset$ ]



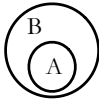
If A decides what B should do, then it means that A has power to tell B what to do (a power that may be restricted in many ways).

- iii) *A and B overlap* [ $\exists x (x \in A \wedge x \notin B) \wedge \exists y (y \notin A \wedge y \in B) \wedge \exists z (z \in A \wedge z \in B)$ ]



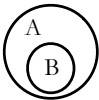
When some-but-not-all members of A are also the ones who are to do the job, then it is more difficult to categorize the decision using ordinary language. An example of this case might be when the CEO of a company who is also a member of the company board. He participates in the decisions made by the board, as well as in performing the actions chosen by the board. However, other people working at the company play no part in the choices made.

- iv) *A is a part of B* [ $A \subset B$ ]



When less than all members of a group decide what the entire group should do, it might look like dictatorship (if there is only one member of A) or a junta (if there is more than one member in A), but this is perhaps the most common case of decision in most large organizations – a subset of the organization members decide what the entire organization should do. Dictators and juntas are examples of such subsets, but also elected parliaments.

- v) *B is a part of A* [ $B \subset A$ ]



Sometimes a group may decide what a single member should do. This can be called ‘appointing’ or ‘designating’.

Whether one accepts category ii) depends a little on one’s view on action. One may say that if a person is responsible for an action, then that person also participates in the action. If for example an officer orders a soldier to dig a hole in the ground, then one might want to say that the officer is responsible for the digging of the hole, thus also participating in the action to some degree. With this view

of action, not only category iii) disappears, but also categories iii) and v)<sup>1</sup>. It is not important for this dissertation whether this view of action is used or not.

The degree of participation in a decision may vary between the members of a group; this blurs the borders between the categories. A person in a group may have little actual opportunity to influence the decision (due to low status, little knowledge, etc.), making participation low for that person, although not strictly nonexistent. What looks like a case of i) may then in effect be a case of iv). If a chairperson pushes through a decision that he should write a letter to the government asking for financial support, then participation in the decision as well as in the action is likely to be low for the other group members. What looks like a group decision may then in effect be an individual decision. Another case is when a group of people working at a company has a meeting, and the chairperson, who is also a manager, proposes that an employee do a certain task. If that employee readily accepts the task, then it may be very unclear if it is a case of category i) or ii).

Something should also be said about the terms *obligation* and *commitment*. It is unproblematic to say that the obligation created in a decision is a *commitment* for each member in B who is also a member of A *and* who wants the selected course of action to happen. However, there are cases which are less clear. For example, there may be a group that uses voting to settle an issue. One member votes against the proposed action, but loses the vote, and finds himself obliged to perform the action. Is he then *committed* to do the action?

### 3.5.2 Relation between the definition and the empirical results

The definition set out here is contradicted by the empirical data in one aspect: it states that a decision is an event while the empirical data shows that it can be seen as an event, a state or a process. However, the definition is not meant to describe the concept of (group) decision-making as used in everyday language today, but to be used in a detailed, scientific investigation of group decision-making. Therefore, I prefer to keep the somewhat stipulative definition of decision as an event, considering the discussions and preparations preceding a decision as something other than part of the decision. It is of course desirable that the terms used in scientific contexts do not deviate from everyday language, but it is sometimes necessary that they do.

The empirical data have several points in common with the definition (5): the decision-maker can be a group (p. 78 *decider*), the decision involves a choice (p. 73-4 *selection*), and it involves an obligation (p. 73 *rules and commands*).

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1. In that case, one may want to make finer distinctions for the obligations, for example between being obliged to perform an action and being obliged to let someone else perform an action.

The remaining parts of the definition are neither contradicted, nor supported by, the empirical data.

### 3.5.3 Object of study in this dissertation

In this dissertation, I am primarily interested in group decision-making, that is, the set of agents that makes the choice should contain more than one member. The restriction that is present, implicitly or explicitly, in most studies of group decision-making will apply here too: only small groups are included, where ‘small group’ is defined loosely as a group of people where each member can interact face-to-face with each other member.

Further, I will focus on the linguistic communication of decision-making in small groups, as opposed to underlying psychological motives or the quality of the decisions that are made.

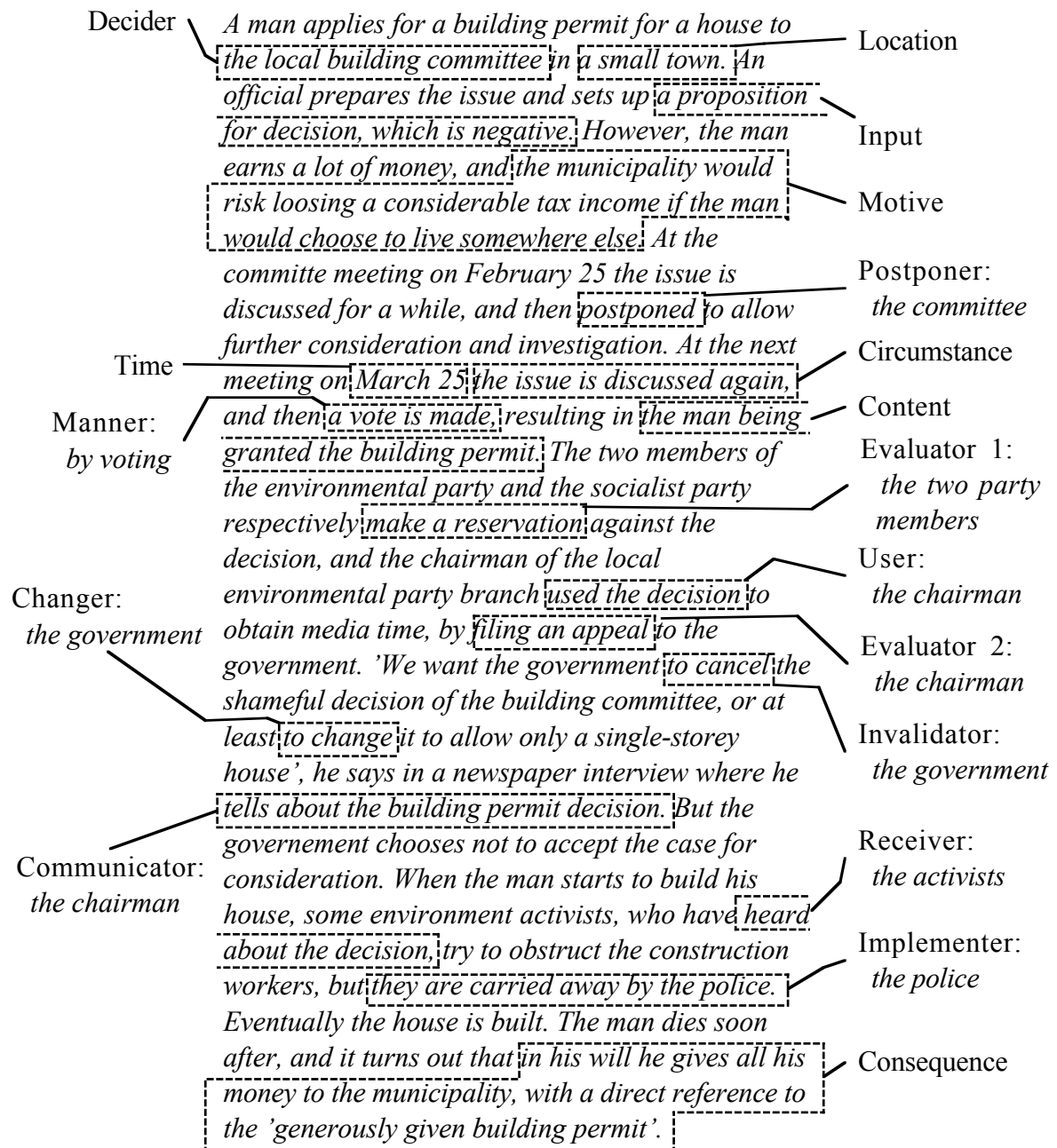
## 3.6 Summary

In this chapter I have investigated of the concept of decision using Allwood’s model for concept determination, enriched with some of Wilson’s methods for concept analysis. Uses of the words *beslut/ besluta/ bestämma* and *decide/ decision* in Swedish and English corpora have been used as input for the determination. A summary of the empirical investigation was made in 3.4.12, and a definition of decision was set up in 3.5.1.

A prototypical example of a decision can serve as an illustration of what a decision is. It is more common that the decider is a group than an individual, and the most common content is a chosen alternative. All other roles are so uncommon that they should be left out of a prototypical example. The following example from GP-HD matches the requirements:

- Nämnden beslutade att föra frågan vidare till kommunstyrelsen...
- *The committee decided to forward the question to the city board...*

A maximal type is perhaps more illustrating, but will have to be artificial, and not fetched from the corpora, to ensure the presence of all roles:



The example is maximal in the sense that it contains all the roles found in the corpora (with the exception of the role of the studier – the reader is an example of that role).



# 4. Argumentation

## 4.1 Introduction

As mentioned in 2.5, argumentation enters group decision-making naturally when members of a group try to persuade each other that “their” suggested alternative is the best one. Argumentation is one of the oldest branches of language studies, the first schools of Ancient Greece taught it, although under other names, but to a large extent it has been kept out of main-stream linguistics, and the theories and developments of argumentation/rhetoric on the one hand and linguistics on the other have been separate tracks. During the 20th century the rhetorical track was made more scientific, through the works of Chaïm Perelman, Lucie Olbrechts-Tyteca, Stephen Toulmin and others, as described above (section 2.5). However, argumentation and linguistics are still kept fairly separate, and I think that both fields would benefit from being brought closer to each other. One example of this is that argumentation theory still focuses to a large extent on written argumentative discourse,<sup>1</sup> while linguistics during the last decades has opened up towards spoken language. Moreover, even though some work has been done in argumentation analysis on naturally occurring spoken language, the underlying frameworks and theories have been developed for written language. Since my present interest in argumentation comes from its being part of group decision-making, and since group decision-making often, and to a large extent, is a spoken, interactive, face-to-face activity (see chapter 5), this written language bias of traditional argumentation analysis is a drawback.

In this chapter I shall attempt to put argumentation analysis in closer contact with modern linguistics. A linguistic theoretical framework that has been developed with full recognition of spoken language (Allwood’s activity-based communication analysis) will be combined with a well established framework for argumentation analysis (van Eemeren and Grootendorst’s pragma-dialectical

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1. Oral speeches have of course been studied, but they have been expected to be carefully planned, in a way very similar to written language.

school of argumentation analysis), to analyze argumentation in naturally occurring spoken language.

## 4.2 Pragma-dialectics

### 4.2.1 Introduction

The Dutch researchers Frans van Eemeren and the late Rob Grootendorst developed a school of argumentation analysis that they call *pragma-dialectics*. A detailed explanation of the theory can be found in (van Eemeren and Grootendorst 1992), but only a brief explanation is presented here.

The name *pragma-dialectics* comes from the attempt to merge linguistics, or, more specifically, pragmatics, with the philosophical study of critical dialogue, dialectics. The name reveals that the present study is not the first attempt to merge linguistics with argumentation analysis.

In this section I shall present, and to some degree criticize, the pragma-dialectical model. The first part of this, 4.2.2 to 4.2.4, contains a presentation of the ideological foundations, a discussion of the pragma-dialectical view on the distinction between normative and descriptive aspects, and finally a description of the pragmatic (linguistic) theories that pragma-dialectics includes. 4.2.5 through 4.2.11 contains a presentation of the actual model, starting with some basic concepts. At the end of this section, in 4.2.12, the model as a whole will be discussed.

### 4.2.2 Ideological basis

The ideological foundations of pragma-dialectics are captured in the four key terms, briefly explained here (van Eemeren and Grootendorst 1984:4-18):

#### **Externalization**

By externalization, pragma-dialecticians mean that the analysis of argumentation must concern expressed opinions and argumentative statements, that is, utterances and text, as opposed to thoughts, ideas and motives. Naturally, the intentions and meanings that a speaker has cannot be completely avoided when analyzing argumentation, which is not what the pragma-dialecticians advocate. Rather, they claim that these ‘psycho-pragmatic primitives’ (van Eemeren and Grootendorst 1984:6) must be clearly linked to utterances and texts, and great care has to be taken when they are attributed to speakers.

#### **Functionalization**

In argumentation theories that are more oriented towards logic, argumentation is sometimes presented in a very static way. According to the pragma-dialecticians, functionalization means that argumentation has to be seen as ‘a purposive activity’ (van Eemeren and Grootendorst 1984:7), more precisely, ‘a form of verbal action.’



The precise consequences of this view are somewhat unclear, but they seem to be connected to an interest in speech-acts displayed by pragma-dialectics.

### **Socialization**

The term socialization is used in this context to refer to the emphasis the pragma-dialecticians put on looking at communication and interaction during argumentation. Argumentation does not appear in a social vacuum, but between people, so argumentation has to be seen as ‘a part of a bilateral process’ (van Eemeren and Grootendorst 1984:9).

### **Dialectification.**

Dialectification, finally, puts emphasis on the dialectical process of argumentation. Argumentation is not simply about justifying a claim, but also refuting other claims, since the other party usually has a conflicting opinion. Argumentation is a process where both pro- and contra-argumentation must be allowed to occur.

#### 4.2.3 Descriptive vs. normative aspects

According to the pragma-dialectical school, argumentation starts with a difference of opinion, and aims at resolving this difference. Furthermore, the study of this process should neither be strictly descriptive nor strictly normative, but normative and descriptive approaches should be ‘so closely interwoven that they become integrated’ (van Eemeren et al. 1996:275). This is developed somewhat in (van Eemeren 1990), but it is still not obvious why this intermingling of normative and descriptive approaches is necessary. The key probably lies in van Eemeren’s view of what argumentation theory is: ‘Scholars of argumentation are interested in how argumentative discourse can be used to justify or refute a standpoint in a rational way’ (van Eemeren 1990:37). Van Eemeren simply does not see any point in studying argumentation unless it is normative.

Although I agree that human sciences have a tendency to become irrelevant for people outside the universities by refusing to show how research results can be applied to solving practical problems, I cannot see why the description and the norms cannot be kept apart in the traditional scientific way. Moreover, since the present work starts with the ambition of describing naturally occurring argumentation, the unclear distinction between normative and descriptive elements is a major disadvantage of the pragma-dialectical school.<sup>1</sup>

#### 4.2.4 Pragmatic foundation

The pragmatic theory used as starting point for van Eemeren and Grootendorst is based on the works of Austin (1962), Searle (1969; 1979) and Grice (1975). Grice’s maxims of conversation are general principles for conversations, and pragma-dialecticians adopt these, adapting them slightly. Grice’s communicative

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1. See also section 4.3.3 below.

principle is adjusted into *the Principle of Communication: be clear, honest, efficient and to the point*, and the four maxims supporting Grice's cooperative principle are adjusted into five rules of communication:

- *The First Rule of Communication*  
Do not perform any incomprehensible speech acts.
- *The Second Rule of Communication*  
Do not perform any insincere speech acts.
- *The Third Rule of Communication*  
Do not perform any superfluous speech acts.
- *The Fourth Rule of Communication*  
Do not perform any futile speech acts.
- *The Fifth Rule of Communication*  
Do not perform any speech acts that do not appropriately connect to preceding speech acts.

From (van Eemeren and Grootendorst 1992:50-51)

Readers who are not familiar with Grice's maxims are recommended to read Levinson (1983), or some other introductory textbook on pragmatics. Briefly, it can be said that these maxims are rules that participants in conversation do follow and expect other participants to follow as well. Relying on these maxims, *implicatures* can be calculated, which means that meaning can be inferred. Consider the following example:

Pem is writing a dissertation. One day Pom asks how the dissertation is coming along, and Pem answers: *It has been nice weather lately, hasn't it?*

Here, Pem's answer seems to be in conflict with the Fifth Rule of Communication, since it does not seem to connect to the preceding question. However, because we assume that Pem is following the rules, we infer that the change of topic is significant, and that it probably means that Pem does not want to talk about the dissertation. 'Pem does not want to talk about the dissertation' is thus an implicature.

Both the pragma-dialectical rules of communication and Grice's maxims suffer from two main weaknesses: i) they overlap, and ii) they are not formed on a principled basis. The overlapping occurs for example with the first and fifth rule – when you are not able to appropriately connect a speech act to the preceding conversation, then you do not understand it (fully) – and with the third and fourth rule – futile speech acts are likely to be superfluous. The lack of a principled basis for the rules leads to the suspicion that the list is not exhaustive (Grice admits this himself).

In Allwood's framework (see section 2.4.2), implicatures are inferences based on several assumptions, not just a single maxim. In the example with the dissertation above, it is assumed that Pem is a rational, motivated agent, who is cooper-

ating at least as much as to be understood. Pem is also most likely taking Pom into ethical consideration. It would be neither cooperative, nor ethical, for a rational agent to simply ignore Pom's question. Therefore, we can infer that the change of topic is significant. Further, our knowledge of the world tells us that dissertations often are hard to write, and that many students feel stressed about them. It is thus reasonable to assume that Pem is feeling stressed about the dissertation, and feels embarrassed or just generally uncomfortable talking about it. The implicature 'Pem does not want to talk about the dissertation' is an inference based on all of these variables.

For speech-acts, the pragma-dialecticians use Searle's taxonomy, claiming that some speech act types cannot play a direct part in a 'critical discussion', meaning a well functioning resolution of a difference of opinion (van Eemeren et al. 1996:286-288). An example of a speech act type that the pragma-dialecticians claim cannot play a direct part in a critical discussion is that of *expressives*. An expressive is defined by the authors as 'a speech act by means of which the speaker or writer expresses his or her feelings about something,' one of the examples given is the phrase 'I wish I could find such a nice girl friend.'

It is not difficult to imagine a situation where such a phrase shows that the speaker has accepted some thesis that he previously did not. Let's say that Adam has claimed that it is futile to try to create good relationships with women, since they never accept men as they are, but try to change them into something else. Bill then argues passionately against this, using his own girl friend as an example. Adam then says, 'I wish I could find such a nice girl friend,' showing that he accepts Bill's argument. This seems like a counter example to the claim that expressives cannot play a direct part in a critical discussion, but the pragma-dialecticians, who would most likely accept the example, stick to their claim. The solution lies in the conception of *indirect speech acts*: according to van Eemeren and Grootendorst (1992:44 ff), the utterance, 'I wish I could find such a nice girl friend,' can implicitly convey a commissive (acceptance), even though it 'at first sight, [does] not express [its] primary function' (van Eemeren and Grootendorst 1992:48).

The idea of indirect speech acts is problematic, as pointed out by Levinson (1983:263 ff). Or, to be more precise, making the distinction between direct and indirect speech acts is troublesome. If the direct speech act is anything other than grammatical mood (e.g. interrogative, indicative, imperative), then how is it conventionally linked to the expression? Further, if it is not conventionally linked to the expression, then what separates it from the indirect speech act? In the pragma-dialectic writings, direct speech acts are sometimes seen as speech acts that are labeled directly by the speaker, as in 'I hereby promise that I will pick you up at eight!' (van Eemeren and Grootendorst 1992:44). Sometimes, direct speech act seems to refer to the most prominent of several functions of an utterance: 'Incidentally, in practice, all speech acts that are crucial to a critical discus-

sion can be indirectly performed by way of speech acts that, at first sight, do not express their primary function' (van Eemeren and Grootendorst 1992:48).

Allwood (2000) points out some further problems with Austin's & Searle's speech act theory. One problem is that the taxonomy used does not have a systematic basis, rather, it is a grouping of English verbs, resulting in a) an unfortunate Anglo-centrism, and b) unclear categories. Another problem is the "monolithic" view of speech acts, that there is no recognition of the multi-functionality of utterances.

A: Mummy, I want ice cream!

B: Do you want me to get angry?

In the example above, B's contribution is a question as well as being a threat.

There are other problems with Austin's & Searle's speech act theory; a further discussion of these, and of speech acts in general, can be found in (Allwood 1978) and (Allwood 1996a).

#### 4.2.5 Basic concepts

As we now turn from the theoretical foundation of pragma-dialectics to the pragma-dialectical model itself, there are a number of basic concepts that are more or less presupposed, and I shall present these here.

##### **Standpoints and arguments**

The pragma-dialectical theory assumes that speakers put forward *standpoints*, which may, or may not, be accepted by the listener. In the latter case, the speaker is likely to advance an *argument* in support of the standpoint. Standpoint–argument is a relationship, in the sense that an argument for a standpoint very well may need an additional argument, compared to which it is itself a standpoint. The neutral term used is *utterance*, including written argumentation.

##### **Logical and pragmatic levels**

Sometimes a distinction is made in the pragma-dialectical writings between the *logical level* and the *pragmatic level*, described in the following way:

*At the pragmatic level, the analysis is directed toward reconstructing the complex speech act performed in advancing the argumentation, while at the logical level, the reasoning underlying the argumentation is reconstructed.*

(van Eemeren and Grootendorst 1992:60)

The word *level* implies a hierarchical organization, where the pragmatic level is above or below the logical level, but I have found no other traces of such an organization in the pragma-dialectical works I have studied, and I do not think that the pragma-dialecticians have intended such a hierarchical organization. Thus, the 'pragmatic level' can be seen as an analysis of the speech acts, while the 'logical level' connotes analysis of the reasoning.

### Premises and conclusions

In pragma-dialectics, the logical level deals with *premises* and *conclusions*, as in traditional logic. The basic schema for logical reasoning is that of the syllogism, with a general rule connecting two kinds of propositions (major premise), an instance of the first type of proposition, and an instance of the other type.<sup>1</sup> For example:

- All men are mortal (major premise)
- All Greeks are men (minor premise)
- Therefore, all Greeks are mortal (conclusion)

In actual conversation, all three elements are seldom expressed, often of them is left implicit, to be inferred by the listener. *Unexpressed premises* are premises that have not been put forward explicitly, but are needed to complete the argumentation, on a logical level. Ex:

*Cats should not be allowed to run around freely, since they are malicious carnivores.*

Here the first proposition, ‘cats should not be allowed to run around freely’, is supported with the second proposition, ‘cats are malicious carnivores’. The underlying premise here is the general rule that ‘malicious carnivores should not be allowed to run around freely’, without which the second proposition is not an argument for the first one. This type of unexpressed premises are very common and usually makes communication more efficient, since the listener can deduce the unexpressed premise quicker than it can be uttered by the speaker.

Unexpressed premises have been a major concern for argumentation theorists for a long time, and a survey of the field can be found in (Gerritsen 2001). The problem with unexpressed premises is that there are usually many possible premises that would make the argumentation complete. Or, to put it differently, it is unclear what ‘complete argumentation’ is. The traditional view is that the unexpressed premise is the premise that is needed to make the argument logically valid. There are some difficulties involved with that approach when applying it to natural language, since it is not obvious that all reasoning is deductive in the strict, logical sense. The pragma-dialectical solution to this is *modern deductivism*, shown in (Gerritsen 2001:59), and consists, simply put, of adding probabilities to the syllogisms (‘all men are *probably* mortal’).

Another difficulty with unexpressed premises is pointed out in the distinction between *used* and *needed* premise, introduced by Ennis (1982:64). The needed premise is the logical minimum, that is, the premise needed to make the argument logically valid. In cases where the major premise is unexpressed, the logical minimum is a simple joining of the minor premise and the conclusion in an if...then-clause: ‘If cats are malicious carnivores, then cats should not be allowed to run around freely.’ The used premise, on the other hand, is the premise that

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1. See also p. 31.

the speaker had in mind. In the cat example above, the used premise is probably not the simple if-then-clause, but more likely ‘malicious carnivores should not be allowed to run around freely.’ Van Eemeren & Grootendorst (1992:64) claim that the logical minimum does not contribute anything new; assuming that the speaker intends to communicate only the logical minimum would be to assume that she breaks the Gricean maxim of quantity (or the Third Rule of Communication) (van Eemeren and Grootendorst 1984:141).

Pointing at the maxim of quantity, the pragma-dialecticians introduce the *pragmatic optimum*, which corresponds to Ennise’s used premise.

*Predominantly, [the pragmatic optimum] is a matter of generalizing the logical minimum, making it as informative as possible without ascribing unwarranted commitments to the speaker and formulating it in a colloquial way that fits in with the rest of the argumentative discourse.*

(van Eemeren and Grootendorst 1992:64).

The authors provide a procedure for making this generalization, a procedure that essentially consists of making such expansions of the logical minimum that the context allows. Any expansions of the logical minimum should be based on information in the context. A key factor here is the commitments that the speaker can be seen to have due to the utterance.

I do not quite agree with this analysis. The pragma-dialecticians claim that since the logical minimum does not contribute anything new, the speaker would break the Gricean maxim of quantity if she said it.<sup>1</sup> The problem with this argument is that unexpressed premises are not expressed, so the break does not occur. I do agree with the pragma-dialecticians that a pragmatic optimum/used premise is needed, but it can not be explained as simply as a violation of the maxim of quantity.

#### 4.2.6 Stages

According to the pragma-dialectical school, argumentation can be divided into four stages:

- i) The *confrontation stage*, where participants establish that they have a difference of opinion.
- ii) The *opening stage*, where participants set up rules and assign roles for resolving the difference.
- iii) The *argumentation stage*, where participants put forward arguments for their standpoint or against the other’s standpoint.

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1. To be precise, they claim that it would break the third rule of communication, *Do not perform any superfluous speech acts*, which is a modification of Grice’s theory.

- iv) The *concluding stage*, where participants decide on the result of the argumentation, that is, if and how the difference of opinion was resolved.

The authors emphasize that these stages are purely analytical, that it may be quite difficult to perceive them in actual conversation and that they need not occur in the order given above. Because of this, a better term would perhaps be something less sequential, such as *component*.

#### 4.2.7 Roles

The participant that puts forward a claim is called the *protagonist* in the pragma-dialectical school, while the participant that attacks or questions the claim is called the *antagonist*. The labels are convenient, although it should be noted that participants in actual argumentative conversation will typically shift roles many times.

#### 4.2.8 Rules for Critical Discussion

In the core of the pragma-dialectical model lie the *Rules for Critical Discussion*, which have been developed in order to capture fallacies (see p. 122 below).<sup>1</sup> The rules for critical discussion are continuously updated and modified, and the version presented here should be considered typical rather than canonical:

1. *Freedom rule*  
*Parties must not prevent each other from putting forward standpoints or casting doubts on standpoints.*
2. *Burden-of-proof rule*  
*A party who puts forward a standpoint is obliged to defend it if asked to do so.*
3. *Standpoint rule*  
*A party's attack on a standpoint must relate to the standpoint that has indeed been advanced by the other party.*
4. *Relevance rule*  
*A party may defend his or her standpoint only by advancing argumentation related to that standpoint.*
5. *Unexpressed premise rule*  
*A party may not falsely present something as a premise that has been left unexpressed by the other party or deny a premise that he or she has left implicit.*
6. *Starting point rule*  
*No party may falsely present a premise as an accepted starting point, or deny a premise representing an accepted starting point.*

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1. The relationship between the five rules of communication on the one hand, and the rules for critical discussion on the other hand, is discussed below.

7. *Argumentation scheme rule*  
A standpoint may not be regarded as conclusively defended if the defence does not take place by means of an appropriate argumentation scheme that is correctly applied.
8. *Validity rule*  
The reasoning in the argumentation must be logically valid or must be capable of being made valid by making explicit one or more unexpressed premises.
9. *Closure rule*  
A failed defence of a standpoint must result in the protagonist retracting the standpoint, and a successful defence of a standpoint must result in the antagonist retracting his or her doubts.
10. *Usage rule*  
A party must not use formulations that are insufficiently clear or confusingly ambiguous, and they must interpret the other formulations of the other party as carefully and accurately as possible.

(van Eemeren et al. 2002 pp. 182-183)

The rules are in most cases clear; only a brief explanation is offered here. Interested readers may study (van Eemeren and Grootendorst 1992), for example.

*The freedom rule* prevents people from threatening the opponent into silence, for example, or in some other way preventing arguments from being put forward.

*The burden-of-proof rule* is in a way the basis of argumentation, stating that if you claim something you have to be able to provide reasons for it.

*The standpoint rule* is there to prevent arguers from implicitly modifying the propositions made by the opponent by arguing, not against the propositions actually made by the other party, but against some related, similar argument. An example:

A: Cats should not be allowed to run around freely, since they are malicious carnivores.

B: But it would be unethical to put all animals in cages.

Here B argues against the standpoint that all cats should be put in cages, while A has said nothing about cages. A may very well have another solution in mind, such as leashes or even destruction.

A similar problem is addressed by *the relevance rule*, which prevents an arguer from putting forward arguments that support a different claim than the one made.

Assuming that cages are the only alternative to prevent the cats from running around freely in the example above (it might have been settled earlier), the example also illustrates a break against the *unexpressed premise rule*. Unexpressed premises are not in themselves problematic, as explained above (p. 117-118), since they speed up communication, leaving trivial elements of reasoning for the listener to infer. However, there may be more than one possible unexpressed premise that connects two expressed propositions. In the cat example on p. 117, the general rule connecting A's two propositions could also be 'malicious beings



should not be allowed to run around freely’, or ‘carnivores should not be allowed to run around freely’. Because of this, an arguer who wishes to attack an unexpressed premise of the opponent needs to make sure that she has deduced the premise the opponent intended. In the cat example, B attacks the unexpressed premise ‘animals should not be allowed to run around freely’, which is not necessarily the major premise A has in mind. At the same time, a necessary unexpressed premise cannot be denied by a speaker on the grounds that it was unexpressed. Rule 5 ensures that unexpressed premises are handled correctly.

The *starting point rule* targets cases when an arguer masks her claims as generally accepted propositions, or denies a point to which she has already conceded. An example of the first case is claims being framed in phrases like: ‘It is a well known fact that...’

The *argumentation scheme rule* addresses cases when the connection between the claim and the argument is bad, although not necessarily logically invalid. For example, during the 1990’s in Sweden if one argued against letting children have mobile phones by saying that they have never had mobile phones before, the opponent would have been unlikely to accept such an argument. Mobile phones were not available until the 1990’s (at least not for a reasonable price), so it was not possible for most people to let their children have mobile phones. The opponent would not accept tradition as an authority in this case; she would not accept the argumentation scheme of tradition as authority.

The *validity rule* brings the insights of formal logic into argumentation, saying that arguments cannot be *illogical*. For example: ‘There cannot be smoke without fire, we know that, and we see the fire from here, so we must take precautions to avoid the smoke that is bound to come.’ Here the rule ‘smoke always comes with’ fire is used to argue that fire will bring smoke, which is logically invalid.

The *closure rule* demands that if all the arguments of a participant have been defeated, she has to give up and accept the claim of the opponent. This may seem like a very hard requirement, but remember that in practice, few discussions reach this kind of closure explicitly. The closure rule states the purpose of the critical discussion – that one party should be convinced that the other party is right. One could imagine other purposes for argumentation, but this is what the pragma-dialecticians have in mind for a critical discussion.

Finally, the *usage rule* targets cases where a participant tries to mislead the opponent by using unclear wording, or deliberately misinterprets something said by the opponent.

According to van Eemeren and Grootendorst, these rules are normative in the sense that if one does not follow them, it is not a critical discussion, the ideal way of resolving a difference of opinion. Using these rules the authors can define

so called *fallacies*<sup>1</sup> elegantly as a breach of any these rules, thus avoiding the problem of finding a common element in all the different kinds of fallacies. An example is the fallacy known as *argumentum ad baculum*, where violence or the threat of violence is used as an argument. This can be done to simply silence the opponent – ‘shut up, or else...!’ – in which case it violates rule 1, the freedom rule. The fallacy can also be done slightly differently, allowing arguments to be put forward, but forcing the opponent to accept a standpoint – ‘accept this, or else...!’. In that case, the argumentation scheme rule points it out as a fallacy, since threats are not accepted argumentation schemes.

Although the intention for the practical use of these ten rules is clear (to capture fallacies), its theoretical status is less obvious. The rules for communication adopted from Grice (see p. 114 above) and adapted are general principles for how humans do communicate, while the ten rules for critical discussion seem to be primarily normative. The problem is, however, that these two sets of rules overlap partially. The relevance rule, for example, overlaps with the fifth rule of communication, ‘do not perform any speech acts that do not appropriately connect to preceding speech acts’. Rules 5 and 6, the unexpressed premise and the starting point rules, overlap with the second rule of communication, ‘do not perform any insincere speech acts’. In addition, rule 10, the usage rule, overlaps with the first rule of communication, ‘do not perform any incomprehensible speech acts’. The third and fourth rules of communication, ‘do not perform any superfluous speech acts’ and ‘do not perform any futile speech acts’, are not covered, however, so the ten rules of critical discussion do not replace the five rules of communication. For this reasons, the intended relationship between the five rules of communication and the ten rules of critical discussion is unclear. Are the rules for critical discussion meant to replace the rules for communication? If so, why are the third and fourth rules left out? Moreover, are the ten rules meant to be conversational principles in the same way as the rules for communication: principles that speakers can use to create implicatures of various kinds? If so, wow? Also, if the ten rules are *not* meant to replace the rules of communication, then why the considerable overlap?

As I understand it, the rules are primarily normative, meant for identifying bad parts of an argumentation, but some of the rules seems to have more of a defining character. The burden-of-proof rule, (2), is partly descriptive and partly normative: for epistemological reasons it is advantageous not to accept statements without evidence (normative), and if nobody in a conversation is prepared to provide reasons for her standpoints, there will be no argumentation (descriptive). A weaker phrasing of the rule would cover the descriptive aspects and leave

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1. Fallacies are typically defined as arguments that ‘seem to be valid but are not’. There are, however, many kinds of argumentative phenomena that are called fallacies without matching this definition, for example *argumentum ad baculum*. Hamblin (1970) discusses this in detail.

the normative aspects out: when two opponents have conflicting standpoints, at least one of them must defend her standpoint. Similarly, the rules about relevance, 3 and 4, cannot be broken without the entire conversation becoming rather absurd.

Further, the closure rule, (9), is a requirement for argumentation as a whole, although it is phrased very strongly: it is not necessary for the antagonist to retract her doubts, it is enough that she accepts, for the time being, the opponent's standpoint. However, if the closure rule were removed completely, there would not be much point in argumentation.

The freedom rule (1) is clearly an ethically normative rule, but not so much for argumentation as for whatever the the purpose of argumentation. A person threatened into silence has not been convinced of the truth of the opponent's view, but only lets the opponent have her way. An example: A and B are discussing what to have for dinner. A says that if B does not agree to cook fish, A will be angry all night. In that case, B may agree to cook fish, but not because her doubts have been removed, but because she finds keeping A happy more important than deciding what to cook for dinner. That is not so much a way to argue as a way to make a decision *without* arguing.

Another understanding of the ten rules is that they constitute a prescriptive model, i.e. that they describe *one* way of resolving a dispute, not necessarily *the* way, and not necessarily the *best* one. This seems to be what the authors have in mind in (van Eemeren and Grootendorst 1984:151).<sup>1</sup> However, even if this is the case, the overlap between the five rules of communication and the ten rules of critical discussion is still a problem – why prescribe rules that all participants already follow? Further, the theoretical value of the ten rules would in that case be quite limited, since they could only be used for analyzing conversations where participants have declared that they intend to follow these rules.

These rules are discussed more in section 4.3 below.

#### 4.2.9 Reconstruction

The actual analysis of an instance of argumentation, termed *reconstruction* by the pragma-dialecticians, emphasizes that identifying the different stages and classifying arguments modifies the original data; the structure is not present until it is added by the analyst. A reconstruction consists of a series of operations, *deletions* (elements are removed), *additions* (missing elements are added), *permutations* (the order between elements are changed), and *substitutions* (replacing vague or ambiguous elements with clearer alternatives).

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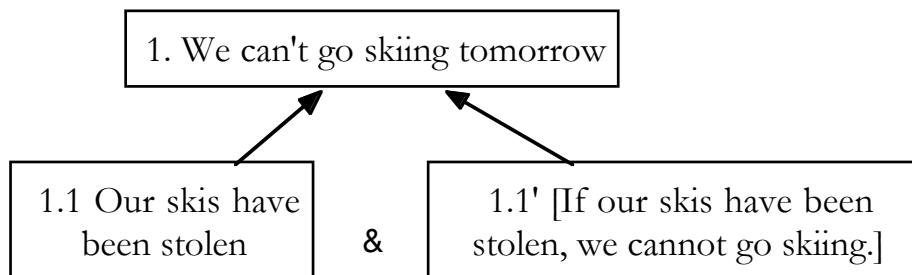
1. I assume now that the “code of conduct” the authors speak about is a variant of the ten rules of critical discussion; if it is not, the relationship between the ten rules of critical discussion and the five rules of communication is further complicated by an unclear relation to this “code of conduct”.

### 4.2.10 Analytical overview

Actual argumentative discourse can be rather complex and winding, and the analyst of such discourse may want to describe the standpoints and arguments of the participants, as well as how these relate to each other. In pragma-dialectics, this is done in an *analytical overview* (van Eemeren et al. 1996:288 ff; van Eemeren and Grootendorst 1992:73 ff). The crucial part is how to describe the relations between the arguments and standpoints. The pragma-dialecticians start with a distinction between *single*, *multiple*, *coordinatively compound* and *subordinatively compound* argumentation. I shall explain and illustrate these now; examples have been chosen to be logically valid in order to facilitate understanding for the reader, but logical validity is not necessary for the notation to work.

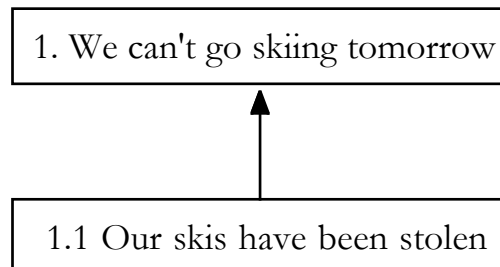
In single argumentation, two premises (typically one unexpressed) are provided to support a standpoint:

*Figure 4-1: Example of single argumentation. 'We can't go skiing tomorrow, because our skis have been stolen'<sup>1</sup>*



The apostrophe and the square brackets in the right-hand argument signal that it is an unexpressed premise. To make the diagram more compact and lucid, the unexpressed premise of a single argumentation is often left out:

*Figure 4-2: Example of single argumentation, abbreviated. 'We can't go skiing tomorrow, because our skis have been stolen'*



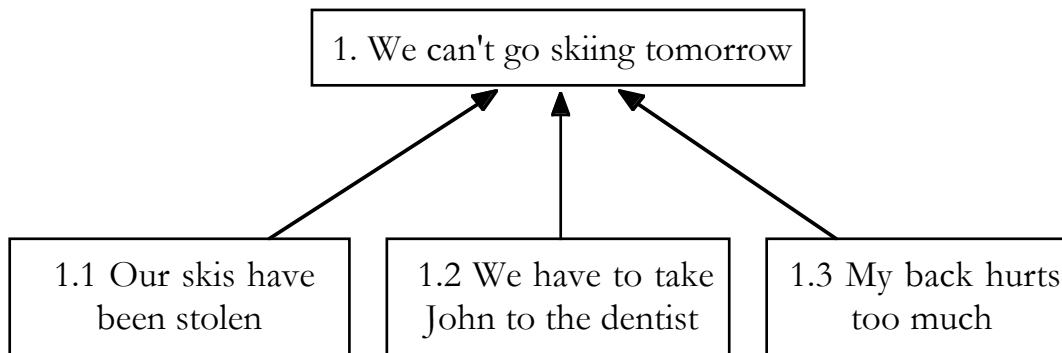

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1. This might not be true (perhaps we can buy new skis, for example), but that is another story.

Figures 4-1 and 4-2 represent the same argumentation.

In multiple argumentation, several independent arguments are given for one and the same standpoint:

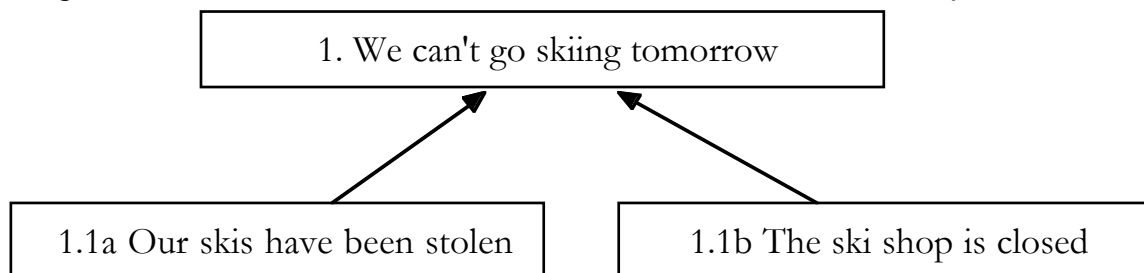
*Figure 4-3: Example of multiple argumentation. 'We can't go skiing tomorrow, because our skis have been stolen, we have to take John to the dentist, and my back hurts too much.'*



Multiple argumentation thus consists of several single argumentations, and the unexpressed premise of each of them can be added to the diagram, if the analyst chooses to.

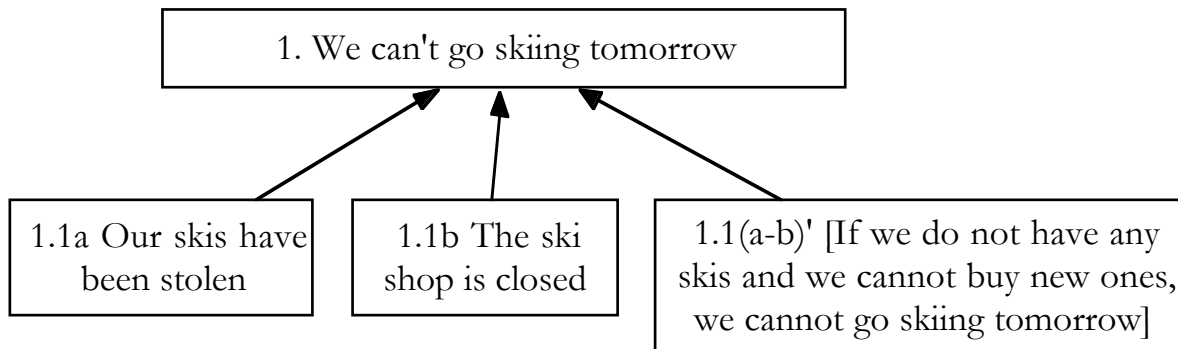
Coordinatively compound argumentation consists of several arguments the same way multiple argumentation does, but they are not independent:

*Figure 4-4: Example of coordinatively compound argumentation. 'We can't go skiing tomorrow, because our skis have been stolen and the ski shop is closed.'*



Here 1.1a and 1.1b work together to form support for standpoint 1. An unexpressed premise may be added to the diagram:

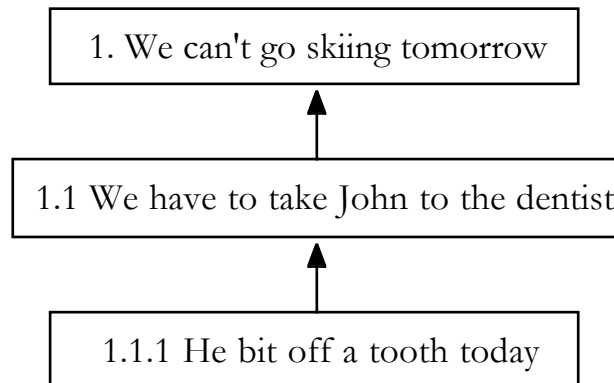
Figure 4-5: Example of coordinatively compound argumentation with unexpressed premise added. ‘We can’t go skiing tomorrow, because our skis have been stolen and the ski shop is closed.’



This example also shows that there is considerable freedom for the analyst concerning the level of detail in the analytical overview. The unexpressed premise above may be expanded to include ‘if the ski shop is closed we cannot buy new skis,’ ‘there is no way of obtaining skis other than buying them’, or some other premise that the analyst wants to focus on.

Subordinatively compound argumentation, finally, consists of at least two arguments where one supports the other:

Figure 4-6: Example of subordinatively compound argumentation. ‘We can’t go skiing tomorrow, because we have to take John to the dentist, since he bit off a tooth today.’



Another way of explaining this is to say that subordinatively compound argumentation occurs when single argumentation is provided to support the argument in a single argumentation.

Another kind of relationship between arguments and standpoints concerns what makes an argument into a support of the standpoint, or, what it is that makes the argument relevant. This is called the *argumentation scheme*, and it is discussed in the next section.

#### 4.2.11 Argument schemes

There is a long history of studying and classifying *kinds of arguments*. In modern argumentation analysis, these are usually referred to as *argument schemes* or *argumentation schemes* (in French *schèmes argumentatifs*). Several classification systems exist, and an overview is given in (Garssen 2001).

The pragma-dialecticians identify three types of argumentation schemes: *cause*, *symptom* and *analogy*, a division very similar to Whately's (1846) and closely reminiscent of the one found in (Freely 1993). The pragma-dialectic system differs from the others in the respect that the types are based on critical questions that should be asked when faced with different argumentation schemes (Garssen 2001:91 ff). In a *causal* (or *instrumental*) relationship between argument and claim, the argument is presented as the cause of the claim, or vice versa.

*Because Tom has been drinking an excessive amount of whiskey (and drinking too much whiskey leads to a terrible headache), Tom must have a terrible headache.*

(van Eemeren et al. 1996:97)

The key critical question is if the cause given really leads to the presented result.

The second type of argument, *analogy*, also *argument based on comparison*, presents a controversial idea as being similar to something that is not controversial, thus showing that what applies to the already accepted case also applies to the not yet accepted case:

*The method I proposed last year worked (and this problem is similar to the one we had last year), so it will work again.*

(van Eemeren et al. 1996:97)

The key critical question here is whether there are enough relevant similarities between the two compared situations.

The third type of argumentation scheme is called *symptomatic* arguments or *token type* arguments, but both terms are confusing. By a symptom we usually mean something that has been caused by something else (a disease), but the cause-effect relationship here belongs to the first argumentation scheme type discussed (causal or instrumental). A type-token relationship has to do with general instantiation, possibly a kind of similarity, which belongs to the second type of argumentation scheme (analogy or comparison). What the pragma-dialecticians mean by this type seems to be something close to concomitance: the two phenomena often occur together, but are not necessarily in a cause-effect relationship. Their own example is about Americans and their concern about costs:

*As Daniel is an American (and Americans are inclined to care a lot about money), he is sure to be concerned about the cost.*

(van Eemeren et al. 1996:97)

The authors clearly do not consider the relationship between Americanness and concern over cost a cause-effect relationship, but perhaps that they often go together for no particular reason. The central critical question in this case is if the sign really is typical for the claim.

There are some problems with the classification described here. First, the difference between causal and symptomatic argumentation is bound to be rather fuzzy. Consider the whiskey example above, repeated here without the linking premise:

*Because Tom has been drinking an excessive amount of whiskey, Tom must have a terrible headache.*

The implicit premise could now be any of the following (at least):

- i) Drinking an excessive amount of whiskey always leads to a terrible headache.
- ii) Drinking an excessive amount of whiskey usually leads to a terrible headache.
- iii) Drinking an excessive amount of whiskey sometimes leads to a terrible headache.

This points out that the cause-effect relationship does not have to be absolute, as in (i), but less certain cases can also have cause-effect relationships, as in (ii) and (iii). Comparing this to the example with Americans and money, one could ask whether being American has caused the concern of money, or if these two properties simply go together. Looking at what it means to be American – to be raised in an American culture with American values – it is not unreasonable to see the concern of money as resulting from being American. One way to distinguish symptomatic from causal is of course to let the intention behind the argument determine the type – if the arguer sees the relation as causal, it is causal; if she sees it as symptomatic, it is symptomatic. However, it is not necessary for the arguer to have thought much about it, unless it matters directly. Neither in the whiskey example nor in the example with Americans and concerns about money does it matter much to the arguer whether the argument type is symptomatic or causal.

Another problem with the taxonomy is that the critical questions are not the only important questions that should be asked when faced with these kinds of arguments. In a causal argument it is also important to ask whether the cause has really occurred: Has Tom really been drinking an excessive amount of whiskey? Does the cause necessarily lead to the result: Is it impossible to drink an excessive amount of whiskey without getting a terrible headache afterwards? Does the cause lead to exactly the result that has been presented: is the headache one gets after drinking an excessive amount of whiskey always terrible?

The same type of questions should be asked for symptomatic arguments: Has the symptom really occurred? (Is Daniel really American?) Does the symptom al-



ways occur with the claimed phenomenon? (Do all Americans care about money?) Is the symptom a token of precisely the phenomenon that is claimed? (Do Americans *care* about money or do they *like* money?)

For analogical arguments, one should not only ask if there are enough relevant similarities, but also if the uncontroversial situation is really something to copy (perhaps the method that was proposed last year did not work as well as the speaker claims).

In pragma-dialectics one of the important motivations for doing argumentation analysis is to find out whether argumentation is good or bad. Moreover, the classification of arguments into symptomatic, causal and analogical categories may very well serve a purpose, as a tool to discover weaknesses in arguments. If a certain argument is seen as a causal argument, what questions should we ask? What if it is viewed as a symptomatic argument? Accordingly, classification can help the analyst to discover different aspects of the argument.

#### 4.2.12 Discussion

The theory of argumentation analysis developed primarily by van Eemeren and Grootendorst has practical strengths. The creators assume that an argumentation analyst has a piece of argumentation that she wants to investigate to find out what is good or bad with it. The four stages help to set out a general structure for argumentation, while the four operations allowed for reconstruction help the analyst to take greater care and be more explicit.

The rules for critical discussion are a quite small set of rules that potentially enable the analyst to discover any fallacy, a powerful tool indeed. It is, however, not always easy to see that a given fallacy breaks the rule in question, since the rules are rather abstract. An example is the ‘argumentum ad hominem’ fallacy, where the expertise, intelligence or general character of the opponent is attacked. According to van Eemeren and Grootendorst (1992:110-111) this is a breach of rule 1, the freedom rule, since it undermines the opponent’s right to participate in the argumentation. Such reasoning may be used to classify any successful counter-argumentation as a fallacy, since losing an argument may be intimidating for the arguer, making her less credible. My own analysis would be that argumentum ad hominem breaks the relevance rule.

The weakness of the theory is its basis in pragmatic theory and that it mixes normative and descriptive elements. The former becomes clear during attempts to couple certain speech act types with particular argumentation stages, despite the fact that the speech act typology used has no basis in argumentation. Another problem connected to the underlying pragmatic theory is its lack of a clear definition of ‘argument’. The term is used widely in the texts, but it is unclear if an argument is a speech act, a proposition or something else. It is also unfortunate that terms like *argumentation*, *utterance*, *speech-act* and *premise* are not used consistently. An example of this is the description of the reconstruction, which

sometimes deals with *speech-acts*, sometimes with *standpoints or arguments*, and sometimes with unspecified *elements* (van Eemeren et al. 1996:288 ff).

The mixing of normative and descriptive aspects is obvious in the Ten Rules for Critical Discussion. These are primarily normative, but they are also used to define what ‘critical discussion’ is.

In order to attend to the problems mentioned here, I shall merge the pragma-dialectical model of argumentation analysis with Allwood’s Activity-based Communication Analysis, presented in section 2.4.2 above.

## 4.3 A merged model of argumentation

### 4.3.1 General

In this section, I shall put forward a modified version of the pragma-dialectical model for argumentation analysis. The section should be understood as a number of suggested modifications, so the parts of pragma-dialectics that are not discussed here, are left untouched. The general idea behind the modifications will be to replace the linguistic theories of Austin and Searle with those of Allwood.

#### Terminology

First, some clarification of terms is necessary. I will use the following terms with the given meanings:

- *Arguing*: The social interactive activity that argumentation analysis is concerned with. (The word will be used as a countable noun when applicable, for example, *an arguing* will be used for an instance of this activity type, in order to avoid confusion with the terms below).
- *Standpoint*: A proposition claimed to be true by a participant in an arguing.<sup>1</sup>
- *Argument*: One or more proposition which supports or backs up a standpoint (argument for the standpoint) or the standpoint’s negation (argument against a standpoint).
- *Argumentation*: A set of arguments that collectively supports or backs up one or more standpoint made by a participant in an arguing.

In everyday English, the word *argument* can be used in (at least) two senses, somewhat synonymous to *reason* or somewhat synonymous to *quarrel*. This has caused some confusion in Anglophone argumentation research, and O’Keefe (1977) made a distinction between *argument*<sub>1</sub> ( $\approx$  reason) and *argument*<sub>2</sub> ( $\approx$  quarrel). The term *arguing* in the proposed model corresponds to O’Keefe’s *argument*<sub>2</sub>, and the term *argument* to O’Keefe’s *argument*<sub>1</sub>. However, O’Keefe sees *argument*<sub>1</sub> as a speech act, while *argument* is a (possibly complex) proposition in this model. Communicative acts involved in arguing are discussed in section 4.3.6, p. 141 be-

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1. Or at least the most probable of the available alternatives.

low. Further, *argument*<sub>2</sub> covers conversations that do not match *arguing* as used here,<sup>1</sup> such as the one used as an example by Jacobs and Jackson (1982:225):

- S: Do you know where my bag is?  
 C: Yeah, it's packed away.  
 S: Whadya mean it's packed away?!  
 C: Just what I said!  
 S: Why in the world would you do something like that?!  
 C: Hhhhhhh [C stalks off in a huff]

*Arguing*, as used here, does not include this quarreling sense that *argument*<sub>2</sub> does, but is more similar to the Swedish verb *argumentera*.

### The activity of arguing

Following Allwood's theory of Activity-based Communication Analysis, the merged model treats argumentation as an activity type, *arguing*. This is also in accordance with van Eemeren, (van Eemeren et al. 1996:5).

As Allwood (1993a) writes, several activities can be going on at the same time. For example, the activity 'driving a car' can be going on at the same time as the activity 'moving' (i.e. to change address), where the former is a sub-activity of the latter. Another example is a customer in a shop flirting with the shop assistant while purchasing some goods; the flirting and the purchasing are parallel activities. Many activities are sub-activities of some other, higher-level activity, which is obviously the case with arguing as well. Arguing can show up as a sub-activity in many activity types: one may argue about the price at a bazaar, one may argue as part of a discussion preceding a decision in a committee, one may argue about which road to take when traveling by car, etc.

An alternative to this activity perspective is to see arguing as some kind of mode of conversation, perhaps characterized by frequent disagreement and criticism of the opponent's views. This is roughly what Jacobs and Jackson have done (see 2.5.5), and although it may be an interesting aspect of human communication, it is not the aspect studied here.

A precondition of the activity *arguing* is that the participants have discovered that they have conflicting views on some issue. In Allwood's theory such a precondition would be part of the participants' individual backgrounds (see p. 28 ff.), but it can also be described as a part of the purpose of the activity type. The latter solution is used here:

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1. A more detailed description of arguing will be given below.

*Purpose*

The purpose of arguing is to reach a shared view on some issue on which the participants have discovered that they have conflicting views.<sup>1</sup> The reason for a shared view to be desired may vary.

The description given here of the purpose of arguing is somewhat stipulative, and in everyday language the term may be used for other activities as well. Some might say that quarreling is arguing, even though the participants may not seek a shared view at all<sup>2</sup>. I would say that quarreling is arguing only to the extent that the participants do seek a shared view on the issue their quarrel concerns. There are probably other purposes involved in quarreling (inflicting pain on the opponent? forcing the opponent into social subordination?) and when these are in focus, the quarreling ceases to be arguing. A similar case is that of political debates, where an important purpose is to make the audience behave in a certain way in an election, for example not to vote at all, which perhaps could be achieved by boring the audience. However, even in situations where none of the participants have any real intention of changing either their own view or their opponent's, they might still have to pretend, to some degree, that they believe that a shared view can be reached, and they have to phrase their communicative acts according to that purpose. The following excerpt is taken from a television broadcast debate on nuclear power preceding in Sweden in 1980. The English translation is idiomatic.

**Lennart Daleus:** ja Per Unkel vet ju att de finns fler möjligheter te stora olyckor än den som vi har diskuterat den här med / ä ångexplosioner å att kärnkraften / är en farlig energikälla å att den innehåller oerhörda risker allting från / ö uranbrytningen till avfallshanteringen de ä e vi nog överens om å att de e risker / som inte har någon motsvarighet i andra energikällor / att dom här oerhörda olyckorna kan inträffa å ja tycker fortfarande de att de e rimlit att vi använder oss av dom statlia rapporter som har kommit inför den här folkomröstningen när vi ska diskutera riskbedömningen / å dom eventuella ä konsekvenser de kan / ä få me sej...

**Lennart Daleus:** *yes Per Unkel knows that there are more possibilities for major accidents that the one we have been discussing here the one with / er steam explosions and that nuclear power / is a dangerous source of energy and that it contains enormous risks everything from / er extraction of uranium to handling of waste we er probably agree on that and that there risks / unparalleled by any other source of energy / that these enormous accidents can happen and I still think that it is reasonable for us to use the government reports that have been produced for this referendum when we are to discuss the estimation of risks / and the possible consequences that it can / er bring along...*

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1. A similar attitude is expressed in (Strecker 1976:17), quoted in (Schwitalla 1987): *Argumentation has the goal of solving conflicts by attaining a common language, which also implies a common system of viewing the world.*
  2. One party adopting the other party's view is one way of attaining a shared view.

Here, Lennart Daleus tries to establish a common ground for continued argumentation, as if a shared view on the future of nuclear power could indeed be reached for him and Per Unkel, even though he can hardly have believed that such a shared view would actually be reached.

Another consequence of the purpose and requirement stated here is that pure explanations are not arguings. A person who describes her view on an issue to another who does not have an opinion on that issue at all is not arguing. In practice, arguing and explaining may be difficult to tell apart, and when analyzing an arguing that has started, it is probably best to consider pure explanations as arguments.

### *Procedures*

The basic procedure for arguing is that the participants put forward standpoints that describe their view on the issue in question, and then supply arguments that support their own standpoints, and attack the standpoints of the opponent.

### *Roles*

There is only one stable role in standard arguing, *participant*. The two roles protagonist and antagonist identified in the standard pragma-dialectical school are useful, but can shift many times in an instance of arguing, just as the defensive and offensive roles can shift during a game of soccer. A participant may actually be a protagonist and antagonist at the same time, if an utterance supports her own standpoint while it attacks the other participant's standpoint. In an analysis of argumentation (i.e. the set of propositions used to support a standpoint), the roles of protagonist and antagonist are more stable.

### *Rules*

In the merged model, I choose to describe the *obligations, rights and required competence* of the roles as a set of rules, comparable to the rules of a game. In the case of arguing, there is only one, very general, rule:

#### I *The Foundation Rule*

Each participant should be a rational, motivated agent, trying to fulfill the purpose of the activity.

This is the only completely necessary rule for arguing to work, but there are several other rules that make arguing work better, section 4.3.3. As far as I can see, rule I holds for all social activities where the participants are “normal” humans (which explains the somewhat turgid name); this means that there are no specific rules necessary for arguing, a considerable difference to the standard pragma-dialectical model. Arguing is primarily defined through its purpose.

The attentive reader may wonder what has happened to cooperation, which is so important both in Allwood's and Grice's works. It has not been left out, but it is a consequence of the fact that all participants have a common purpose (to reach a shared view), which they try to fulfill.

It should be noted that the foundation rule is assumed to be “on a low level,” in the same way as Grice’s maxims and cooperative principle. A participant may very well state that she thinks the opponent is irrational, and then continue to provide rational arguments for her view. If she really considered the opponent irrational, it would be useless to try to convince her with rational arguments.

Problems arise when one of the arguers suffers from a mental illness of some kind, for example senile dementia, and her ability to behave in a rational, motivated and agentive way is limited. However, the limitations on her rationality, motivation and agency also limits her ability to perform arguing. At a certain moment, she might remember that she is arguing, but forget what she is arguing about. She may then choose to admit that and ask her opponent what they are talking about, she may choose to simply stop arguing and start another conversation, or she may make a guess about what they were talking about, and pretend she has not forgotten. In the last case, the arguing is likely to break down quickly. An arguer who is faced with this kind of behavior from her opponent is likely to stop considering the opponent a rational, motivated agent, and will try to argue only to the extent that she judges the opponent capable of reciprocating. She may also try to use some other causally effective behavior to get the opponent to behave as she wants her to behave, or (most likely) use a combination of these methods.

#### *Instruments, artifacts and media*

No particular instruments, artifacts or media are needed.

#### *Environment*

There are no particular requirements on the *physical environment*. Arguing can be performed in face-to-face spoken interaction, on the telephone, in writing or in some other way that allows detailed interaction.

On the *social-emotional level*, different cultures put different requirements on what is good behavior in arguing, and indeed whether arguing is good or bad in itself. The present study is not concerned with cross-cultural comparison, but the author of this study is Swedish, as are the participants of the analyzed conversation (below), therefore, the analysis is made from a Swedish perspective.

### 4.3.2 Stages

Of the four stages of argumentation identified in standard pragma-dialectics, three match the model proposed here in a straightforward way. The *confrontation stage* is when the participants discover that they have different views on some issue, and decide whether they shall argue about it or not. If they decide not to, they have not performed any arguing, as I see it, and the confrontation is not part of the arguing. Rather, it is an interactional event (or possibly a process) that is a precondition for arguing.

During the *argumentation stage*, participants describe their own view of the issue, modify their view in the light of what is said, and try to make the other participant(s) share their view by putting forward arguments for it. In the proposed model, this covers the entire arguing.

The *conclusion stage*, ideally, is where the arguing ends according to the pragma-dialecticians, but in the proposed model, this is simply the end of the arguing – an arguing ends, in one way or another. Van Eemeren and Grootendorst (1992:43) make a distinction between *settling* a dispute and *resolving* a dispute, where the former refers to situations like tossing a coin or calling on an arbiter, and the latter to situations where one of the participants “wins” and the other party abandons her original standpoint. As I see it, settling a dispute only occurs if the conclusion shows that the participants still have conflicting views, and it is necessary to make a decision dependent on these views. Settling a dispute is then about making a decision despite conflicting views. However, an instance of arguing is an instance of arguing no matter how it ends. In addition, like the confrontation, the conclusion is an interactional event rather than a stage.

Compared to standard pragma-dialectics, the fourth stage, the *opening stage*, where the participants set up rules for the discussion, is missing. In most activities the participants may stop to discuss and possibly adjust the structure, procedure, roles or some other aspect of the activity. It seems more natural to view this as not being part of the activity, but rather as a meta-discussion.<sup>1</sup>

Therefore, like any other activity, arguing has a start and an end, and what lies between is the activity. However, the arguing may be part of a larger discussion that started before the confrontation, and the arguments used may refer to things said and done before the arguing started. Similarly, a participant may attempt a conclusion, for example by suggesting that a shared view has been reached. If the opponent rejects the suggestion, the arguing continues, but when the analyst afterwards tries to identify the end of the arguing, all attempts to conclude the arguing, successful as well as unsuccessful ones, may be treated together. Because of this, the boundaries of an arguing may not be precise.

### 4.3.3 Normative aspects

The traditional separation of rhetoric and argumentation is based on a normative requirement – in rhetoric one can use any means to persuade, while only “good” or “proper” arguments are allowed in argumentation. For example, reasoning should be logically valid, at least when unexpressed premises are considered. However, under the presupposition made here, that the purpose of arguing is to reach a shared view on an issue where there are conflicting views (see p. 132 above), any proposition that is meant to convince the opponent to change her

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1. This does not mean that the set-up of the arguing is neutral in relation to the goals of the participants.

view, is an argument. One may claim that logically valid reasoning is the only way to change a person's view, and that other cases of view change are mistakes of one kind or another. I consider this an empirical question, and until this has been sorted out, a descriptive model of arguing must allow for all kinds of propositions to be treated as arguments and normative requirements should be kept separate.

In the model of arguing proposed here, an argument is a proposition that backs up a standpoint or another argument (see p. 130 above); the term *backs up* is intentionally vague. Basically any proposition that *is intended* to make the opponent accept another standpoint or argument, is an argument. At the same time, argumentation analysis is often performed to find out which arguments are good and which are bad, and therefore a useful model of arguing must also include normative aspects.

The long and strong normative tradition in rhetoric and argumentation analysis is fueled by two problems with persuasion in general, and arguing in particular. First, an arguer may try to deceive her opponent, which is an ethical problem. Secondly, it is generally desirable that the shared view that is reached shall persist over time, and not change when a participant gets time to think more about the issue, which is an epistemological problem. I shall first attend to the ethical problem.

In most kinds of cooperation the participants need to take each other into ethical consideration to some minimal degree; this goes for conversation as well (see (Allwood 2000:12)). Arguing, however, is an activity type that is not unlikely to occur under circumstances where participants cannot be assumed to have much concern for the other's well-being, either because they dislike the other participant, or because the expected consequences of the arguing are very important (e.g. in a court). Because of this, normative aspects of arguing require special attention. An extra rule of the game of arguing can be added to call attention to ethical issues:

## II *The Ethics Rule*

The participants should take each other into ethical consideration.

This rule prevents any intentional misleading of the opponent. In many cases, it is a descriptive rule; it is assumed that the participants follow it. However, when analyzing for example the arguing between the prosecutor and council for the defense in court, the participants cannot be assumed to follow this rule. It is then only useful for normative analyzes.

Looking at the epistemological side of normativity, the view reached through arguing is a part of the participants' beliefs, and we generally desire our beliefs to be true and well motivated. There is a long tradition in science of how to evaluate different kinds of evidence; the general epistemological ideals from that tradition are valid for evaluating arguing and argumentation. For our purposes, those ideals can be said to be that beliefs should be based on logically valid reasoning



and reasonable premises. Many so-called fallacies are arguments which seem epistemologically sound, but are not. An example of this is when king Charles Gustavus of Sweden some years ago criticized the Norwegian prime minister for the Norwegian seal hunting industry, he argued in the following way: ‘If [the prime minister] cannot handle the seal problem, how will she be able to handle the Norwegian people?’ The utterance assumes that the prime minister’s inability to handle the seal problem is a sign that she is unable to handle the people. However, these two abilities are not necessarily related, and it is also likely that the prime minister prioritizes her people over the seals, which means that her inability to handle the seal problem says nothing about her ability to handle the people. Thus the arguing is not epistemologically sound.

When epistemological soundness of the arguing is desired, the following rule may be added:

### III *The Epistemology Rule*

The arguments put forward should be connected to the claim in an epistemologically sound way.<sup>1</sup>

This rule cannot be assumed to hold for all arguings. For example, when analyzing the arguing occurring when a person tries to persuade another person to dance with her, it is perhaps much more important that the courting person comes through as entertaining, amusing, nice, or interesting than that the arguments are epistemologically sound.<sup>2</sup>

One consequence of the above rules is that the participant who claims that some proposition should be part of the shared view also must defend that proposition, if asked to do so. Hence, if A says that Munich is a bad city because it rains all the time, and B wonders how A knows that it rains so much in Munich, then A cannot evade the burden of proof by asking how B knows that it does not rain in Munich all the time. This is motivated on epistemological grounds (Ockham’s razor), but also on rational grounds (it is not rational to withhold reasons for the shared view if you try to reach a shared view) as well as ethical (if the other party is trying to understand why you believe as you do, it is probably unethical to withhold that information).

### IV *The Corollary of Burden-of-Proof*

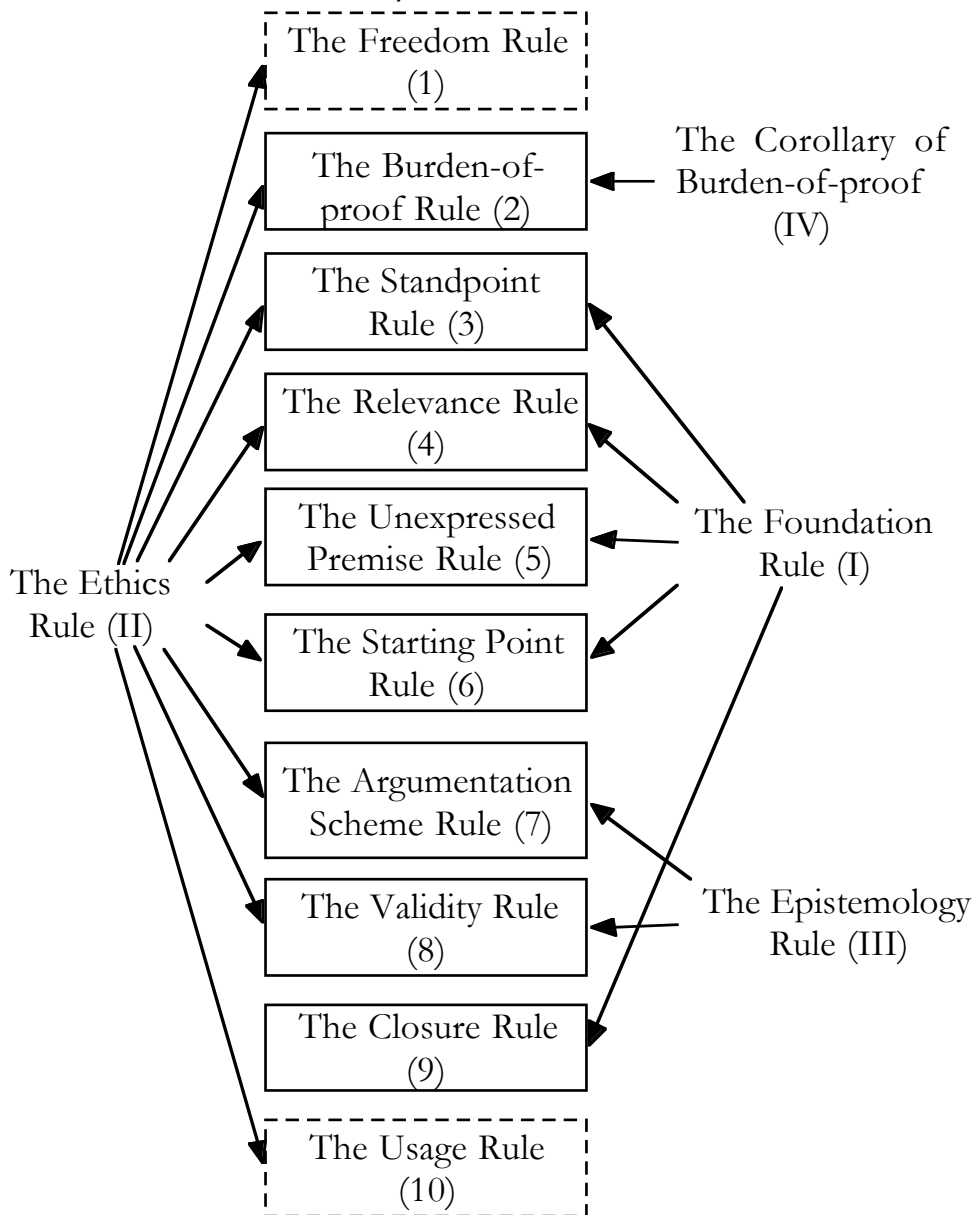
The participant advancing a claim must defend that claim with arguments if asked to do so.

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1. That is, it should be possible to make this connection. Every step in the chain need not be taken explicitly.
  2. One may want to say that such a conversation is not arguing, but something else, or that the actual arguing is implicit and concerns exactly how entertaining, amusing etc. the courting person is. However, the conversation may still look very much like explicit arguing, and it is in that respect that the rule does not apply.

This principle is not an absolute demand for high quality arguing, and if the proposition claimed to be true is a wide-spread or traditional belief, it is not unreasonable to ask the person who doubts the proposition to explain the reasons for her doubts. However, if a dispute arises about who has the burden of proof, this principle should be used.

Note that a comparison of the the proposed list of four rules with the ten Rules of Critical Discussion shows that most of the latter can be derived from the former, illustrated in figure 4-7.

Figure 4-7: How the Rules of Critical Discussion correspond to the rules in the proposed model.



In contrast to the rules proposed here, the Rules of Critical Discussion make no distinction between normative and descriptive rules, or between ethically normative and epistemologically normative reasons. A consequence of this is that in order to derive one of the Rules of Critical Discussion, it is often necessary to

combine two or more of the rules proposed here. Thus, most of the Rules of Critical Discussion cannot be broken deliberately with the intention of deceiving the opponent without also breaking the ethics rule (II); the exceptions are rule 1 and 9, which are discussed below.

Most cases of breaches of rules 3-6 (standpoint, relevance, unexpressed premise, and starting point) would also break the ethics rule (II). However, arguers may accidentally infer an unexpressed premise that was not intended by the speaker, they may confuse a standpoint of the opponent with a similar standpoint that has not been advanced, etc. If discovered, such mistakes can be corrected by the opponent on the grounds of the foundation rule (I) – it is irrational to attack a standpoint that has not been advanced, to try to support a claim with arguments for another claim, or to treat a premise as an accepted starting point.

The argumentation scheme rule (7) and the validity rule (8) can be derived from the epistemology rule (III), and the burden-of-proof rule (2) is left untouched in rule IV.

The closure rule (9) is a consequence of the foundation rule (I) in combination with the purpose of arguing, since it really just defines what it means to win/lose an arguing – to reach a shared view is the whole point of arguing.

The freedom rule (1) does not really concern arguing, since shared view is not achieved by breaking the freedom rule. On the other hand, the ethics rule (II) is valid for many other activities, so that if the activity that the arguing is a part of (for example a group decision) has the ethics rule, then the freedom rule is covered there.

The last of the ten Rules of Critical Discussion, the usage rule, is rather vague, and overlaps greatly with Grice's maxim of manner. It is clear that a deliberate violation of that rule would also be a break against the ethics rule (II), but what about unintentional violations? What do 'insufficiently clear' and 'as carefully and accurately as possible' mean? The foundation rule (I) demands the arguers express themselves clearly enough for the opponent to understand what is going on, and as a consequence the arguers must take each other into cognitive consideration. Moreover, if this is not possible, the arguing can hardly continue. However, if an arguer accidentally using an 'insufficiently clear' formulation that forces the opponent to request a clarification would not cause the arguing to break down.

#### 4.3.4 Reconstruction

The pragma-dialectical recognition of the reconstruction (see p. 123 above) is very attractive, but the detailed division of it into addition, deletion, substitution and permutation has little practical value, since these steps blend into each other. It is important, however, that the analyst's interpretation of the text/conversation is explicit. In the merged model suggested here, the reconstruction is kept as an important step, but it is not analyzed into sub-steps.

### 4.3.5 Unexpressed premises

In standard pragma-dialectics, a modified version of Grice's maxim of quantity is used to find out what the unexpressed premises in argumentation are. As explained above (p. 118) this is unsatisfactory, and a closer analysis of the underlying principles of unexpressed premises is necessary.

Unexpressed premises are beliefs that together with expressed premises make (or are intended to make) the listener understand the conclusion, or to understand why it is reasonable to believe the conclusion.

It is difficult to pinpoint what *understanding* means, but it seems to be about how a certain belief is connected to other beliefs. Allwood describes understanding as a relation between an agent and some particular type of information (Allwood 1986). The work of the agent consists of connecting, in a meaningful way, the information that is to be understood with other information already understood by the agent (Allwood 1986). In other and less formal words, a person understands something when she sees how it fits with her view of the world, including her view of other people and their views of the world.

So, expressed and unexpressed premises link a belief to other beliefs. When a premise, or a part of a premise, is unexpressed, it is typically because the speaker assumes that the listener can infer it herself, in the same way as with other implicatures.<sup>1</sup> All kinds of encyclopedic and situational information can be necessary to infer what an unexpressed premise is likely to be, and there is no single maxim that can explain all unexpressed premises. Here is an example:

*Mary and Sue are discussing what to give Jenny at her birthday. Mary suggests a guide book to country-side restaurants.*

Sue: That would be pretty useless, since Jenny does not have a car.

The full explanation to why the suggested present would be useless is something like this:

*The purpose of a guidebook is to help people choose among whatever-the-guide-book-is-about. Since Jenny has no car she cannot go to the country side and thus she has no opportunity to choose among country side restaurants. The book would thus fill the purpose for a task that Jenny would not do.*

Sue relies on Mary to be able to infer this from the little information in her utterance. To make that inference a lot of information about restaurants, guidebooks and transportation is needed. In the merged model, unexpressed premises are understood in the same way as other implicatures, and cannot be reduced to simple results of a single communicative rule.

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1. Another reason for leaving out parts could be that the speaker does not notice that the part is needed.

### 4.3.6 Communicative acts

A taxonomy of communicative acts for arguing must, as I see it, relate to the general purpose of arguing, which is to reach a shared view on some issue where the participants have discovered that they have conflicting views. A simple model of this is to consider the shared view as a pool of beliefs held by all participants, and that the arguers try to modify this pool. The complete shared view is normally very large, containing our general understanding of the world (e.g. ‘if you throw a drinking glass on stone, the glass is likely to break’), things we may have learned in school or similar situations (e.g. ‘the Battle of Hastings occurred in 1066’), as well as value judgments (e.g. ‘democracy is to be preferred over fascism’). Most modifications to the shared view are never questioned, but are simply accepted by the participants. For example, a person A may tell her friends that she intends to go to France. The friends then usually accept this piece of information, and the belief that ‘A intends to go to France’ is added to pool of beliefs held by all participants. However, in some cases, one or more of the participants in a conversation may not accept the claim made, resulting in a discovery of conflicting views. For example, one of A’s friends may respond ‘No, you do not! I saw your plane ticket – you are going to Spain!’ In such a case, the participants have discovered that they have conflicting views on an issue, and they are likely to want to reach a shared view on that issue, and so arguing can start.

The following types of communicative acts can be predicted:

- Suggesting modification the shared view (making a claim)
- Elaborating (specification, description) a claim
- Modifying a claim
- Agreeing with a claim
- Disagreeing with a claim

The most prominent feature of arguing is perhaps that disagreements to claims are not left as disagreements; attempts to resolve the conflicts are made. Two more types of communicative acts can then be predicted:

- Giving reason for a claim
- Giving reason against a claim

A reason for or against a suggested modification of the shared view is in itself a suggested modification of the shared view (or at least a focusing of a part of the shared view), and can be elaborated or modified; other participants can agree or disagree about it, and there can be reasons for or against it.

In addition to these basic types of communicative acts, some types can be predicted that are indirectly oriented towards the purpose of reaching a shared view, such as request for elaboration, request for reason, request for attitude (agreement/disagreement), clarifications, etc.

A more precise taxonomy must be based on analyzes of actual arguing.

### 4.3.7 Analytical overview

In the model suggested in this chapter, the participants in a successful arguing session do reach a shared view, and the content of this view develops during the arguing. Some suggestions are accepted, others are discarded. The resulting argument structure is a description of the shared view and how the beliefs in it are related to each other in terms of some being reasons for others, but there may be many suggestions that do not reach the final shared view. The analytical overview has a dynamic character that is difficult to capture in a diagram. However, the ideas of the pragma-dialectical school of how to represent the structure of the arguments (see p. 124 ff.) can be used to describe the claims and reasons occurring at some point in the conversation.

The purpose of the analytical overview is to describe the reasoning advocated by the participants in the conversation, a description that can be used to evaluate the quality of the arguments (normative aspects). The overview contains propositions that according to the analyst's interpretation are held as beliefs by the participants, and used by the participants as arguments and standpoints. To avoid cluttering the overview with details about precise references, the propositions are described as statements made in the context of the analyzed conversation, that is, deictic words like *we* and *tomorrow* can be used, etc. The examples in section 4.2.10 illustrate this.

## 4.4 An analysis of authentic argumentation

### 4.4.1 Overview

As an example of how the merged model of argumentation can be used for analyzing argumentation, a conversation within a family about buying a new car will be analyzed. The cultural context is Swedish, and the social institution is, as mentioned, the family. The main arguers are husband (Roland) and wife (Eva), while the teenage son (Anders) is participating to a limited degree. Being a native Swede I understand the general principle of important decisions for the family to be that they should be made with consensus between husband and wife, and that children have a right to state their opinion and argue for their views in proportion to their age and degree of maturity.

The conversation takes place while the family is having dinner. Only the part of the dinner conversation where the purchase of the car is discussed is analyzed.

There are two activities going on, having dinner and arguing about what type of car to buy. The dinner activity is left unanalyzed here. The arguing is clearly a part of the more general activity of making a decision about what car to buy, although I can reveal already at this point that no decision is reached in the transcribed section of the conversation.

The family has a jeep, and now they are in need of a new car. In earlier discussions a small truck or van has been suggested (*folkvagnsbuss*), and the arguing starts when the husband suggests that the family should buy another type of car (*van*). It should be noted that the Swedish use of the word *van* does not match the English use precisely (because of this the word will be italicized in this thesis each time it is used in the Swedish sense). In fact, the precise meaning of the terms *folkvagnsbuss* and *van* in the conversation are not clear, but it is not necessary to know the precise meaning in order to understand the arguing.

The preconditions and purpose of the activity are thus that the family should buy a new car, and they need to reach a shared view on which type of car it should be.

Below is a brief summary of the arguing; only the main arguments are mentioned. The numbers to the left indicate which line in the transcription corresponds to the summary to the right. Appendix 4 contains a complete transcription of the conversation.

**Table 4-1: Summary of the analysed conversation.**

Line	Summary
1	R suggests that the family should buy a <i>van</i> instead of a <i>folkvagnsbuss</i> , and E questions this.
7	A says that <i>vans</i> have low fuel consumption.
10	R says that <i>vans</i> are cheap, and gives an estimated price.
13	E argues that <i>vans</i> do not have low fuel consumption.
16	A says that the spare parts for <i>vans</i> are cheap.
18	R says that <i>vans</i> are cheap to buy.
24	E says that she still is not convinced.
25	R and E discuss whether or not it is easy to drive <i>vans</i> .
42	E says that the car they buy must have proper seats with seat belts, and she and A discuss the seating of <i>vans</i> .
67	E returns to the main topic, saying that the cost is very important.
70	R repeats the estimated price of a <i>van</i> . He and E discuss why <i>vans</i> are cheap.
81	E raises the question of crash safety, and R assures that <i>vans</i> are very crash safe. E requires R to explain how he can be so sure of the crash safety of <i>vans</i> . E is not satisfied with the explanation, and says that they should check the statistics with one of the insurance companies.
126	E asks how much it costs to insure a <i>van</i> , and after some discussion they agree to check with an insurance company.
140	E says that she wants to test drive a <i>van</i> before she agrees to buy one.

140	E says that <i>vans</i> normally have an automatic gear box and that she does not like automatics.
158	E says that she likes large steering wheels and that <i>vans</i> do not have large steering wheels. R says that <i>vans</i> have small steering wheels because they have servo. E says she likes servo.
174	E says that automatics are bad on winter roads, and R disagrees. They argue about this at some length. R finally says that there are only two draw-backs with automatics and that is that they cause slightly higher fuel consumption and that they cannot be jump-started.
246	E leaves the room to do other things. The arguing ends.

Appendix 4 contains, along with the transcription of the conversation, the result of the reconstruction of the arguing (column 3), that is, my interpretations and reformulations of the utterances, and notes on which utterances have been disregarded as unclear or not belonging to the arguing. The fourth column shows the categorizations of the utterances as communicative acts, along with references to the analytical overview in appendix 5.

It is perhaps a good idea for the interested reader to read a few utterances from the transcription first, to gain an understanding of the conversation. Then, look at the reconstruction and the communicative act classification, and how all this is matched in the analytical overview. When one has an understanding of how the utterances, reconstructions, communicative acts and boxes in the analytical overview hang together, it is easier to browse more freely through the diagrams.

#### 4.4.2 General comments

The activity structure of this arguing is somewhat unbalanced. The confrontation occurs in two short utterances, lines 1 and 6. Discussion follows, but no conclusion is reached. This means that the goal of a shared view is not attained. When the transcription ends, the husband and wife still do not agree on which car type to buy, at least they do not agree explicitly. It is reasonable to think that they will continue the arguing later, and so the arguing may not be as unsuccessful as it may seem, but simply unfinished. In one interpretation of Eva's utterance on line 24 (which is difficult to analyze as discussed more below) Eva suspects that the other participants are preparing a conclusion, and she "forces" the discussion to continue.

Another thing to note is that the arguing clearly fits into a more general activity, 'to decide what type of car to buy', or perhaps the even more general 'to buy a car'. The husband and wife do try to find a solution to a common problem, not necessarily to win an argumentation competition. The traditional view of argumentation as a game with winner and loser, where the participants attack, de-



fend, retreat etc., fits poorly with this conversation. An example of this is found on line 24:<sup>1</sup>

**\$E:** PROBLEMET e ju att ja ska köra ren de e JA som ska köra ren

**\$E:** *THE PROBLEM is that I am going to drive it it is I who is going to drive it*

It is obvious from the start of the arguing that Eva does not like vans, but simple dislike is not an important factor in this decision, at least not “officially” – dislike has to be motivated by more objective reasons. Because of this, from a strictly argumentative view point, it is not obvious what Eva’s argument really is here. But when reading the transcription, and listening to the recording, the utterance is not strange at all: Eva is frustrated with the answers she gets to her questions and objections, and she points out that unless she is properly convinced that *vans* are good, it will not be a good idea to buy a *van*. The shared view that the participants strive for includes Eva’s attitude to the car, and if she does not like *vans*, there can be no shared view that the family should buy a *van*. However, Eva does want to reach the shared view, she wants to be convinced. If the traditional view of argumentation as a competitive game is to be upheld, one has to say that Eva wants to loose, making it a rather strange game. Alternatively, the game has to be cooperative in nature, similar to climbing a mountain<sup>2</sup>. Another example of this is found on line 67:

**\$E:** fast de e ju e prisfråga

**\$E:** *but it IS a matter of cost*

Here Eva flatly gives a reason *for* buying a *van* (since it has already been established, at least to some extent, that *vans* are cheaper than *folkvagnsbussar*), even though she is the main (and only) contender against buying one. Comparing it to a game of tennis, it is like telling the opponent, ‘My backhand is really weak, so you should put as many balls as possible on that side’.

Allowing some speculation, this might reflect a difference between Swedish culture on one hand and continental or Dutch culture on the other. It is often said that Swedes are consensus-oriented or conflict-avoiding, and if so, it is not strange that the arguing in a Swedish conversation displays more cooperation and less competition than the continental/Dutch arguings that presumably constitute the basis of standard pragma-dialectics. A much more extensive investigation than the present one is needed to confirm or reject this speculation.

- 
1. The English translation in italics is idiomatic, and does not necessarily match the Swedish utterance word-for-word. Nor does the translation try to render spoken language features like reductions and specific spoken language forms.
  2. Allwood touches on such an analysis in Allwood, J. (1992) *The Academic Seminar as an Arena of Conflict and Conflict Resolution*. Department of Linguistics, Göteborg University, Sweden.

### 4.4.3 Communicative acts

All types of communicative acts that were predicted in section 4.3.6 were found in the conversation, but some communicative acts occurred that were not predicted. One such act is found on line 42:

\$E: e re nånting vi framföallt ska se till de e att vi får ordentliga SÄTEN me ordentliga säkerhetsbältar å nackstöd annars e inte ja intresserad

*\$E: one thing e really must make sure is that we get proper SEATS with proper seat belts and head restraints otherwise I am not interested*

This is not a reason either to accept the claim or to reject it, but rather it is requirement placed on any solution to the problem of finding a new car for the family: ‘whichever car we buy, it must have proper seats.’ The communicative act label that has been used is *assertion of evaluation criterion*, since that signals how the requirement relates to the ongoing discussion. When evaluating the strengths and weaknesses of *vans* and *folkevagnsbussar* (the arguments for and against them), the quality of the seats must be taken into account. One could argue that the utterance really belongs to another discussion, on the topic ‘what is a good car for this family?’ while the current discussion concerns the topic ‘are *vans* good cars?’. If other participants had disagreed with the evaluation criterion and started to give reasons against it, a separate analytical overview could have been set up for that issue. Since such disagreement does not occur, there is no need for a separate diagram, and the label *assertion of evaluation criterion* is used. However, it serves as a reminder for the analyst that (i) people can argue about more than one thing at the time, and (ii) arguing is not isolated from other activities, but forms a part of a “larger” activity, in this case ‘to buy a car’.

A similar situation of “leaving the actual arguing” occurs on line 111, in connection with the arguing about the crash safety of *vans* (*Trygg-Hansa* is an insurance company):

\$E: ja de e ju ba å titta på Trygg-Hansas statistik /// kan ju int va så svårt dom ha ju statistik på de // de finns ju minibussar (dä sånna små)

*\$E: well we can just have a look at Trygg-Hansa’s statistics /// couldn’t be too difficult they do have statistics for that // there are mini buses (you know such small ones)*

The participants have been discussing the crash safety of *vans*, providing reasons for and against their being crash safe. With this utterance Eva suggests a method to solve the dispute (to reach a shared view), without actually using that method (since it cannot be done immediately). The communicative act label is *deferral to other arbiter*, where the important part is the deferral – the issue is not solved here and now, but the participants know how to solve it, and will do so, later.

If the other participants do not agree to the suggested deferral, an arguing can arise on that issue, just as it can with evaluation criteria, as discussed above. On line 135 Roland suggests a method to find out what it costs to insure a *van*, but this suggested deferral is not accepted by his wife:

\$R: ja de e ju bara ringa te e te Björn elle Sten-Åke elle nån dom ha ju en sån (där)

\$E: ja me man ska int ringa ti entusiasterna Roland /// då e de bättre rö+ jöra me sitt försäkringsbolag va re kostar å försäkra en sån ti xempel då va

*\$R: well it's just to ring to er to Björn or Sten-Åke or somebody they have got one of (those)*

*\$E: but one can't ring the enthusiasts Roland /// it is better to check with the insurance company how much it costs to insure for example such a car like*

If the disagreement develops into a larger arguing, it could be necessary to set up a separate analytical overview. This does not occur here.

Another unpredicted case occurs on line 7, where the son speaks about *vans*:

\$A: dom drar lite bensin pappa de e ju re enda som e bra me rom

*\$A: they need very little gas dad that is the only thing that is good about them*

The utterance contains two reasons: that *vans* have low fuel consumption is a reason to buy a *van*, and that *vans* do not have any other advantage over *folkevagnsbussar* is a reason not to buy a *van*, and the second reason is meant to outweigh the first reason. This technique to introduce and admit reasons for not accepting a claim that one tries to get acceptance for, and then dismiss them as non-vital, is used again at a later stage, by the husband:

\$R: nä ja få säga de att e ja ka // de // de de finns bara EN nackdel me automatlådor / idag /// å de e de att dom dra LITE mer bensin men de LITE mer bensin för dom drar mer bensin (...) (överhuvudtaget)

*\$R: no I must say that er I can // there's / there's there's only ONE disadvantage with automatics / today /// and that's that they cause SLIGHTLY higher fuel consumption but that is SLIGHTLY higher fuel consumption because they do have higher fuel consumption (...) (at all)*

However, in the case of the son's utterance, it is not so clear that the second reason is really meant to outweigh the first reason. Throughout the conversation he does not commit himself strongly either to buying a *van* or to not buying one, although he seems to lean somewhat towards the first alternative. Presumably, he does not want to "choose sides" between his parents, and is careful not to displease either of them. Thus, the utterance on line 7 has the ring of support for his mother's view, while it actually provides his father with a reason for accepting the suggestion of buying a *van*. In that sense the communicative act is *simultaneously* a reason for and against a suggested modification of the shared view.

One difficulty with analyzing argumentation that is neither explicitly handled by the model suggested here, nor by the standard pragma-dialectical model, is that the importance of the arguments (i) are different and (ii) can be negotiated. The table below lists the reasons for and against buying a van that seem to be accepted by all participants:

Table 4-2: Reasons for and against buying a 'van'.

The family should buy a van	The family should not buy a van
1.2 <i>Vans</i> are cheaper.	2.2 <i>Vans</i> have small steering wheels.
1.4 Many other families have <i>vans</i> .	2.7 <i>Vans</i> have high fuel consumption.
1.5 <i>Vans</i> have power steering.	2.8 <i>Vans</i> are like living rooms.
1.6 <i>Vans</i> have good loading capacity.	

Clearly, some of these reasons are more important than others. The fact that many other families have *vans* is so weak as a reason that it is not clear if it should be considered a reason at all, and it is also unclear why it is a disadvantage of *vans* that they are like living rooms.

In situations where a shared view is reached, the overall prioritizing done by the participants is obvious (the arguments for the shared view are considered most important), but on a more detailed level, motives behind prioritizing are not clear. In some cases the importance of the reasons is mentioned explicitly, as on line 79:

\$E: ja vi KÖR ju så lite så fö den sakens skull så e re ju ingen

\$E: *well we DRIVE so little that for that sake it is no big*

Here Eva says that the higher fuel consumption for *vans* is not an important argument, since the family does not drive much.

The importance of arguments can also be addressed more indirectly, as on line 24:

\$E: PROBLEMET e ju att ja ska köra ren de e JA som ska köra ren

\$E: *THE PROBLEM is that I am going to drive it it is I who is going to drive it*

As discussed above, Eva's intuitive dislike of *vans* would normally not be an important argument, but the utterance on line 24 shows that Eva in this case thinks that her dislike *is* an important argument (and the other ones seem to accept that). Even if this interpretation is wrong, it is clear that the utterance attacks, not the logical validity or truth of the given reasons, but their importance: they are not strong enough to outweigh the (not fully expressed) argument that Eva does not like vans.

#### 4.4.4 Other observations

The temporal order of the given reasons is sometimes surprising, as on line 25-27:

\$R: ja men de e ändå lättare å köra

\$E: ja de säger du också men nu e re så här att INGER hon ha ju inte haft nåra svårigheter ALLS me såna fordon å hon ha kört va som helst // men HON tycker att den här e hon dra se alltså för å köra rom

*\$R: yes but it is easier to drive anyway*

*\$E: well so you say but this is the way it is that INGER has not had any difficulties at ALL with vehicles of this kind and she has driven anything // but SHE thinks that this is she is reluctant to drive them*

Here the reason *vans are difficult to drive* is countered by Roland before Eva has said anything about it. Roland assumes that Eva's dislike of vans has to do with that she fears that they are difficult to drive, and considering Eva's response, he is probably right.

#### 4.4.5 Normative aspects

As discussed above (p. 135 ff.), normative aspects of arguing can be divided into ethical and epistemological aspects. Looking first at the ethical side, we observe that the participants behave very well towards each other. Only on one occasion can the behavior be criticized as ethically dubious, on line 198, presented here with the preceding utterance:

*\$R: ja JA kan det inte å ja e betydligt duktiare förare än va du e*

*\$E: ja de vet ja ju inte ja kan ju va lyhörd på andra saker*

*\$R: well I can't do that and I'm a considerably better driver than you are*

*\$E: well I don't know about that I may be more keen in other things*

Here the topic is whether an automatic gear box renders more control to the driver than a manual gear box, and Roland says that he is a better driver than Eva. Eva attacks this as incorrect, since being a good driver is not only about being able to control the car. (Roland modifies his claim a few lines further down, 202, to 'a better driver technically.')

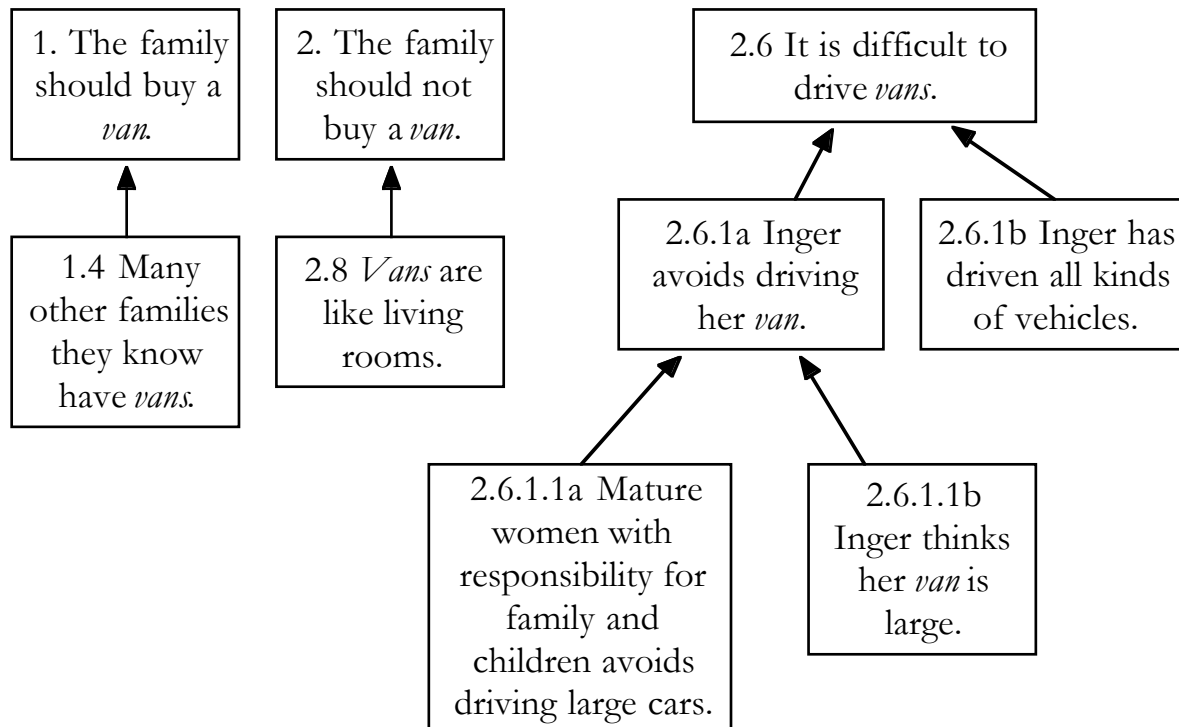
The problem here is that what it means to be a good driver it is not well defined, but considering that they are talking about controlling the car, it is not unreasonable to assume that Roland intended *better driver* to mean 'better at maneuvering the car.' Eva, however, does not take the context into account when interpreting the phrase, but responds to it as if it had the meaning 'better motorist road user.' If she does so deliberately, it is ethically questionable.

Epistemologically, there are more problematic cases. Arguments 1.4 (a reason to buy a *van* is that many other families have *vans*), and 2.8 (a reason not to buy a *van* is that they are like living rooms) have at best limited relevance. 2.6.1.1a (being responsible for family and children makes mature women think it is difficult to drive big cars) is quite difficult to understand at all.<sup>1</sup>

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1. One interpretation is that the responsibility for family and children makes mature women more careful and worried about dangers in general, and large cars are in an unclear way associated with danger. This makes mature women *dislike* large cars (rather than making them think it is difficult to drive large cars). This interpretation is rather speculative, however.

Figure 4-8: Arguments 1.4, 2.8 and 2.6 with immediate relations.



On one occasion an epistemologically irrelevant argument is explicitly refuted by a participant. That is 1.3.2.1' (the heavy framework of the jeep shows that vans have heavy frameworks), put forward on line 105 and immediately refuted:

\$A: mamma / mamma ko+ kolla (...) å så känne ru på jeepen där de e så hä tjock RA:M i n vetdu

[...]

\$E: ja de jeepen de anders me ja e inte så säke på att dom hä va:narna e såna // de vill ja no se: e fakta på innan

\$A: mum / mum loo+ look (...) and feel on the jeep the FRAMEWORK is this thick you know

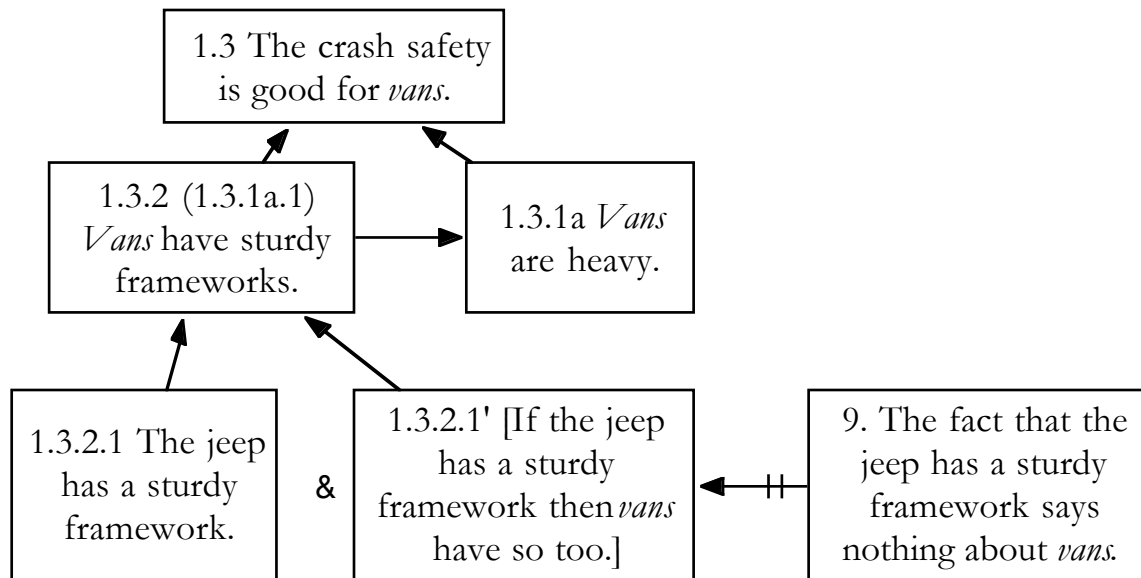
[...]

\$E: yes that is the jeep Anders but I am not so sure that these vans are like that // I think I want to see facts on that before

Here Eva immediately refutes Anders' argument on epistemological grounds, saying that the construction of the jeep cannot be used as an argument for the crash safety of *vans*.

A more subtle epistemological problem concerns the relation between the crash safety and the weight of the car, and the argumentation about this is shown in figure 4-9.

Figure 4-9: Argument 1.3.2.1' with immediate relations.



Roland argues that vans are crash safe since they are heavy, without being very explicit about the reasoning behind this. He does give an example though, and the underlying reasoning is probably that if a heavy car crashes with a light car, the light car will be struck much harder than the heavy car (due to physical laws). Statistical laws tell us that the heavier car you have, the higher the chance that the car you happen to crash with is lighter than your car, thus, a heavy car is more crash safe than a light car. Crash safety is seen as the risk of being severely injured in a car crash. Eva, however, seems to look at crash safety from another angle, as how well the construction of the car distributes the forces involved in a crash in order to protect the driver. The participants do not discover that they understand crash safety in different ways, so the arguments relate badly.

## 4.5 Summary and conclusions

In this chapter, I have described a model for analyzing argumentation in naturally occurring conversation, the model being a merger of the pragma-dialectical theory of argumentation analysis and the theory of language in general and conversation in particular called activity-based communication analysis (ACA). The basic idea was to replace the weak linguistic underpinnings of the pragma-dialectical school with the well-developed linguistic theory, ACA.

The intermingling of normative and descriptive aspects that is made consciously in the pragma-dialectical model has been separated in my model, without great difficulty. The mixing seems rather unnecessary, and the proposed model is in my opinion clearer and more useful than the pragma-dialectical one, since it can be used for normative as well as for descriptive analyses.

In the proposed model, arguing is an activity with the purpose of reaching a shared view on an issue where the participants disagree. A description of the activity *arguing* was made using a modified version of Allwood's template for de-

scribing social activities. Based on the description of the activity, a rudimentary taxonomy for communicative acts was set up.

In this study I have also shown how the model can be used to analyze argumentation by analyzing a naturally occurring conversation containing arguing. One thing that was discovered in the analysis was that the weight of arguments is important, but not handled well in the pragma-dialectical model or the proposed one. Additional research is needed to find a way of handling argument importance (see also p. 299-301). Another thing that was made obvious in the example analysis is that arguing typically occurs in a context of other activities, in this case as a part of the activity to decide what car to buy. Naturally occurring arguing cannot be separated from the reason for which a shared view is desired.



# 5. Interaction in group decision-making

## 5.1 Introduction

For a linguist studying group decision-making, the interaction associated with the group decision-making event appears as the core of the problem. What is it that people say and do to make a decision? I shall start this study of the interaction of group decision-making by presenting the group decision-making corpus that will be used as empirical input (section 5.2), and then proceed to work out a framework for analyzing the detailed linguistic interaction of group decision-making episodes (section 5.3). Using this framework, I will investigate the recordings in the decision-making corpus in order to discover interactional regularities (section 5.4), and then try to find more general decision-making patterns (section 5.5). Towards the end of this chapter, I will produce an activity description of group decision-making (section 5.6), and compare the results to the research of Marjan Huisman, who performed a similar study (section 5.7). In the last section (5.8), general conclusions will be drawn.

## 5.2 Material

The empirical basis for the present work consists of 18 recordings and transcriptions of naturally occurring activities where group decisions have been made. The principle for collecting these was simply to gather as many recordings as possible of conversations where adults make group decisions in Swedish. The criteria for inclusion was somewhat intuitive: naturally occurring activities, with Swedish speaking adults, spending a considerable amount of time on making decisions together.

Most of the recordings come from the Gothenburg Spoken Language Corpus (GSLC) (Allwood et al. 2003), a corpus of spoken language developed at the Department of Linguistics, Göteborg University. GSLC consists of approximately 375 recordings totalling 1.4 million tokens, distributed over about 25 different

*Table 5-1: Overview of Group Decision-Making Corpus. Recordings with IDs starting with an A are audio recordings, and recordings with IDs starting with a V are video recordings.*

ID	Title	Description	Rec. Year	Tokens	Dur.
A321001	<i>Quitting Work</i>	A married couple discusses the strategy for him to quit his work. Two participants: the husband and the wife.	1995	5 250	00:26
A321601	<i>Budget Negotiation</i>	A project leader at a large company discusses the budget of his project with some superiors. Three participants: the project leader and two superiors.	2002	9 124	00:58
A322501	<i>Budget Revision</i>	The project leader in A321601 returns to his project group, and they revise the budget together. Four participants: the project leader and three project group members.	2002	11 682	1:42
A462701	<i>Culture-Nature Project</i>	Researchers in the Humanities meet to discuss a common project on culture. Seven participants.	1989	18 920	1:35
A771101	<i>Making Recordings</i>	A communication researcher negotiates with the manager of a company about making recordings at the company. Two participants.	1992	3 141	00:17
A792501	<i>Esperanto Foundation</i>	A board meeting at an esperanto foundation. Five participants.	1997	16 589	1:35
A850101	<i>Bäckmåla Municipality Council</i>	A meeting with the council of a municipality in a rural area in Sweden. Eight participants.	1969	24 005	2:54
A850401	<i>Bäckmåla Health Committee</i>	A meeting with the Health Committee of a municipality in a rural area in Sweden. Eight participants, including the recording researcher.	1969	28 781	2:55

ID	Title	Description	Year	Tokens	Dur.
A850701	<i>Bäckmåla Local Housing Committee</i>	A meeting with the Local Housing Committee of a municipality in a rural area in Sweden. Seven participants.	1969	12 718	1:31
A851501	<i>Patent Office</i>	A meeting at the Patent Office. Eight participants.	1966	7 307	00:49
AXX0101	<i>Buying a Car</i>	A family discusses what new car to buy. Four participants.	1997	2 328	00:12
V321601	<i>Choir</i>	During a rehearsal, a choir has a discussion session. There are fifteen participants with individual contributions, and approximately fifteen participants without.	2004	3 469	00:21
V321801	<i>City District Committee</i>	A meeting with a City District Committee in a Swedish city. The participants are elected members of political parties. There are 26 participants with individual contributions, and five to ten participants without.	2004	15 441	2:02
V770201	<i>Strategy Meeting</i>	A meeting at a consultancy company where future plans are made. Twelve participants.	1992	26 950	3:12
V770301	<i>Board of City District Committee 1</i>	Meeting with the Board of City District Committee in a Swedish city. The participants are civil servants in the city administration. Fourteen participants.	1993	34 013	3:58
V770501	<i>Board of City District Committee 2</i>	Meeting with the Board of City District Committee in a Swedish city. The participants are municipal administrative officials. Eleven participants.	1994	11 414	1:09
V770901	<i>Board of City District Committee 3</i>	Meeting with the Board of City District Committee in a Swedish city. The participants are municipal administrative officials. Ten participants.	1995	25 233	2:58
<i>Total:</i>				265 931	28:33

activity types. Colleagues contributed a few other recordings, and I made a few recordings myself.

Readers unfamiliar with corpus linguistics may find this method of collection strange – why did I not find representative groups, record these, and then construct a corpus from these recordings? The simple answer is that it would have taken too much time. Finding and recording representative groups would have taken considerable time, and transcribing would have come on top of that: one hour of recorded conversation takes approximately 30 hours to transcribe, check and prepare for computer analysis, and the 28 hours of recordings included in the corpus I have used thus correspond to almost five months of full-time transcribing. Using already recorded and transcribed material was thus an efficient way of saving time for making deeper or broader analyses of the data.

The recordings of the resulting corpus are described in table 5-1 on the previous opening.

The recordings have been transcribed using the GTS/MSO6 standard (Nivre et al. 2004; Nivre 1999). Before a transcription is added to the GSLC, it is checked by another transcriber, in order to improve the inter-coder reliability. In addition, in the course of working with the transcriptions, I adjusted the transcriptions when necessary. The excerpts from the transcriptions presented here have been somewhat simplified,<sup>1</sup> and there should be no significant problems reading them. Appendix 1 contains a brief explanation of the standard.

The transcriptions were annotated manually with group decision episodes, i.e. sequences of contributions where group decisions are made. After that, a specially developed computer program, Clipper, was used to scan the transcriptions for episode annotations, creating recording/transcription clips containing the episodes. The set of decision-making episodes could then be studied in greater detail.

### Identifying group decisions

One difficulty studying group decisions is identifying the relevant episodes in the recordings. The definition set up above (p. 105) is too abstract to be directly useful, so some kind of operationalization of this definition is necessary in order to recognize group decision episodes. The criterion that was used in this study was that a proposal should be made and verbal consent given, or at least clearly sought.<sup>2</sup> This operationalization has the drawback that it excludes group decisions that are made quickly, without much reflection, but since this dissertation concerns the language and interaction of group decision-making, that is not

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1. For example, comments without relevance for the example have been removed, IDT (pronunciation-like spelling) has been used for rendering the words, and initial capitals are used for names.
  2. N.B. that *verbal consent* includes consent made with non-vocal, symbolic behaviours (e.g. nods).

much of a problem – there is not very much language or interaction in such group decisions. Quick and non-reflected group decisions may be important and interesting, but they are not paid much attention in this study.

It is often not obvious what is a proposal and what is not; I do not claim to have found *all* group decision episodes present in these recordings. In particular, short and partly non-vocal decisions are likely to have been over-looked. Further, if group decisions are possible without proposals, then these are also likely to have been left out (see section 5.3.2 below for a discussion of the prominence of proposals in group decisions). However, episodes with a fairly explicit proposal that span more than a couple of contributions are unlikely to have been missed. Further, uncertain cases were marked as such, and were not ignored.

## 5.3 Communicative acts in group decision-making

### 5.3.1 Introduction

The present chapter focuses on interaction during group decision-making, which to a large extent is a communicative activity. Communicative activities consist mainly of communicative acts ('speech acts'), therefore, in this section I shall discuss communicative acts in group decision-making.

The view on communicative acts adopted here is the one described in section 4.3.6, p. 141, thus, a taxonomy of communicative acts in group decision-making must relate to the purpose of the activity. The purpose is to reach/create an obligation concerning a future action, according to the definition of group decision-making given on p. 105. In chapter 4, a taxonomy for communicative acts in arguing was developed by predicting a set of acts based on the nature of arguing, and then extending and verifying that taxonomy by analyzing arguing in a naturally occurring conversation. I found it more difficult to predict communicative acts for group decision-making, which necessitated a more directly empirical method: studying the group decision-making episodes of my corpus. In this section I shall present the communicative acts that I found this way.

### 5.3.2 Proposing and accepting

At a sufficient level of abstraction, any communicative act needs to be evaluated by the receiver (Allwood 2000:18 ff), in the sense that one has to decide if one wants to continue the interaction, has perceived and understood what was said, and possibly, if one should react in some way. However, at the heart of group decision-making lies a communicative act for which evaluation is a central theme, usually called *proposal*, though I prefer the more event-oriented form *proposing* or *making a proposal*. The term *proposal* will be used here for the description of future action that a proposing contains. Proposing can be characterized in the following way:

- i) It presents or points out a future or on-going action A as a possibility.
- ii) The sender S wants A (not) to take place.
- iii) S wants the receiver(s) to agree to A (not) taking place.

Borderline cases may be used to contrast this. An officer giving an order to a private soldier is an act that presents a future action as a possibility, and the sender wants that action to take place. The soldier must also obey the officer, thus, he is obliged to accept the ordered action. However, the soldier is not expected to evaluate the action on the whole and consider whether he likes it, or if he thinks that it is a good idea or an efficient means to achieve whatever the ends might be. That is, he is not expected to agree to the action taking place. The soldier is expected to evaluate the utterance and identify it as an order, and probably also to accept the officer as a person authorized to order the soldier about. This authorization includes, at least ideally, evaluating the action to find out if the officer is authorized to give an order to do just that (for example torture may not be allowed). However, given that the officer is authorized to give the order, the soldier is not expected to agree with the action, but simply to obey the order. In some cases this part about evaluation and consent is rather under-specified:

***Excerpt 5-1. V321601, line 328: Example of a border-line case of group decision.***

*A choir has been discussing common issues for a while, and prepares to start the rehearsal. The conductor, participant A, is closing the topic, and moves on to the rehearsal, naming the song to start with (from #1# to #2#).*

\$A: ... om ni kommer på fler gånger  
som ni inte / som ni vet att ni inte  
kan / komma under hösten titta på  
de här pappret också // innan ni går  
hem // a / de lägger vi här så länge  
Rosa // #1# In carnatus est // e et  
natulit+ // In carnatus et #2#  
< |21.0 >  
@ < event: people preparing to start  
the rehearsal and A plays a bit on the  
piano >

\$A: ... if you come up with other  
occasions when you can't / that you  
know that you can't / come during the  
autumn look at this paper too //  
before you go home // yeah / we put it  
here meanwhile Rosa // #1# In  
carnatus est // er et of cour+ // In  
carnatus et #2# < |21.0 >  
@ < event: people preparing to start  
the rehearsal and A plays a bit on the  
piano >

Here, the conductor is closing the previous topic and moves on to the rehearsal. The habit in this choir is that the conductor quite naturally decides what to rehearse, although it could be called into question. In excerpt 5-1, the conductor does not in any way invite explicit consent, and nobody says anything that could be interpreted as expressing consent. Since the choir then starts to rehearse the proposed piece (finding the written music, putting away drinks, etc.), its behavior can be interpreted as implicit consent. However, the behavior of the choir can just as well be seen as doing what the conductor has told it to do, that is, the choir obeys the conductor's order (follows his instruction), without considering whether the action is a good idea or not. Thus, it is somewhat unclear whether

this should be seen as a proposing or an order. In this dissertation, the episode has not been treated as a group decision, since the sender does not indicate that he seeks agreement, nor does the receiver show any explicit agreement. (See also section 5.3.8 for further discussion of this excerpt.)

Another bordering case is that of presenting an alternative without suggesting it. This could perhaps be done as a part of giving background information about a case, using an alternative action as a means to explain some problem, or as a topic introduction, listing available options. This is discussed more in section 5.3.6.

Sabourin & Geist (1990) write that the essence of proposing is to make the group members ‘confer upon’ the action, in the sense of ‘verbal interchange of views’ (Sabourin and Geist 1990:414). Although it is true that proposing often gives rise to a discussion of the proposal, there are clearly many cases where such discussion or conferral is neither necessary nor desired, as in the following example:

**Excerpt 5-2. A850101, line 60: Example of a group decision without conferral.**

*A meeting with the board of a rural township in southern Sweden. The chairperson opens the meeting, and proposes a minutes verifier (utterance 1, from #1# to #2#). He elicits explicit consent for the proposal (utterance 3), and receives that consent in utterance 4.*

1	\$A: Bäckmåla kommun+ / kommunalnämnd / behagar härmed sammanträda // och #1# då har vi på / föredragningslistan val av justeringsman / i tur att justera / kvällens pro+ / protokoll / skulle vara Bengt Alkvist #2# // något annat förslag	\$A: Bäckmåla town+ / township board / is hereby gathered for conferral // and #1# on the agenda we find election of minutes verifier / the person in turn for verifying tonight's min+ / minutes / would be Bengt Alkvist #2# // any other suggestion
2	\$X: nä	\$X: no
3	\$A: utses Alkvist	\$A: is Alkvist appointed
4	\$X: <1 ja >1 <2   >2 @ <1 comment: several participants >1 @ <2 event: strike of chairperson's gavel >2	\$X: <1 yes >1 <2   >2 @ <1 comment: several participants >1 @ <2 event: strike of chairperson's gavel >2

The excerpt shows a routine decision of appointing a “minutes verifier”,<sup>1</sup> and there is no reason to believe that any participant finds the decision unsatisfactory due to the lack of conferral.

In Allwood's (2000:18 ff) terminology, i and ii, according to the characterization of proposing on p. 158 above, constitute the main expressive dimension of the act, while iii is the main evocative dimension. That is to say, a response to a pro-

1. It is common in Sweden that organizations have statutes that require a “minutes verifier” to be elected at each formal meeting.

posing typically requires evaluation of whether one is prepared to commit to the proposed action. If the result of such an evaluation is positive, the response is likely to be *accepting*<sup>1</sup>, characterized in the following way:

- i) It concerns a proposed action A.
- ii) The sender agrees to A taking place.<sup>2</sup>

If the result of the evaluation is negative, *rejecting* is the more likely response; its characterization is very similar to that of accepting:

- i) It concerns a proposed action A.
- ii) The sender does not agree to A taking place.<sup>2</sup>

In CA contexts, the concept of *adjacency pair* is often used to describe interactional structure (see p. 38). Proposing-accepting/rejecting can be described as an adjacency pair, in other words, the making of a proposal creates an expectation of an accepting/rejecting. Under most circumstances, subsequent contributions will be interpreted as being relevant for producing an accepting/rejecting, until an accepting or rejecting has been performed, or the proposal has been made irrelevant. One way of making a proposal irrelevant is to make a new proposal, either a modified version of the first proposal, or a counter-proposal, which is not compatible with the first proposal. Normally this implies a rejection of the first proposal, and arguing is likely to occur (see section 5.3.3 below).

Now let's turn to another aspect of the proposal-accepting phenomenon. Imagine a simple group decision situation with two participants, where the making of a proposal is followed by an accepting in such a way that an obligation is created. It is important to note that the actual creation of the obligation is neither part of the proposing nor the accepting, but rather something that comes from the pair of communicative acts. The features numbered ii in the descriptions of accepting and rejecting above could have been phrased as 'S creates/refuses to create an obligation to do A,' but that would have caused problems for the continued analysis. Proposing something does not cause an obligation, since a rejection of the proposal cancels the entire decision. Similarly, if there are more than two participants in the group, the first accepting does not cause any obligation, since a subsequent rejecting could block the decision. Consider the following, invented example:

- 
- 1. The term *accepting* is here restricted to accepting proposals. Further, it denotes a slightly different sense than in the example with the soldier and the officer above, since *accepting* here includes agreement.
  - 2. Or, not taking place, if that is the proposal.



**Figure 5-1: Blocked decision.**


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*Three friends, A, B and C, are having a small talk one evening in December.  
Participant A comes up with the idea that they throw a New Year's party.*

---

- |   |   |
|---|---|
| 1 | A: Hey, why don't we organize a New Year's party together? We could rent Pam's café.  |
| 2 | B: Great idea! We could easily fit 20 people in there.                                |
| 3 | C: Well, hrm, I can't really. I'm going to London to see my brother. Maybe next year? |
| 4 | A: Yeah, perhaps.   |
- 

Here, participant A proposes that they all throw a party together and participant B accepts. But, that does not create any commitment between A and B to throw a party, since participant C has not accepted yet. When C rejects the proposal, he blocks the decision, thus, the commitment between A and B is blocked too. Participant A and participant B may of course decide to do it on their own, without C, but that would require a "separate" decision episode. If participant C a week later talks to participant B and says that the trip to London has been cancelled and that he wants to go along with A's party idea, they cannot rely on a commitment from A to do this. It might very well turn out that A by that time has accepted an invitation to some other party for New Year's Eve.

In situations where more than one accepting is necessary to make a decision, and where a decision actually is made, then it is when the "last" of the relevant participants perform his accepting that the obligation is created. Hence, that act could be singled out as the decision act or the act that realizes the potential obligations expressed by the previous speakers. Sabourin and Geist (1990:406) seem to have this view when they speak about 'the proposal/decision adjacency pair'. I find it rather counter intuitive, however, to view a single act by a single participant as a group act, and that a single participant could make a group decision. Thus, the obligation is something that somewhat mysteriously arises from fact that everybody agrees. When each individual has said that he *wants* the decision to be made, then the decision *has* been made.

In order for the proposing-accepting to become a decision, it is crucial that expressed dissent (rejecting) is absent. The following excerpt illustrates the importance of this absence:

**Excerpt 5-3. V770301, line 733: Illustration of the importance of the absence of rejectings.**

---

*A is the chairperson in a committee of municipal administrative officials. They are discussing principles for leasing agreements for premises. The chairperson summarizes what has been said into a new proposal (from #1# to #2#). X is one of the participants, but it is unclear which one.*

---

1	<p>\$A: nä å å då då e de olika för ja tror att de E så att de varierar #1# men kunde vi inte uttrycka som en viljeinriktning då va att vi önskar skilja // e: lokaldelen från dom driftskostnader som uppstår så att säja va och att vi använder de som princip och att de sen ska framgå väldit tydligt då i uthyrningsavtal å annat att de är så // å å så funderar ni på hur man kan lägga upp de va de: #2# &lt; // &gt; #3# ö: och sen så tittar vi lite på fritis taxer</p> <p>@ &lt; event: several participants nod, mumble and start turning papers etc. &gt;</p>	<p><i>\$A: no and and then that is different since I think that DOES vary #1# but couldn't we say that the direction of our intent right is that we want to separate // er: the facility part from the running costs that come up so to speak right and that that is our principle and that we then make it clear in the rental agreements and things that this is the way it is // and and then you think about how to work it out right #2# &lt; // &gt; #3# er: and then we can look at the recreation fees a little</i></p> <p><i>@ &lt; event: several participants nod, mumble and start turning papers etc. &gt;</i></p>
2	\$X: m:	\$X: m

The interesting part is the pause at the end of participant A's utterance (from #2# to #3#), where the other participants nod, mumble, start turning papers etc. Although some of them, by nodding and mumbling, might be considered as explicitly accepting, most of them simply start doing something else. During the pause, participant A looks around in the group, clearly checking if anybody has anything to object. By doing so (and by the context) he creates a perfect opportunity for anybody to object, when no one does, the absence of rejection of the proposal is significant.

It should be noted that there may be situations where the absence of rejection connotes something other than silent consent; in such cases the absence cannot be interpreted as accepting (see pp. 204-6 below).

The analysis above makes proposing the foundation of group decision-making interaction (the act is given a similar prominence by Sabourin & Geist (1990)). For that reason, other communicative acts must be analyzed in relation to proposing. This is precisely what I shall do now.

### 5.3.3 Arguing, giving background information, modifying proposals and reformulating proposals

If the receiver rejects a given proposal, the participants disagree on what should be done, which means that the prerequisites for arguing are set (see p. 132). Since the proposal concerns an action that the group should do together (in a weak sense of the word), there is also an incentive to turn disagreement into agreement. Arguing has already been described as an activity targeted at reaching a shared view on an issue, in this case on what should be done. This explains why arguing is common in group decision-making, and a typical example is shown below:

**Excerpt 5-4. V770201, line 835: Example of arguing in group decision-making.**

*A company has gathered to discuss its future. The manager, participant A, has compiled a list of prospective customers that he wants to discuss at the meeting. In utterance 1 participant H suggests that they all go through the list, from the top, together; participant A objects to this in utterance 2.*

1	\$H: kan vi inledningsvis gå igenom dom kund nummer ett här då / kund nummer ett står längst upp kund nummer två /	\$H: could we start by going through them customer number one here like / customer number one is at the top customer number two /
2	\$A: men vi kan ju inte gå igenom det här är ju nästan sextio namn eller / kan ju inte jobba igenom det // inledningsvis // tycker ni att det finns frågetecken	\$A: but we can not go through this is almost sixty names right / can not work through that // for a start // do you think there are doubts

Here participant H proposes that they should go through the list customer by customer, and participant A rejects that idea. Doing so, he provides an argument (that it would take too much time), and indeed leaves the actual rejecting to be inferred from the giving of the argument.

On a more abstract level, the proposing can be seen as a Suggesting Modification of the Shared View (see p. 141), the view on what should be done; this reveals the close connection between group decision-making and arguing. The communicative acts found in arguing, therefore, show up in group decision-making as well. Further, since the issues that are to be decided on often are quite complex, it is not surprising that there is plenty of information giving about background issues or about a proposal, moreover, requests for such information are also common. These acts can be difficult to distinguish from arguments for or against the proposal:

**Excerpt 5-5. A792501, line 1292: Illustration of the difficulty distinguishing arguments from providing background information.**

*A committee in an Esperanto association goes through a list of newly published Esperanto literature, deciding what to buy. The list is very long, and each participant presents the books s/he finds interesting and the remaining books are left without comment. Participant A presents a book about Zamenhof, signaling that he is interested in buying the book; participant B points out that it includes a horoscope. They all joke about this for a while, and then participant A provides an argument for buying the book.*

1	\$A: // visst // öh ja sedan är här ju då ett par <1 >1 öh <2 esperantoanknytningar (det är) <3 Cherpillod igen >3 >2 han kommer här med med dato faktoj lokoj om Zamenhof alltså [381 eller z ]381 (...) [382 samma ]382	\$A: // sure // er yes and there are also a couple <1 >1 er <2 associations to esperanto (it's) <3 Cherpillod again >3 >2 he is here with with dato faktoj lokoj about Zamenhof that is [381 or z ]381 (...) [382 the same ]382
---	---	---

	@ <1 hesitation sound >1 @ <2 chuckle: C >2,<2 laughter: E >2 @ <3 chuckling >3	@ <1 <i>hesitation sound</i> >1 @ <2 <i>chuckle: C</i> >2,<2 <i>laughter:</i> <i>E</i> >2 @ <3 <i>chuckling</i> >3
2	\$C: [381 m ]381	\$C: [381 m ]381
3	\$D: [382 öh ]382	\$D: [382 er ]382
4	\$B: [382 ja just det ]382 ja det var ju den med eh horoskop eller vad det var	\$B: [382 <i>yeah right</i> ]382 <i>yes that</i> <i>was the one with er horoscope or</i> <i>something</i>
5	\$A: // JA / det <1 tror jag det stod ja / >1 ja visst / horoskopo de Zamenhof ja @ <1 laughter: C >1	\$A: // YES / it <1 <i>said so didn't it</i> / >1 <i>yes of course / horoskopo de</i> <i>Zamenhof</i> @ <1 <i>laughter: C</i> >1

(... 14 utterances where the participants joke about the horoscope ...)

20	\$A: men öh men det här med datoj faktoj lokoj är ju [389 rätt ]389 [390 intressant ]390 därför att jag tror nog att han [391 är e en sån där kalenderbitare som ]391 som nä	\$A: <i>but er but I think that this</i> <i>datoj faktoj lokoj is</i> [389 <i>kind</i> <i>of</i> ]389 [390 <i>interesting</i> ]390 <i>because I think that he is probably</i> <i>[391 a er you know a statistics nut</i> <i>that ]391 that no</i>
21	\$D: [389 (...) ]389	\$D: [389 (...) ]389
22	\$C: [390 m ]390	\$C: [390 m ]390
23	\$C: [391 om vi nu få horoskopet på köpet så gör det ingenting alltså ]391	\$C: [391 <i>if we get the horoscope as</i> <i>well does not matter right</i> ]391
24	\$C: nä	\$C: <i>no</i>
25	\$A: så eh / <3 men kanske >3 //	\$A: <i>so er / &lt;3 but maybe &gt;3 //</i>

In utterance 1, the chair proposes to buy a book about Zamenhof; in utterance 4, participant B says that that book contains a horoscope of Zamenhof. This can be seen as an elaboration of the proposal or giving background information, but it is also clear from participant A's reaction in utterance 5 (a somewhat embarrassed admission), and C's laughter, that the horoscope part is a disadvantage for the book. Utterance 4 can be understood as an argument against buying it.

When a proposal has been made it can be elaborated upon and generally *modified* by the original proposer or someone else, sometimes in response to an argument against it or a request for elaboration, and sometimes as part of showing acceptance. Excerpt 5-6 illustrates:

*Excerpt 5-6. V770301, line 1591: Example of a proposal being modified.*

*Administrative officials of a City District in a Swedish city are discussing the participation in a fair. Different departments of the city administration will see to their own participation, and they will get extra money from the central administration for this. In utterance 1 participant J asks the chair if they should coordinate the participation.*

1	\$J: finns de nån anledning å samordna de här	\$J: is there any reason to coordinate this
2	\$A: // ja de e väl närmast det så a säga ska vi backa upp de på någe sätt via samordning eller så #1# så att de inte bara rinner ut #2#	\$A: // well yes I guess that is the question should we back this up somehow with coordination or something #1# so that it does not come to nothing #2#
3	\$X: [102 ja de tror ja ]102	\$X: yes I think so
4	\$C: #3# [102 ja tror de e ]102 bra å göra #4# se vilka som e intresserade så får man då bedöma e de så att var å en tar tar de på egen hand eller (väljer å göra något gemensamt) // men i alla fall att man kanske försöker å se vilka de e som ska vara me (...) så vi får en överblick på de #5# / ja tar gärna på mej de i så fall	\$C: #3# I think that would be good to do #4# see who is interested and then we can judge will everybody do it on their own or choose to do something together // but anyway that we perhaps try to see who it is that is going to participate (...) so we get an overview of it #5# / I will be glad to do that in that case
5	\$A: m bra	\$A: m good
6	\$X: m	\$X: m
7	\$X: m	\$X: m
8	\$A: och då återkommer du om vi har nära behov om de finns behov så att säga att stödja även de	\$A: and then you get back to us if we have any needs if it is necessary so to speak to support that too

Here participant J makes a proposal,<sup>1</sup> and the chair (participant A) reformulates the proposal in utterance 2 in a way that shows that he is in favor of it (#1# to #2#). Participant C first shows acceptance (#3# to #4#), and then elaborates the proposal (#4# to #5#), specifying what should be done and why. The difference between modifying a previously made proposal and making a new proposal is not obvious. How much can a proposal be modified without being a new proposal? In a strict analysis, all modification must be seen as forming new proposals, but in actual conversations it may be convenient to view minor modifications of proposals as just that, not new proposals.

One important version of proposal modification is *reformulation* of a proposal, where the original proposal is repeated, but with the inclusion of some modifica-

1. It is difficult to say if it is an ordinary proposal or a non-stanced one (see section 5.3.6).

tion and/or elaboration that already has been made, or at least focusing on the essence of the proposal.<sup>1</sup> A reformulation does not add anything new to a proposal, but simply gathers what has already been said:

**Excerpt 5-7. V770901, line 848: Example of a reformulation.**

*Participant A is the chairperson in a committee of municipal administrative officials for a city in Sweden. They are discussing the recruitment of new personnel. In utterance 1 the chairperson brings up the question, and it is then discussed for a while. In utterance 121 the chairperson makes a summary. Börje is one of the participants (not active in this excerpt).*

1	\$A: då försöker vi me den <   > och e då ha vi de hä me kostchef @ < clear throat: T >	\$A: let's try that <   > and then there's the issue with a municipal nutritionist @ < clear throat: T >
2	\$E: m	\$E: m
3	\$A: // då e egentlien frågan ska vi bredda rekryteringsamlingen i avvaktan på att [118 (...)]118 (beslut)	\$A: // the question is really should we broaden the recruitment set while waiting for the [118 (...)]118 (decision)
4	\$E: [118 m]118	\$E: [118 m]118
5	\$X: m	\$X: m
6	\$E: och de e fy+ de e tre tider e inbokade / intervjutider / å en fjärde en fjärde som vi prata me också men inte fått tid / e sen kan beroende på den övergången så skulle de kunna bli ytterligare någon	\$E: and there are fou+ there are three interview / dates set / and a fourth a fourth one that we spoke with too but couldn't get a time / er and depending on that change there could be another one as well
<i>114 utterances where the recruiting is discussed</i>		
121	\$A: okej men de praktiska [1000 fixa]1000 ni vid sidan å de behöver vi inte tala om [1001 /]1001 utan vi konstaterar då att e / organisationen för // för va vi lägger kostenheten är fortfarande en öppen fråga och e / den tar vi upp vid ett senare tillfälle då när den e lite bättre beredd å i avvaktan på de så tar Börje över huvudansvaret för rekryteringen av kostchef	\$A: okay but you take care of the practical [1000 things]1000 on the side we need not talk about them [1001 /]1001 but we observe that er / the organization for // for where we locate the food unit is still an open question and er / we'll return to it on a later occasion when it is a bit better prepared and while waiting for that Börje takes the main responsibility for the recruitment of a new municipal nutritionist

1. Some CA researchers would refer to this phenomenon as *formulations*, as for example (Gafaranga and Britten 2004:148). However, formulations, as described originally by Garfinkel and Sacks (1970) and also by Heritage and Watson (1980), are a kind of meta-comments, describing what is going on in the conversation, which makes it a much wider concept than the quite specific concept of reformulations, as used here. It is also questionable whether Gafaranga's and Britten's uses of the term are really in harmony with Garfinkel and Sacks' use.

122	\$E: [1000 m ]1000	\$E: [1000 m ]1000
123	\$E: [1001 nä ]1001	\$E: [1001 no ]1001
124	\$X: m ///	\$X: m ///

In utterance 3, the chair proposes that they continue to look for candidates for the municipal nutritionist post while waiting for some other decision. The proposal is discussed at length, and in utterance 121 the chair summarizes the outcome of the discussion into a proposal. The discussion is too long to be presented here, but the point of the example is that utterance 121 does not add anything new; it “gathers” what has already been said and what the chair (participant A) believes everybody agrees on.

Reformulations are not necessarily completely neutral summaries of previous discussion, but can of course be biased. This can make it difficult to distinguish a modification of a proposal from a reformulation of a proposal (see also *Summaries*, p. 201).

### 5.3.4 Elicitations

Participants can elicit most kinds of communicative acts explicitly; for example, they may ask for proposals, request elaboration of a proposal, or ask for acceptance.

#### *Excerpt 5-8. A850701, line 83: Example of an eliciting of proposal.*

*Meeting with the building committee of the municipality in a rural area in southern Sweden. In utterance 1 the chairperson introduces the subject of electing a verifier for the minutes (#1# to #2#), and elicits proposals (#2# to #3#).*

1	\$R: #1# vi ska börja me punkt ett de e utseende av justeringsman för kvällens protokoll #2# / får ja be om förslag #3# //	\$R: #1# we shall start with paragraph one that is er appointing a verifier of tonight's minutes #2# / are there any suggestions #3#
2	\$Y: ska vi föreslå e Johansson	\$Y: should we suggest er Johansson
3	\$R: e Erik Johansson är föreslagen räcker förslagen	\$R: er Erik Johansson is suggested are there enough suggestions
4	\$X: ja	\$X: yes
5	\$R: väljes Erik	\$R: is Erik elected
6	\$X: < ja > @ < comment: several participants >	\$X: < yes > @ < comment: several participants >
7	\$R: svaret e ja <   > // @ < event: strike of chairperson's gavel >	\$R: the answer is yes <   > // @ < event: strike of chairperson's gavel >

In utterance 1, the chair elicits proposals, and these are provided in utterance 2.

Requesting elaboration of a proposal can be a way of objecting to a proposal, but it can also be something more neutral; one might simply need more information about the proposal before it can be evaluated properly.

**Excerpt 5-9. A771101, line 210: Example of a request for background information.**

*Participant A, a communication researcher, is talking to participant B, a company manager, about a study performed at the company. In utterance 1 participant A suggests that he should be allowed to make recordings at the company. Participant B only gives very neutral feedback in utterance 2, which means neither yes nor no, and participant A provides arguments for his proposal in utterance 3.*

1	\$A: å då ja ja fråga Hed då om vi skulle kunna få göra nära inspelningar här	<i>\$A: and so I I asked Hed if we could do some recordings here</i>
2	\$B: m	<i>\$B: m</i>
3	\$A: å vill ja säga också de fullständit / <   > betryggande ur anonymitetssynpunkt va du tar bort / alla identifikationer vi kan även ta [21 bort ]21 att de e gjort i Meckelstad precis [22 alltså ]22 me allting [23 va ]23 @ < hesitation sound >	<i>\$A: and I would like to say that it is completely / &lt;   &gt; satisfactory as regards anonymity like you remove / all identification we can even [21 remove ]21 that it has been done in Meckelstad right [22 so ]22 with everything [23 like ]23 @ &lt; hesitation sound &gt;</i>
4	\$B: [21 m ]21	<i>\$B: [21 m ]21</i>
5	\$B: [22 m ]22	<i>\$B: [22 m ]22</i>
6	\$B: [23 m ]23 <   > ö // ja inspelning me hjälp utav ä bandspelare eller ä @ < inhalation sound >	<i>\$B: [23 m ]23 &lt;   &gt; er // yes recording with a er tape recorder or er @ &lt; inhalation sound &gt;</i>
7	\$A: ja ur VÅR synpunkt HELST me hjälp av video / men om de möter stort motstånd så kan vi gå tibaks på den va men <   > de vi har inga möjligheter att titta till [24 exempel ]24 på minspel å sånt va å en massa såna saker om vi inte har video men // ja kan förstå @ < hesitation sound >	<i>\$A: well from OUR point of view PREFERABLY with video / but if that meets great opposition we can back off on that one right but &lt;   &gt; it we have no possibility to look [24 for example ]24 at facial expressions and such right and a lot of such things if we do not have video but // I can understand @ &lt; hesitation sound &gt;</i>

Participant B's question in utterance 6 is a quite simple way of finding out something which is of importance, namely whether the proposed recordings are video or audio recordings. One might speculate whether this is a way of "buying time" for participant B to ponder the proposal, or some kind of preparation for a re-



jection,<sup>1</sup> but on a more direct level it is an elicitation of elaboration of the proposal made in utterance 1.

### 5.3.5 Proclamation and topic introduction

In formal meetings the start and end of a decision episode is sometimes marked quite clearly. Typically, a meeting follows an agenda, and when moving to a new point on the agenda the topic is introduced without a proposal being made.

**Excerpt 5-10. A850101, line 230: Example of a topic introduction.**

*A meeting with the board of a municipality in a rural area in southern Sweden. In utterance 1 the chairperson brings up an issue about employments at the municipality office (#1# to #2#), and then makes sure that all members have received information about the issue (#3# to #4#).*

1	\$A: e / #1# punkten e // åtta angående tjänster på kommunalkontoret #2# / vill du / #3# di / ni har fått ut dom här / skrivelserna va #4#	\$A: er / #1# paragraph er // eight concerning employments at the municipality office #2# / would you / #3# they / you have received these / papers right #4#
2	\$X: m / < ja > @ < ingressive >	\$X: m / < yes > @ < ingressive >
3	\$A: å ni har tagit del uta dom och / Allansson kanske / kan närmare redogöra för de / varsågoda	\$A: and you have read them and er / Allansson perhaps / can present them in greater detail / please
4	\$D: herr ordförande ...	\$D: mister chairperson ...

In utterances 1 and 3 the chair introduces the topic, and then leaves the proposing to participant D. This kind of topic introduction appears in less formal situations as well, as in the following excerpt.

**Excerpt 5-11. A462701, line 65: Example of a topic introduction in an informal context.**

*A start-up meeting for a research project in the humanities. In utterance 1 participant J starts talking about nature and culture, which prompts participant T to bring up the question in utterance 2 about which concept of culture they should use in the project.*

1	\$J: ... åtminstone om man uppfatta verkligheten som dikotom / de vill säja kultur natur	\$J: ... at least if you perceive reality as dichotomous / that is culture nature
2	\$T: a / men vilket kulturbegrepp ska vi ha	\$T: yeah / but which concept of culture should we have
3	\$J: / <   > a just de de beror ju på hur man uppfattar de @ < clear throat >	\$J: / <   > yeah true that depends on how you perceive it @ < clear throat >

1. This can be compared to the idea of *insertion sequences* and *dispreferred seconds* in CA; see for example (Levinson 1983:332 ff).

Here, participant T introduces a topic by asking a question (in utterance 2), without proposing anything.

At the other end of the decision episode, formal meetings sometimes contain contributions that proclaim the decision that just has been made. Excerpt 5-8 on p. 167 above contain such a contribution in utterance 7. The chair declares the result of the election/decision, and marks this with a strike of his gavel. I have not found any such contributions in informal conversations, although similar things are thinkable, as in the following, invented example:

**Figure 5-2: Informal proclamation.**

*A and B are in a grocery store, buying food for a dinner.*

1	A: What do you say, should we make a separate dish for the kids? Pasta and meat balls?
2	B: Yes, that's a good idea.
3	A: Then we'll do that.

In utterance 3, the decision is simply acknowledged, or proclaimed, analogous to the proclamation in utterance 7 in the formal situation in excerpt 5-8.

### 5.3.6 Non-stanced proposing

Sometimes a participant can present a proposal to the group without revealing if he wants the action to be done, or if he wants the receivers to consent to doing it (items ii and iii in the characterization of proposing above). An example is given in excerpt 5-12:

**Excerpt 5-12. A850701, line 98: Example of a non-stanced proposal.**

*The building permit committee of a municipality in a rural area in southern Sweden has a meeting. They are going through applications for building permits. In utterance 1, the chairperson presents an application, which is commented on in utterance 2.*

1	\$R: ... // (de) / e vi framme vi byggnaslovsansökningar / industriarbetare Lars Jönsson Vektorsvägen tre Lessebo enfamiljshus å garage (å tomt Berket) Snickarebo ett etthundrasju Bäckhult //	\$R: ... // (it) / we have reached applications for building permits / industry worker Lars Jönsson three Vektorsvägen Lessebo single family house and garage and (and plot Berket) Snickarebo one one hundred seven Bäckhult //
2	\$B: här ligger en lapp i ärendet att e de skulle vara en annan beteckning / (ett nittitvå) e de en annan tomt också då då gäller ju inte situationsplanen men vi får ju behandla de alleles som föreligger vi kan inte behandla nånting som vi inte vet nånting om	\$B: there a note here about this matter that er there should be another identifier / (one ninety two) if it is another lot then the site plan is not valid but we have to take it up as it is given to us we cannot take up something we do not know anything about
3	\$R: nähe	\$R: okay

4	\$B: här e allså den situationsplanen som föreligger / å här e ritningarna // å där e ingenting att erinra / mot de // där föreligger inget hinder för byggnadsnämnden att bevilja byggnaslovet	\$B: so here is the site plan that we have / and here are the blue prints // and there is nothing to object against that // and so there is no impediment for the building permit committee to grant the building permit
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In utterance 1, the chair introduces the next topic without revealing anything about his own opinion on the subject. Still, the utterance functions as an elicitor for evaluation to the other participants. In addition, participant B produces an accept in utterance 4. The proposal is quite clear, but participant R is not really the one proposing. Rather, participant R presents a proposal that the applicant (Lars Jönsson) has made. The communicative act in utterance 1 is called a *non-stanced proposing*, with the following characterization:

- i) It presents or points out a future or on-going action A as a possibility.
- ii) The sender S does not reveal if he wants A to take place.
- iii) S wants the receiver(s) to evaluate A.

Utterance 1 is also a topic introduction; a single utterance often serves these two functions. However, a topic introduction need not be a non-stanced proposing, as excerpt 5-11 and 5-12 show, nor does a non-stanced proposing need to be a topic introduction, for example when somebody, while discussing some issue, presents an alternative but argues against it.

Note that it might be quite difficult to say whether a proposing is non-stanced or stanced, both for the other participants and for the analyst. The attitude towards a proposal can be communicated with prosody, gaze and other non-verbal communication, making it less explicit. This ambiguity is probably exploited by participants who make the proposals in order to avoid committing themselves too strongly to the proposal, while hinting that they are positive to it. See pp. 206-10 for a discussion of this.

### 5.3.7 Other acts

The group decision-making episodes in these recordings contain many communicative acts and sequences that are not specific for group decision-making, such as feedback, clarifications and own communication management (Allwood 1995). Episodes may contain longer or smaller segments where participants leave the actual decision-making to engage in some other activity. This may be something directly relevant to decision-making, such as finding some relevant information in some papers or setting up technical equipment, but it can also be a diversion, such as discussing what happened last weekend or commenting somebody's new hair-cut.

### 5.3.8 Reflections and expectations

There are interesting cases when a decision episode begins with the group starting to do something (or treating an issue as if a decision has been made on it), and then somebody objects to whatever the group is doing:

*Excerpt 5-13. V321601, line 125: Example illustrating the importance of reflection.*

*A choir has been invited to participate in a show that an artist is setting up. Information has been sent to the choir members some days before, and now, during a rehearsal, participation in the show is being discussed. Participant A is the conductor, participant B is a member of the choir board, and participant G is a member of the choir who is not a member of the board. In utterance 1, participant A presents the situation and invitation, and then the choir discusses the details of participation for quite a while. In utterance 23, participant A details how each member should report which days he or she can participate in the show.*

1	<p>\$A: ... de är väl förmodligen för att Magnus Uggle har nått jubileum // och där ska han ha föreställningar nu hela hösten på // på Rondo och då vill dom ha en / kör som sjunger ett e // nått slags barockstycke / nyskrivet barockstycke i början av den föreställningen / två minuter drygt / e långt // e // å de är ju asså en förfärlig massa föreställningar onsdag torsdag freda lördag // hela hösten från den tjugoförsta september / fram till den nittonde DEcember // å då ve de var de två körer som fick denna förfrågan via musikhögskolan // de va &lt;2 Con Sonora &gt;2 och // &lt;3 Illfyr &gt;3 Britta Krame hon som / ledde en afrikan+ // afri+ af+ afrikan+ // (...) /// dom kan inte ta allting naturligtvis ( &lt;4 fs &gt;4 ) inga möjligheter (utan) dom frågade oss / om vi &lt;5 vi+ &gt;5 var intresserade å då skickade jag ut de här mejlet / (...) fundera på till idag / och dom har även frågat // Godehamns kammarkör om dom kan ta något // å då har vi kommit ner till att / vi / om de e möjligt // #1# om vi vill de här för de första #2# // så / får vi / i uppdrag att försöka lösa / tre stycken veckor / ...</p>	<p>\$A: ... it is probably because Magnus Uggle has some kind of anniversary // and he is going to have shows there this entire autumn at // at Rondo and then they want a / choir singing a er // some kind of baroque piece // a new baroque piece at the start of that show / just over two minutes er long // er // and it is a terrible lot of shows wednesday thursday friday saturday // the entire autumn from twenty first of september / up until nineteenth of DEcember // and then there were two choirs that got this request via the academy of music // it was &lt;2 Con Sonora &gt;2 and // &lt;3 Illfyr &gt;3 Britta Krame the one who / conducted and africa+ // afri+ af+ africa+ // (...) /// they can not take all of if of course (there is) no possibility (but) they asked us / if we want+ were interested and then I sent this email / (...) consider until today / and they have also asked // Godehamn chamber choir if they can take something // and then we have come up to that / we / if it is possible // #1# if we want this first of all #2# // then / it will / be our task to try to sort out / three weeks / ...</p>
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	@ <2 name of choir >2 @ <3 name of choir >3 @ <4 estimated full expression: det finns >4 @ <5 cutoff: vill >5	@ <2 name of choir >2 @ <3 name of choir >3
<i>21 utterances where the choir discusses practical details of participation.</i>		
23	\$A: < så // så tror ja de e s att // de visar sej / har man då // i första hand > så skriver man upp sej å ja har en sån här // en sån här lista // å de e en massa rö:da siffror här och under dom / kryssar man i å säger att / de där kan ja / å de e aså onsdag torsdag freda lördag / varje vecka / vecka fyrtifvra fyrtifem fyrtisex /// e / å / tyvärr / eller så / så e de så att vi må:ste på nåt sätt lämna besked ikväll om de e möjligt / s att vi behöver ta en stund till detta // så att / kan ni // kan ni egentlien göra så här att ni // under den här repetitionen nu på nåt sätt så kan ni väl göra nån anteckning nånstans att jag kan inte / (...) vecka den å den å [13 den dan ]13 @ < event: many people talking and laughing >	\$A: < and // and that's the way it is I think so / we'll see / if you got // first and foremost > you write your name and I have this // this list here // and there are lots of red numbers here and under them you tick the box saying that / I can come this time / and it is Wednesday Thursday Friday Saturday / every week / week fortyfour fortyfive fortysix /// er / and / unfortunately / or it / it turns out that we ha:ve to in some way answer the invitation tonight if it is possible / so we need to take a moment for this // so / you can // you can actually do it like this you // during this rehearsal in some way you can write down somewhere that I can't // (...) week this and this and [13 this day ]13 @ < event: many people talking and laughing >
24	\$G: [13 har ]13 vi sagt att vi ska göra de som kör	\$G: [13 have ]13 we said that we are going to do it as a choir
25	\$A: #3# nej de har vi inte gjort / de ser vi ju inte förrän e #4# / [14 eller // jaha en ]14 diskussion om vi ska göra de över huvud taget #5#	\$A: #3# no we haven't done that / we won't see that until er #4# / [14 or // okay a ]14 discussion if we are going to do it at all #5#
26	\$B: [14 men en diskussion eller ]14	\$B: [14 but a discussion right ]14
27	\$B: a: e styrelsen tyckte att vi skulle göra de om de e så att folk vill å kan så sa vi vi bara glömde säga de < förut > @ < giggle: several people >	\$B: yeah er the board thought we should do it if it is the case that people want to and have the opportunity we said that we we just forgot to say that < before > @ < giggle: several people >
28	\$A: [15 ja ]15 / ja men de e ju rätt ordet e fritt <   > @ < event: C raises her hand >	\$A: yes / yes but that's right the debate is open @ < event: C raises her hand >

In utterance 1 the conductor makes a non-stanced proposing, informing members about the invitation without really revealing what his attitude towards it is. He does specify that the choir should make a decision on whether they should participate at all (#1# to #2#), but this is not followed up. In utterance 23, the

conductor has started to instruct people what to do, as if the choir had already decided that participating in the show is a good idea; it seems that it all depends on whether or not enough members have enough time to spare. In utterance 24 a member raises the question of whether the choir should participate at all, independent of whether its members can spare the time or not. Participant A first misunderstands the question (#3# to #4#), but assisted by participant B in utterance 26, he realizes his mistake (#4# to #5#). The board member B makes a kind of apology in utterance 27 for not having put that question to the choir, and the conductor invites all members to give their view on the issue. The conversation continues for several minutes with choir members doing so (mostly arguments in favor of participating in the show).

From an analytical viewpoint, the tricky part here is that although utterance 24 sparks off a group decision, it is not (obviously) a proposing. So how should it be analyzed? One alternative is to base the analysis of the example on presuppositions, similar to Severinson Eklundh's (1983:21 ff.) analysis of dialogue, using the concepts of *latent sub-games*. For our purposes, a latent sub-game can be described as a presupposition that is understood and accepted by the listener:<sup>1</sup>

A: The king of France is here.

B: Is he? I thought he had gone home for the weekend.

Here the phrase 'the king of France' presupposes that there is a person that can be referred to with that phrase, and participant A expects participant B to be able to identify that person. Participant B readily does so, and the latent sub-game stays latent. However, if participant B is not able to identify the person, then the latent sub-game becomes a free one, as in the following example:

A: The king of France is here.

B: There is no king of France!

A: Jean-Pierre Dupont, the professor of Philosophy. We call him the king of France.

B: Oh. Very funny. He's bald. But I thought he had gone home for the weekend.

Here participant B misunderstands the reference of the phrase 'the king of France', and protests against its presupposition. The latent sub-game is then realised into a free sub-game, aimed at identifying the referent of the phrase 'the king of France'. It should be said that there may be many latent subgames in a single utterance, and only the ones that the listener questions become realized into free sub-games.

Utterance 24 in excerpt 5-13, then, might be the realization of a latent sub-game. However, it is tricky to find the precise part of utterance 23 that carries the presupposition that utterance 24 would be a protest against, especially if that presupposition should not be carried by any of the previous utterances (2-22, where de-

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1. See for example (Levinson 1983) for a detailed discussion of presuppositions.

tails of the participation is also discussed). One must remember that presuppositions are tied to specific words or phrases, and generally are not very dependent on context (Levinson 1983:179). Utterance 24 seems to be a protest against the relevance of utterance 23, rather than its validity or intelligibility. One could assume a very general relevance presupposition, that every utterance presupposes that it is relevant at its current place in the current conversation, but that would overlap with Grice's maxim of relevance or Allwood's assumption of goal efficiency (see p. 26-7 ff.), and be better handled as an implicature rather than a presupposition.

A better alternative is to analyze the situation in excerpt 5-13 in terms of reflection. A participant in an activity can at any time reflect over the activity structure, the language used, the purpose of the activity, or something else in the situation and this reflection may lead to communicative behavior, such as utterance 24 in 5-13. There was no particular phrase or communicative act in the preceding utterances that participant G reacted against, rather, the entire discussion had come to concern a level of detail that would only be relevant if the choir decided that it would like to go along with the project. The result is essentially that utterance 23 creates an implicature stating that its level of detail is relevant, and thus that the choir has decided to participate in the show. One could also say that the general behavior of the conductor creates this implicature. However, this implicature is not obvious and it is likely that several participants have not noticed it. Further, the amount of time spent on the details is probably crucial, so utterance 23 might have been allowed to pass, had it not been for the fact that the details had already been the topic for discussion for a while (utterances 2 through 22). These two factors – that the implicature is non-obvious and that it is connected to the amount of time spent on the issue – make it questionable whether to call it an implicature at all. The reflection made by participant G is more important.

Participant G then points out that participation is a possibility, eliciting evaluation from the other members, without really revealing her own attitude towards participation. In other words, she makes a non-stanced proposing.

Another example warrants a similar analysis:

***Excerpt 5-14. A462701, line 201: A situation which can be analyzed with the concept of reflection.***

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*Some researchers in the humanities have gathered to discuss a common research project concerning culture and nature. They have been discussing the concept of culture for a while (approximately 40 utterances). In utterance 5 participant M claims that they are talking about things they should not talk about (right now).*

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1	\$J: ja / ja precis / asså de / de kulturbegreppet som ja e ju fakti+ ha ju förekommit rätt ofta i
---	--

\$J: yes / yes exactly / you know the / the concept of culture that I is actu+ has been used quite often i social
---

	socialantropologin // de e ju liksom de hä breda de kallas ju till å me för omnibus: / ibland va /	<i>anthropology // it is like this wide it is indeed even called omnibus: / sometimes right</i>
2	\$S: < omnibus > @ < quiet >	<i>\$S: &lt; omnibus &gt; @ &lt; quiet &gt;</i>
3	\$J: a: jo om ni tittar på Kroebers två [26 hundra ]26 kulturdefinitioner [27 så förekommer de rätt ofta ]27	<i>\$J: yeah yes if you look at Kroeber's two [26 hundred ]26 definitions of culture [27 then you will see that it occurs quite often ]27</i>
4	\$M: [26 men ]26	<i>\$M: [26 but ]26</i>
5	\$M: [27 a: m: ]27 / men ja har en liten ordningsfråga fö ja / upplever <   > att de va inte de som vi skulle [28 prata om ]28 @ < puff: J >	<i>\$M: [27 yea:h m: ]27 / but I have a point of order because I / feel &lt;   &gt; that this is not what we were supposed to [28 talk about ]28 @ &lt; puff: J &gt;</i>
6	\$J: [28 nä precis ]28 / å därför ville inte ja heller ta upp den fö fem minute sen nä detta började	<i>\$J: [28 no exactly ]28 / and that is why I did not want to bring it up five minutes ago when this started</i>

My understanding of this example is that one of the participants, M, reflects on the topic of the conversation and finds that he does not like it. In utterance 5, he brings this up for discussion, proposing that they change topic. There is nothing particular in the immediately preceding utterances to prompt his protests, rather, he objects to the entire topic, which has been going on for some 40 utterances.

Excerpt 5-1 above provides an interesting contrast in relation to excerpt 5-13. An interesting question concerning excerpt 5-13 is how participation in the show almost became a planned action without a (proper) decision. The project was quite beneficial for the choir, and the arguments following utterance 28 shows that most members considered it a great opportunity (to make money for the choir). It was thus a fairly easy and obvious decision, and the conductor is likely to have *expected* the choir to go along with the project. However, in 5-1 the conductor tells the choir which song to start rehearsing, and they all start doing as he says. This conductor is not very authoritarian; some member *could* have objected, possibly proposing some other song to start with (such things do happen in this choir). The conductor *could* also have said something like, 'I think we ought to start rehearsing *in carnatus et*, is that ok with you all?', which would have made it a straight-forward proposing. But he did not, and nobody objected to the suggested song. The conductor *could* also have said something like, 'I think we ought to start rehearsing *in carnatus et*, is that ok with you all?', which would have made it a straight-forward proposing. But he did not, and nobody objected to the suggested song. The conductor is likely to have *expected* everybody to follow his suggestion, so he phrased it as information giving, simply stating the name of the song, meaning roughly 'this is the song I have planned to start rehearsing'. He would probably have been quite surprised had anybody objected, just as he was surprised when participant G made her non-stanced proposing in excerpt 5-13. Actions that everybody is expected to consent to can thus be handled with instructions (orders) rather than group decisions. (Although there may be other reasons to use group decisions.)



### 5.3.9 Formal procedures

In formal situations there is typically a set of rules/conventions that the group either is forced to adhere to or chooses to follow. Sometimes these rules are specified as *rules of order* for the organization, and sometimes the participants simply rely on conventions. Precisely which rules of order exist in Sweden, or how well participants in a formal meeting adhere to the written norm, is beyond the scope of the present work. However, several of the mechanisms in formal meetings can be explained with what has been said about group decision-making in general.

A general property of group decisions is that they can be quite elusive; it may be unclear if a decision has been made or not, both for the analyst and participants. The episodes of this kind that were found in the recordings studied here are all too long to be used as illustrations here, but a single utterance from one of the recordings serves the purpose:

*Excerpt 5-15. V770201, line 4719: Example showing that group decisions can be unclear for the participants.*

*A consultancy company has had a long meeting discussing strategies for the future. Reluctantly, participant T has accepted responsibility for organizing an event for prospective customers. The question whether to send letters to the prospective customers was discussed at some length. When participants are about to leave, T returns to the letters.*

\$T: får ja fråga / blev de nära  
brevutskick överhuvudtaget / blev de  
nån som blev beslut / va de nåt  
beslut om brevutskick

\$T: can I ask / were there any letters at  
all / was there any that was decided /  
was there any decision on sending  
letters

Participant T's uncertainty shows that the vague character of group decisions is a problem for the analysts, as well as participants. One of the motivations of formal procedures seems to be that adhering to a system makes decisions clearer. Excerpt 5-2 on p. 159 above illustrates this function. The chair first brings up the topic, referring to an agenda that everybody can look at, making it clear what the topic for decision is. Next, the chair makes a proposal, and asks the rest of the group if they have other proposals. Only when it is clear that no proposal has been missed, does the chair move on to the actual decision by asking the group if the suggested person can be appointed. The verbal report of the members' acceptance licenses the chair to proclaim that the suggested person has been elected, and the decision is sealed with a strike of the gavel. The explicit question to the group if the person can be appointed, in combination with the proclamation, makes the content of the decision very clear. The final strike of the gavel is also a very precise signal of the end of the decision.

However, it should be noted that the use of formal rules in no way guarantees the clarity of group decisions. First, the formal procedures may be difficult to

understand or follow and may confuse the participants more than they clarify, second, it may be difficult in practice to follow them strictly, as illustrated below.

*Excerpt 5-16. A850701, line 460: Example showing that formal procedures may be difficult to follow.*

*The board of a municipality in a rural area in southern Sweden has a meeting. In utterance 1 the chairperson closes issue 10 by proclaiming the result of the acclamation, and striking his gavel (#1# to #2#). He then proceeds to issue 11 (#2# to #3#), but is interrupted by participant V in utterance 2 (asking permission to talk). In utterance 3 the chairperson gives V permission to talk, and in utterance 4, V returns to the previous issue.*

1	\$R: #1# svaret e ja <1  >1 #2# // elva Bäckhult <2 ik >2 Bäckhult byggnad för omklädning med mera avstyckning från fastigheten (...) ettjugonio Bäckhult / förhandsgranskning av situationsplan #3# @ <1 event: strike of chairperson's gavel >1 @ <2 abbreviation >2	\$R: #1# the answer is yes <1  >1 #2# // eleven Bäckhult <2 ik >2 Bäckhult building for changing rooms et cetera partitioning from the lot (...) one twenty nine Bäckhult / preview of situation plan #3# @ <1 event: strike of chairperson's gavel >1 @ <2 abbreviation >2
2	\$V: herr ordförande	\$V: mister chairperson
3	\$R: varsågod	\$R: proceed
4	\$V: e får ja bara återkomma ti förra ärendet / vi får väl skriva lite om konstruktionsritningar där va och /	\$V: er could I just return to the previous issue / we'll have to write something about the construction blue prints as well don't we and /
5	\$R: e de e klart att [49 vi ska ha di ]49	\$R: er well we obviously [49 need to get it there ]49
6	\$V: [49 (...) ]49 [50 ja just ]50 [51 de ]51	\$V: [49 (...) ]49 [50 yes yes ]50 [51 exactly ]51
7	\$R: [50 att vi ]50 [51 ska ]51	\$R: [50 that we ]50 [51 will ]51
8	\$B: [51 har ]51 vi inte fått fått in dom	\$B: [51 haven't ]51 we received them
9	\$V: inte [52 konstruktionsritningarna ]52	\$V: not [52 the construction blue prints ]52
10	\$R: [52 konstruktionsritningarna ]52 [53 vävritningar ]53	\$R: [52 construction blue prints ]52 [53 plan drawings ]53
11	\$B: [53 men dom måste vi ]53 skicka in för granskning också eller du granskar dom kanske	\$B: [53 but we have to send ]53 those for review too or perhaps you can review them
12	\$V: e [54 e ]54	\$V: er [54 er ]54
13	\$B: [54 dom kan du granska ]54	\$B: [54 you can review them ]54
14	\$V: de gör ja	\$V: I'll do that
15	\$B: jaha de vore bra / å skriva nåra rader om de bara så e lägga de ti ärendet /	\$B: okay that would be fins / and just write some lines about it er add it to the issue /
16	\$R: likaså vävritning	\$R: vävritningar too
17	\$V: (arkivritningar)	\$V: (archive blue prints)
18	\$R: < bra > ///	\$R: fine ///

In utterance 4 participant V returns to an issue that has already been decided on (the start of utterance 1 is the end of that decision episode). However, the clarity of the decision is quite lost after the informal additions made in utterance 4 to 18.

Another phenomenon particular to formal situations is voting, for example, cases where decisions have to be made even though consensus has not been reached. In some cases, a manager can decide what to do, but in other cases, voting is used. Note that voting by acclamation cannot always be distinguished from ordinary group acceptance (for example utterance 6 in excerpt 5-8).

The third characteristic of formal procedures is that they give the participants a chance to be prepared. Using an agenda, notifying those who are to attend one week in advance, repeating the proposal before each decision, all work to avoid surprises. An example of this is the meeting with the City District Committee analyzed below. Each party needs to discuss and prepare the issues that are to be decided, and thus only issues that are on the agenda are decided on, normally.

Formal procedures are discussed further on pp. 202-4 below.

## 5.4 Analyses of each conversation in the corpus

All the studied recordings that contain a substantial number of group decision episodes exhibit rather distinct patterns for how a group decision is made. Using the communicative acts and concepts described above, it is now possible to analyze these patterns. In this section the recordings in the corpus will be presented; for each of these, typical patterns for decision-making will be shown.

### 5.4.1 A321001 – Quitting Work, and AXX0101 – Buying a Car

Each of the two recordings contains a single decision episode, that is, a single issue is discussed throughout the recording. It is thus not possible to make generalizations about how decisions are made in these groups. However, these recordings are part of the body of recordings that form the basis the general observations in section 5.5.

### 5.4.2 A321601 – Budget Negotiation

A project leader at a large company has made a budget for his project. At this meeting his managers are to approve or reject the budget. Although the managers have institutional power over the project leader, they all seem to prefer to behave as if the division of power is symmetrical; they try to reach some kind of consensus. The managers explain why they disagree with the budget, and the project leader is allowed to argue for his view. Still, the inequality of the relationship is clear, as shown in excerpt 5-17:

**Excerpt 5-17. A321601, line 208: Assymetrical power relations between participants.**

*The participants have started to go through the budget. The managers (participants A and B) think that the costs that the project leader (participant C) has specified are too high. In utterance 1 participant C is objecting to the way the managers are discussing the budget (in bundles, #1# to #2#), and proposes another way (#2 to #3#). In utterance 2 he is interrupted by participant A, who rejects C's proposal.*

1	\$C: #1# men ska vi göra för ja tror att de e farlit å ta de liksom klumpvis #2# / utan vi kanske ska ta de // del för del då va de gäller manualerna #3# // för e / börjar vi diskutera klumpvis då får vi ju hamnar vi ju // [33 (...) ]33	\$C: #1# but should we because I think that it is dangerous to take it like in bundles #2# / but perhaps we should take it // part by part when it comes to the manuals #3# // because er // if we start discussing in bundles we will have to we will end up // [33 (...) ]33
2	\$A: #4# [33 nej ja tror att ]33 de vi ska göra e väl egentligen att // att diskutera klumpvis vi ansätter en nivå som vi tycker e rimli // och sen så får vi i så fall hellre säga lägga in de som ett / ett < a-spelkort > nån risk i så fall / för resursallokering // i så fall #5# // vi vi kan inte gärna gå ut för / vi vet ju a erfarenhet också att / om du får timmar eller pengar / så har dom en förmåga att så a säga förbrukas #6# @ < letter: a >	\$A: #4# [33 no I think that ]33 what we really should do is to / to discuss in bundles we set a level that we think is reasonable // and then it is better we add it as an < a > playing card some risk in that case / for resource allocation // in that case #5# // we we can't really go out to / we know from experience too that / if you get hours or money / then they have a tendency to be spent #6# @ < letter >
3	\$C: mhm	\$C: mhm
4	\$A: och de måste vi också hålla emot //	\$A: and we have to resist that too //

In utterance 1 the project leader makes a suggestion on how to go through the budget, and the manager (participant A) then quite bluntly refuses (#4# to #5#), arguing that participant C spends money unnecessarily (#5# to #6#). This shows the unequal relationship between the participants.

The budget can be viewed as a proposal from the project leader; therefore, when the managers object to some part in it, then that is a rejection of (a part of) the proposal. The general pattern of what counts as a group decision in this conversation is that a decision has been made when nobody argues about it anymore; at that point, the decision is what the managers want. Excerpt 5-18 illustrates this.

*Excerpt 5-18. A321601, line 283: Example of what counts as a decision.*

*The participants have started to go through the budget. The managers (A and B) think that the costs that the project leader (C) has specified are too high. Participant C has been arguing for quite some time that the costs are well motivated, and he continues to do so in utterance 1. In utterance 2 and 3 the managers state that they still think the costs are too high.*

1	\$C: men detta har inte varit så lätt tidigare // vad det gäller förändringarna i < xojn > // för Dekos / att kunna identifiera skillnaderna // det har inte varit så lätt för oss att göra det // och jag eh // hoppas att det blir lättare i det här projektet men det har inte varit det // @ < abbreviation: xoj >	\$C: but this has not been easy before // regarding the changes in the < xjo > // for Dekos / to be able to identify the differences // it has not been easy for us to do that // and I er // hope that it will be easier in this project but it has not been so // @ < abbreviation: xoj >
2	\$A: nej / men på nåt sätt så måste vi få ner den till till en rimlig [43 nivå ]43 / den här // det här paketet och	\$A: no / but in one way or another we have to get it down to a reasonable [43 level ]43 / this // this bundle and
3	\$B: [43 m ]43	\$B: [43 m ]43
4	\$C: vad tycker ni är rimligt då // vad hade eran bild av / ett dokumentationspaket varit då	\$C: So what do you think is reasonable then // what would your picture of / a documentation bundle have been then
5	\$B: ja	\$B: yes
6	\$A: jag skulle [44 säga ]44 två tredjedelar av det //	\$A: I would [44 say ]44 two thirds of it //
7	\$B: [44 ja ]44	\$B: [44 yes ]44
8	\$B: ja det är fyra+ / +tusen timmar	\$B: yes it is four / thousand hours
9	\$A: m ///	\$A: m ///
10	\$B: det det det det har väl jag också som // känsla då då att det skulle // kunna räcka så att säga	\$B: that that that that is also like my // feeling like that it could // be enough so to speak
11	\$C: men ska vi ta tillbaka det här och så för jag en diskussion igen med // < PA > och // Ulf Svensson // om timmarna ///	\$C: well should we take this back and I will discuss this with / < PA > and // Ulf Svensson // about the hours ///
	@ < abbreviation >, < name >	@ < abbreviation >, < name >

In utterance 4 the project leader (participant C) seems to have realised that it does not matter how much he argues for his costs, and simply asks the managers what they think the total cost should be. They provide this information in utterances 6 to 10, and participant C then accepts that proposal in utterance 11, saying that he will work on the budget to make it shrink to the level that the managers have specified.

Considering the discussion in 3.5.1 and the definition of group decision, one may ask if this is really an example of group decision at all. Is it not just the managers telling the project leader what to do? (It is of course a group decision in the

sense that the managers decide together, but on the other hand it seems like they have made that decision beforehand.) I consider it a somewhat unclear case, but since it has the form of a group discussion, and the project leader is allowed to argue for his case, the conversation has been included in the study.

### 5.4.3 A322501 - Budget Revision

The project leader from the recording Budget Negotiation has gathered his project members to revise the budget. The discussion is centered around the budget document, which is being edited on the project leader's computer. Typically the project leader proposes things, or asks for proposals on specific issues, sometimes by reading parts of the document, and the other participants accept or propose something else. Excerpt 5-19 shows a typical decision episode:

*Excerpt 5-19. A322501, line 861: A typical decision episode.*

*In going through of the budget, the participants have reached a certain part. In utterance 1 the project leader, participant A, asks the other members if they can predict any costs for that particular part of the project.*

1	\$A: ja // har vi nåra kostnader  18.0	\$A: yes // do we have any costs  18.0
2	\$B: i arbetspaketet så står de va står de här står de att man måste göra de flera gånger ///	\$B: in the job package it says what does it say it says here that it must be done several times ///
3	\$A: du menar att de (här skulle levereras) flera [95 gånger ]95 nå de står de finns ett eget arbetspaket på de	\$A: you mean that this (should be delivered) several [95 times ]95 no it says there is a separate job package on that
4	\$B: [95 m: ]95	\$B: [95 m: ]95
5	\$B: ja fast de fick vi ju inte ha eller hur va de	\$B: yes but we were not allowed to have that or were we
6	\$A: jo de e en reserv precis som ö: / a den har ja kallat slutgiltig < ipl > på den (punkten) /// så @ < abbreviation >	\$A: yes it is a backup just like er / well I have called it final < ipl > on that item /// so @ < abbreviation >
7	\$B: mhm // men i detta så behöver man inte hålla på me längd vikt bredd å höjd å natokodningar å allt tjosan	\$B: mhm // but in this there is no need to worry about length weight width and height and nato codes and all that stuff
8	\$A: nä / gör de de i Vinsler	\$A: no / is it so in Vinsler
9	\$B: a	\$B: yeah
10	\$A: okej vi låter den / dära vara då	\$A: okey we'll leave that / one as it is then

In utterance 1, the project leader, participant A, prompts the other participants to evaluate what is already written in the text. During the 18-second pause, the participants probably read the relevant text. After some arguing, participant A agrees in utterance 10 to leave the written text as it is.

Even though the project leader probably has institutional power to decide what to write in the budget, the other participants' opinions seem to be equally important. Not once does the project leader ignore the others' objections; all decisions are made in consensus. However, the project leader is the one who leads the discussion, and he is usually the one who brings up a topic. He decides when to proceed to the next part of the budget, and he is almost always the one who formulates the text. Thus the general key to what counts as a decision in this group is that the project leader proposes something, and unless the others explicitly reject the proposal, it is considered as accepted. The rejections are also counter-arguments rather than counter-proposals, and the project leader is typically the one who phrases the new proposal, or modifies the first proposal to accommodate the objections.

#### 5.4.4 A462701 - Culture-Nature Project

In this recording some researchers have gathered to discuss a common research project concerning culture and nature. They are all equals in terms of institutional power. This decision group is a bit peculiar, in that all the decision episodes found in the conversation concern what to discuss. Quite early in the conversation the question of which culture concept to use arises; some group members want to discuss it and some do not. The general rule seems to be that an issue will be discussed as long as at least one participant wants to discuss it. Here is an example:

*Excerpt 5-20. A462701, line 210: Example of how a single participant "forces" the other ones to keep discussing an issue.*

*The participants have been discussing the concept of culture for a while. In utterance 1 participant M proposes that they stop talking about that.*

1	\$M: a: m: / men ja har en liten ordningsfråga <   > fö ja / upplever att de va < inte de > som vi skulle [28 prata om ]28 @ < sigh: J >	\$M: yeah m: / but I have a question of procedure <   > because I feel that it was not that that we should [28 talk about ]28 @ < sigh: J >
2	\$J: [28 nä precis ]28 / å därför ville inte ja heller ta upp den fö fem minute sen nä detta började	\$J: [28 no exactly ]28 / and that was why I did not want to bring it up five minutes ago when this started
3	\$M: / då ha vi konstaterat att vi har dessa skillnade:r / å så [29 kan vi ta ]29	\$M: / so we have established that we have these differences / and [28 now we can look at ]29
4	\$S: [29 å sen t+ ungefär som e ]29 som min information / så ja tycker de vi ska va [30 tacksamma ]30 fö	\$S: [29 and so t+ about like er ]29 like my information / that's what I think we should be [30 grateful ]30 for
5	\$M: [30 a: ]30 <   > / så vi kan liksom: komma tillbaka ti de nä de bli relevanta nä vi börja formulera våra frågeställningar ja tror [31 att om v+ ]31	\$M: [30 yeah ]30 <   > we can come back like to it when it is relevant when we start to formulate our research questions I think [31 that if w+ ]31

	@ < inhalation sound >	@ < inhalation sound >
6	\$T: [31 men e vi ]31 medvetna om att vi har lite olika kulturbegrepp /	\$T: [31 but if we ]31 are aware that we have somewhat different concepts of culture /
7	\$S: ja	\$S: yes
8	\$T: så räcker de för att diskussionen ska kunna få (...)	\$T: then it is enough for the discussion to (...)
9	\$S: a ja	\$S: yeah yes
10	\$J: men åtminstone asså va ja kommer eftesom de nu e fatist eftesom vi ta upp de va / begreppet SYMBOL e inte oproblematis va /	\$J: but at least I mean what I will since now it is acutally since we bring it up right / the concept SYMBOL is not unproblematic right /
11	\$S: nä:	\$S: no

In utterance 1, one of the participants proposes that they stop talking about the concept of culture, and two of the other three participants agree. Even the fourth participant, J, seems to accept at first (in utterance 2), but turns around in utterance 10 and continues the discussion of culture. The other ones do not protest against this, but simply follow J in the discussion. This is perhaps a peculiarity for this kind of conversational decision (choosing topic), that all participants have a veto for leaving a topic. The same pattern is repeated several times in the conversation.

#### 5.4.5 A792501 - Esperanto Foundation

There are four participants in this meeting, one of whom is the chairperson. Most of the meeting involves going through lists of newly published books in or about Esperanto and deciding which books to buy. The formal rules of the foundation allow differences in opinion to be settled by voting, but that is never used in the present recording. Rather, the degree of unity is massive; compromise is rarely ever necessary. Excerpt 5-21 shows an example:

##### *Excerpt 5-21. A792501, line 1266: Example of a decision episode.*

*The participants are going through a list of books, deciding which books to buy. In utterance 1 participant A points out a new book by an author called Markheden.*

1	\$A: ja e: m och sen finns de ju då ytteliare en ett svenskt // litet verk nämligen Markheden som kommer me < Svedaj // [375 birdoj > (här) ]375 @ < other language: Esperanto >	\$A: yes er m and there is also another a Swedish // little book that is Markheden that is releasing < Svedaj [375 birdoj > (here) ]375 @ < other language: Esperanto >
2	\$C: [375 å då e de en förbättrad ]375 utgåva av den < Svedaj birdoj > som vi redan [376 har ]376 @ < other language: Esperanto >	\$C: [375 and that is an improved ]375 edition of the < Svedaj birdoj > that we already [376 have ]376 @ < other language: Esperanto >



3	\$D: [376 vi ]376 har redan den ja har för mej ja	<i>\$D: [376 we ]376 already have that one I think yes</i>
4	\$A: ha:	<i>\$A: okay</i>
5	\$C: vi har den gamla e: nu vet inte ja hu den här ser ut om den har en: snyggare omslag eller nånting sånt där frågan är då elle om till å me e så att s:aker som va felaktia i den gamla e [377 tillrättade ]377 eller e dom [378 e kompletterade ]378 / så frågan e om vi ska bry oss elle om vi	<i>\$C: we have the old one er I do not know how this one looks if it has a prettier cover or something like that the question is or if even it is the case that things that were incorrect in the old one are [377 corrected ]377 or are they [378 er added ]378 / so the question is if we should care or if we</i>
6	\$D: [377 < a > ]377 @ < ingressive >,< quiet >	<i>\$D: [377 &lt; yeah &gt; ]377 @ &lt; quiet &gt;</i>
7	\$A: [378 a ]378	<i>\$A: [378 yeah ]378</i>
8	\$A: nä de man man kan väl säga om vi // om de e nån som visar intresse för den gamla så kunde man ju då kan de ju vara intressant [374 å skaffa den nya ]374 men de e inte	<i>\$A: no I guess we could say that if we // if there is anybody who shows an interest in the old one then perhaps we could then it could be interesting [374 to get the new one ]374 but that isn't</i>
9	\$C: [374 å de ha ingen gjort < skulle ja vilja säga > ]374 @ < giggling >	<i>\$C: [374 and nobody has done that &lt; if you ask me &gt; ]374 @ &lt; giggling &gt;</i>
10	\$C: nä [379 ska vi stryka den då ]379	<i>\$C: no [379 we leave that one then ]379</i>
11	\$A: [379 de e inte de så ]379 kan vi [380 ju låta ]380 vara då	<i>\$A: [379 nobody has then ]379 we can [380 let it ]380 be then</i>
12	\$C: [380 a ]380	<i>\$C: [380 yeah ]380</i>
13	\$C: < a > @ < ingressive >,< quiet >	<i>\$C: &lt; yeah &gt; @ &lt; quiet &gt;</i>
14	\$A: // visst // ...	<i>\$A: // sure // ...</i>

Utterance 1 is a non-stanced proposing to buy a book, where participant A does not say anything about his own opinion in the matter. In utterance 5 participant C elaborates on the proposal without explicitly revealing her opinion, but the tone in the last part, 'so the question is if we should care or if we,' is quite sceptic. In utterance 8, the chair (participant A) quickly picks up where C left off and continues the sceptic tone, being a little bit more explicit, and C then supports A's sceptic attitude in utterance 9. In utterance 10, we see the first explicit opinion, rejecting the proposal, and A immediately supports that in utterance 11.

The careful probing of attitudes that is done in the first few utterances is quite characteristic for the activity as a whole; if opinions are made explicit, the participants can be quite sure that there will be no disagreement.

The significant pattern for what counts as a decision in this group is that there is general agreement about the proposal. When agreement is unclear, the decision is unclear too. In excerpt 5-21 above the outcome of the discussion is not obvious. The chair, participant A, still expresses a positive attitude towards the book,

but there is no significant immediate support from the others (participant A quickly moves on to the next book). The uncertainty of the outcome is verified a couple of minutes later, shown in excerpt 5-22:

***Excerpt 5-22. A792501, line 1604: Evidence that the outcome of a previous decision episode was unclear to the participants.***

*A couple of minutes after the sequence in excerpt 5-21 the same book (by Cherpillod) is discussed again. In utterance 1, participant A brings up the topic and asks what the decision was, suggesting that it was to buy the book. In utterance 2, participant D provides a positive reply, as does participant E in utterance 3. Participant D also reminds participant A what the main argument against buying the book was.*

1	\$A: vi sa vi vi ö sa ja ti Cherpillod va / [452 öum: ]452	\$A: vi sa vi vi ö sa ja ti Cherpillod va / [452 öum: ]452
2	\$D: [452 ö1 jo: ]452	\$D: [452 ö1 jo: ]452
3	\$E: [452 jaja ]452 / trots horoskopet	\$E: [452 jaja ]452 / trots horoskopet
4	\$A: m ja	\$A: m ja

The reason for A's question in utterance 1 is somewhat unclear – it could be that he did not understand what the decision was, that he does not remember, or a combination of those reasons. In any case, the decision made earlier was not clear enough for A to remember it as a definite accept. The analytically unclear agreement in excerpt 5-21 is thus unclear for (at least one of) the participants too.

It is important to note that the issues they are deciding on are of little personal importance. The foundation has a substantial amount of money in comparison to the number of books available and the number of participants. If somebody wants a certain book it is not a great sacrifice for the others to agree to it, even if they do not particularly like that book.

#### 5.4.6 A850101 - Bäckmåla Municipality Council

There are eight participants in this meeting, several of them speak a significant amount and disagreement is relatively common. The chair often proposes to table a matter that there is no agreement about, but quite long sequences of arguing and modified proposals are also allowed, in order to reach agreement.

The chair makes most of the proposals, but other participants make some as well. Formal procedures are used quite consistently to clarify what is decided. Excerpt 5-23 is an example of this:

*Excerpt 5-23. A850101, line 230: Example of how a formal procedure is used to clarify a decision.*

*The meeting is discussing employments in the municipality office, and the core issue is a raise in salary for one of the secretaries, miss Odner. In utterance 1 the chair introduces the topic, and then the participants discuss the issue for quite a while. In utterance 61 the chair summarises the discussion and proposes that the paragraph is tabled. This proposal is accepted in utterance 62.*

1	\$A: eh / punkten eh // åtta angående tjänster på kommunalkontoret / vill du / de / ni har fått ut dom här / skrivelserna va	\$A: er / paragraph er // eight concerning employment at the municipality office / do you want to / it / you have received these / papers right
<i>... 59 utterances where paragraph 8 is discussed ...</i>		
61	\$A2: jag tror nog att det vore förståndigt att vi bordlägger denna frågan / och diskuterar / dels med fröken Odner om hon eh / själv är intresserad att ta på sej ett eh / högre ansvar genom eh / de här sekreterarskapen et cetera och sedan att vi bedömer eh / vi bedömer / eh / vårt ställningstagande an+ / att eh / eh / eh / ta / vissa mera / flera arbetsuppgifter här på / kommunalkontoret eller också / att betala de olika / ordförandena i nämnderna en / något högre arvode / det är väl så vi får se det här va / < ja > / och därför så tycker jag nog att vi kanske s+ / borde fundera på den här frågan till nästa sammanträde för det är ju ingen brådska med / det #1# kan vi bordlägga det #2# @ < inhalation sound >	\$A2: I think it would be wise to table this matter / and discuss both with miss Odner if she / is interested herself to take on er / more responsibility through er / these secretary position et cetera and also that we evaluate er / we evaluate / er our standpoint con+ / to er / er / er / put / some more / more job tasks here on / the municipality office or else / to pay the respective chairpersons in the committees a / somewhat higher fee / that is how we have to look at it right / < yes > / and because of that I think that maybe we sh+ / ought to consider this matter until next meeting since there is no hurry with / it #1# should we table it #2# @ < inhalation sound >
62	\$X: <1 ja >1 <2  >2 <3  >3 / @ <1 comment: several participants >1 @ <2 strike of chairperson's gavel >2, @ <3 clear throat: A >3	\$X: <1 yes >1 <2  >2 <3  >3 / @ <1 comment: several participants >1 @ <2 strike of chairperson's gavel >2, @ <3 clear throat: A >3

Here the participants discuss employment at the office at some length, resulting in tabling the matter. This is made clear in the last part of the chair's utterance 25 (#1# to #2#), the group acceptance in utterance 62 and the strike of the gavel, all of which constitute a formal procedure.

The meeting is a textbook example of a formal meeting, containing formalities such as agenda, disciplined turn-taking (asking for permission to speak) and use of the gavel, but with vivid discussions and serious attempts to find solutions

that everybody can agree on. However, some decisions seem to be of too little importance deal with formally. For the analyst, the suspicion arises that the effort to reach consensus only applies to some of the participants. Excerpt 5-24 shows a sequence where one participant's view seems to be of little importance:

**Excerpt 5-24. A850101, line 171: Example of a decision that is not handled formally.**

*Participant C has proposed that a certain kind of information should be sent to the committee members in advance, to speed up the meetings. It was decided that the matter should be investigated. In utterance 1, participant A makes the final, summarizing proposition that is agreed upon.*

1	\$A: men vi kan väl ta upp dom där frågan me / i samarbetsnämnden å så får vi fråga hur de gör [4 för e ]4 de så att det är på detta sättet att dom trycker upp dom som Gunnarsson [5 säger här ]5 då e de ju enkelt för dom å [6 (...)]6 / ja:	\$A: <i>but I we could bring up those question with / in the cooperation committee and so we will ask how they do [4 because if ]4 it is in this way that they print them like Gunnarsson [5 says here ]5 then it is easy for them to [6 (...)] / yes</i>
2	\$C: [4 ja ]4	\$C: [4 yes ]4
3	\$C: [5 ja ]5	\$C: [5 yes ]5
4	\$G: [6 m de gör dom ]6	\$G: [6 m they do that ]6
5	\$C: [6 m ]6	\$C: [6 m ]6
6	\$C: får jag fråga ska inte det till protokollet //	\$C: <i>can I ask shouldn't that be in the minutes //</i>
7	\$A: det behövs nog inte	\$A: <i>I don't think that is necessary</i>

Here the chair (participant A) leaves a decision outside the minutes, in addition, he refrains from repeating the proposal and asking for general acceptance. When participant C asks that the decision should be included in the minutes in utterance 6, participant A turns the suggestion down with little motivation.

#### 5.4.7 A850401 - Bäckmåla Health Committee

This committee has the same chairperson as the municipality council, and the conversation is similar to the one from that meeting. Consensus seems to be required at least among a core of active members. However, the chair sometimes pushes his own opinion through, using an interesting method, as shown in excerpt 5-25:

*Excerpt 5-25. A850401, line 1819: The chair pushing his own opinion through.*

*The chair (participant Ö) has presented an application from the army to build a particular type of temporary lavatory. A member has also raised the question of where the waste gravel (used as a filter) will be put, and the chair does not know. The uncertainty about the waste gravel has caused several members to express negative attitudes towards the application. In utterance 1, the chair proposes that the application be granted (ignoring the question about where to put the waste gravel). Participant C approves of this in utterance 2, but in utterance 3, participant D insists that the gravel question is solved first, and gets support from participant B in utterance 5. Some arguments for and against are presented, and in utterance 15 the chair puts the proposal forward again (#1# to #2#). He gets acceptance in utterance 18, and proclaims the decision in utterance 19.*

1	\$Ö: [480 < ja > så var ]480 de i korthet // vad säger ni vill ni godkänna de @ < loud >	\$Ö: < well > that is the matter in summary // what do you say do you approve of it @ < loud >
2	\$C: ja [481 de e klart ]481	\$C: yes [481 of course ]481
3	\$D: [481 a dom ]481 borde väl i alla fall ö1 tala om var dom ska lägga de där gruset	\$D: [481 well I think ]481 they ought to declare where they are going to put that gravel at least
4	\$Ö: < m > @ < quiet >	\$Ö: < m > @ < quiet >
5	\$B: ja de ska di frågat om å få plats anvisad	\$B: yes they must ask about having a location allotted to them
6	\$Ö: m	\$Ö: m
7	\$E: (av) kommunen här eller [482 (...)]482	\$E: (by) the municipality here or [482 (...)]482
8	\$X: [482 (...)]482	\$X: [482 (...)]482
9	\$Ö: [482 men de kommer dom ]482 de kommer dom å (ändå) di de va kanske de beslutet [483 som vi ]483 fattade [484 förra gången så då lägger dom de väl på tippen ]484	\$Ö: [482 but they are going to ]482 they are going to do that and (yet) they that was perhaps the decision [483 that we ]483 made [484 last time and then they'll put it on the dump ]484
10	\$C: [483 ja ]483	\$C: [483 yes ]483
11	\$A: [484 (...)]484 [485 di vet ]485 inte vad de [486 va för nåt ]486	\$A: [484 (...)] [485 they don't ]485 know what kind of [486 thing that was ]486
12	\$C: [485 m ]485	\$C: [485 m ]485
13	\$Ö: [486 skulle ]486 [487 misstänka de ]487	\$Ö: [486 I would ]486 [487 guess so ]487
14	\$D: [487 a men då ]487 fyller dom ju tippen / [488 på en liten tid ]488	\$D: [487 yeah but then ]487 they are going to fill up the dump / [488 in a short while ]488
15	\$Ö: [488 jae de bli+ ]488 a de blir inte mycke ser du de kan inte bli mer än / två [489 kubikmeter va ]489 (...) e på två ställen fyra	\$Ö: [488 nah that wo+ ]488 no that won't be much you see that cannot be more than / two [489 cubic meters per ]489 (...) is on two places

	kubikmeter om [490 året ]490 / nej / #1# ha de tillstyrkes #2#	<i>four cubic meters per [490 year ]490 / no / #1# okay is that approved #2#</i>
16	\$C: [489 fyra ]489	<i>\$C: [489 four ]489</i>
17	\$C: [490 ja ]490	<i>\$C: [490 yes ]490</i>
18	\$X: < ja > @ < comment: several participants >	<i>\$X: &lt; yes &gt; @ &lt; comment: several participants &gt;</i>
19	\$Ö: svaret e ja <   > @ < event: strike of chairperson's gavel >	<i>\$Ö: the answer is yes &lt;   &gt; @ &lt; event: strike of chairperson's gavel &gt;</i>

Here participants B and D are clearly negative to the application, while participant Ö (the chair) and participant C are positive. The arguments that Ö provides for his proposal do not seem to convince B and D, but Ö ignores this, and acts as if there is general agreement on the issue. B and D's opinions do not seem to be of much importance. Since there is no video recording of this meeting, we cannot be rule out that B and D accept non-vocally, but from the audio recording it seems that Ö pushes his own opinion through, despite the fact that consensus is not reached.

There is apparent prestige connected with proposing something that the other members accept, and corresponding embarrassment with proposing something that is rejected. Excerpt 5-26 shows an example of the latter:

**Excerpt 5-26. A850401, line 2472: A proposing being rejected.**

*A person has helped the committee on a few occasions to catch fish for testing the content of pollutants. The committee is now discussing if this person should be given a fee, and if so, how large that fee should be. In utterance 1 participant C requests permission to speak, and in utterance 3 he proposes that the fee should be at least 100 kronor.*

1	\$C: herr ordförande	<i>\$C: mister chairperson</i>
2	\$Ö: ja	<i>\$Ö: yes</i>
3	\$C: #1# ska vi bevilja nånting så e de ju inte lönt å bevilja UNDER hundra kronor // då me ma å alltihop #2# < ///5.0 > #3# anser anser ja annars så ska vi ju avslå dom // allså hänvisa till // att han får göra opp de me fiskeriföreningen (...) / ligga i deras eget intresse #4# men de tycker ja e småaktit å göra #5# @ < uncertain belonging of pause >	<i>\$C: #1# if we are to grant something then it is not useful to grant LESS than hundred kronor // with feed and everything #2# &lt; ///5.0 &gt; #3# that's that's my opinion otherwise we should reject them // that is refer to // that he must settle this with the fishing association (...) / be in their own interest #4# but I think that would be a petty thing to do #5# @ &lt; uncertain belonging of pause &gt;</i>
4	\$D: de går ju å göra en överenskommelse me: // fiskeriföreningen också // dela kostnaden	<i>\$D: another option would be to strike a deal with // the fishing association too // share the cost</i>

In utterance 3, participant C starts by proposing that a fee of (at least) 100 kronor should be paid (#1# to #2#). The five seconds silence that follows (#2# to #3#) is most notably an absence of support – none of the other members provides additional arguments, positive feedback or other support. This clearly makes C a little nervous, and he goes on to provide what he thinks is the second best alternative (#3# to #4#), not to pay any fee at all but to claim that it is the fishing association that ought to pay the fee. However, he also argues that such an approach would be petty-minded (#4# to #5#). I understand the silence as a tactful way of rejecting the proposal by the other members, and that tact is required due to the loss of prestige connected with the rejection. In utterance 4, participant D presents a compromise between C's expensive proposal and the small-mindedness paying a smaller sum would exhibit, which can be seen as a way to save C from the embarrassment of having his proposal bluntly rejected. Decisions are marked in a formal way, just as they were in the Municipality Council recording, and are quite clear.

#### 5.4.8 A850701 - Bäckmåla Local Housing Committee

Much of this meeting is concerned with applications for different kinds of building permits, and one of the participants, B, seems to be far superior to the others in terms of knowledge of the rules and regulations governing the committee. The typical pattern is that the chair, participant R, introduces the topic, B explains why it should be approved or rejected, and then the formal decision is made though acclamation. Excerpt 5-27 is an instance of this:

**Excerpt 5-27. A850701, line 163: Typical decision episode.**

*The local housing committee is going through applications for building permits. In utterance 1, the chair (R) introduces the next application. Participant E asks for clarification in utterance 2, and receives it in utterance 3. In utterance 5, participant V provides an argument for accepting the application, while participant B tries to break into the discussion (utterance 4). In utterance 6, participant B gets to speak, and complements the argument made by participant V, providing the precise requirements. In utterance 9, he proposes that the application be granted under a certain condition; this is restated by the chair in utterance 11, and generally accepted in utterance 12.*

1	\$R: ja // fyra tjänsteman Sven Torstensson Risinge Bäckhult tillbyggnad av enfamiljshus å förråd till Lundagård två tjugofyra Risinge Bäckhult	\$R: [8 yes ]8 // four the Clerk Sven Torstensson Risinge Bäckhult extension to single family house and storehouse for Lundagård two twentyfour Risinge Bäckhult
2	\$E: ska bygga till (ett rum där)	\$E: are they going to build on (another room there)
3	\$V: ja	\$V: yes
4	\$B: [9 det vill ju till att kunna ]9	\$B: [9 that would require to ]9
5	\$V: [9 ja nä ]9 jag tror bara det finns tio / minst tio meter te te granntomten (...) //	\$V: [9 well no ]9 I just think there is ten / at least ten meters to to the neighbour plot (...) //

6	\$B: ja under förutsättning att de inte kommer närmare tomtgränsen fyra å en halv meter så finns de ingenting å erinra / de e en sån där tillbyggnad som vi kanske kan klara oss utan	<i>\$B: well provided that it doesn't come any closer than four and a half meters then there is nothing to object / it's that kind of extension that we can do without perhaps</i>
7	\$R: ja	<i>\$R: yes</i>
8	\$B: huset finns [10 ju redan ]10	<i>\$B: the house is [10 already there ]10</i>
9	\$R: [10 vi vi ]10 kan ju ta me de i protokollet [11 att ]11 det e under den förutsättningen	<i>\$R: [10 we we ]10 can take it to the minutes [11 that ]11 it is under that condition</i>
10	\$B: [11 ja ]11	<i>\$B: [11 yes ]11</i>
11	\$R: kan byggnadslov bevilj+ / +jas på punkt fyra där m me förutsättning att e / tillbyggnaden icke kommer närmare grannens gräns än fyra å en halv meter	<i>\$R: can building permit be grant+ / +ted for item four where m provided that er / the extension does not come closer to the neighbour's border than four and a half meter</i>
12	\$X: < ja > @ < comment: several participants >	<i>\$X: &lt; yes &gt; @ &lt; comment: several participants &gt;</i>
13	\$R: svaret e ja <   > // ... @ < event: strike of chairperson's gavel >	<i>\$R: the answer is yes &lt;   &gt; // ... @ &lt; event: strike of chairperson's gavel &gt;</i>

The pattern described above is seen in the excerpt: participant R introduces the topic in utterance 1, participant B gives reason for accepting in utterance 6, and a decision is made through acclamation in utterances 11-13.

Most of the decisions are handled formally in the same way as in the Municipality Council and the Health Committee, but additions are made after the formal decision has been gavelled more often, as illustrated in excerpt 5-16 on p. 178 above.

#### 5.4.9 A851501 - Patent Office

In this recording the participants discuss applications for patent that have been sent to the office; these are either accepted or rejected. The number of applications discussed in the recording is a bit too small to make proper generalizations, but it can be noted that the chair makes sure that each participant explains his view on the matter for each application. In all cases consensus is reached after some discussion; therefore, it is not evident how more serious disagreements are handled.

The meeting is quite formal, with an agenda and a chairperson who controls the turn taking quite rigorously, but he uses no gavel. Further, the chair does not repeat proposals or ask for general acceptance (acclamation), rather, he states the decision as if he has made the decision, as shown in excerpt 5-28:



*Excerpt 5-28. A851501, line 147: Typical decision episode.*

*The members of the patent committee have discussed an application for some time. The chair (participant B) then closes the issue with the following utterance:*

*\$B: ja för mej framstår de klart #1#  
att de här måste vara dock så  
mycket funktionella moment  
inblandade i: e formgivningen att ja  
INTE tycker att de kan anses besitta  
tillräcklig särprägel för att va  
registrerbart #2# / så vi får säga nej  
#3#*

*\$B: well for me it is quite obvious #1#  
that in this case there have to be so  
many functional elements concerned  
with er the design that I do NOT think  
that it can be considered as having  
enough distinctive character to be apt  
for registration #2# / so we have to say  
no #3#*

Here participant B gives reasons for his standpoint (#1#-#2#), and pronounces the decision (#2#-#3#), but it is unclear if the decision is B's own or the way he interprets the group's opinion. I have not been able to find out whether he has institutional power to make the decision on his own.

#### 5.4.10 V321801 - City Distric Committee

This is a very formal, political meeting. The members, elected representatives from political parties and the ruling block (a three-party coalition), are not very interested in gaining the acceptance from the opposition. In most cases, the proposals are prepared in advance and the members seem to know fairly well what will happen. If the opposition does not like a proposal from the ruling block, they sometimes demand voting (each member answers yes or no to the proposal, the answers are noted in the minutes, and the majority decides). Since the opposition members know that they are in minority, they must know that these votes will go against them. The assumption I make is that there must be some other motivation for requesting the vote, perhaps it is a tactical maneuver.

When the opposition proposes something they either do that as a display, perhaps of independence, such as when they put forward an alternative budget for the city district, or they must persuade the ruling block that the proposal is good for both sides. An example of such a situation is shown in excerpt 5-29:

*Excerpt 5-29. V321801, line 921: Example of a proposal from the opposition.*

*Participant J (Johan), a representative for the opposition, has briefly touched on the matter in paragraph 31 earlier, and the chair, participant K of the ruling block, saying it was 'not quite that easy' and deferred it to later, according to the agenda. Now that item in the agenda has been reached. In utterance 1 participant K introduces the topic, and gives participant J the right to speak. Participant J does so in utterance 2, obviously referring to a previous discussion, and a proposal he has made earlier. In utterance 5 participant F (Fredrika, member of the ruling block) is positive to J's proposal, but suggests that it should be investigated more carefully. Participant J accepts this in utterance 6, 7, 8 and 10. In utterance 12, the chair returns to the original proposal and elicits acceptance for that.*

1	\$K: ... // då går vi vidare till nummer trettioett å de e delegation av beslutanderätt // ha nämnden nära fråger i detta ärende förutom Johan // < Johan varsegod > @ < chuckle: several participants >	\$K: ... // now we are moving on to number thirty-one, and that is delegation of the power of decision // does the council have any questions in this matter except Johan // < proceed Johan > @ < chuckle: several participants >
2	\$J: nä men e // du säger de e inte så enkelt ja // ja tror inte de e ju egentlien bara ett penndrag // å (vända på) delegationen // < e så att i // > ja har (...) eller ha [32 ja ]32 // har ja fel @ < event: F raises her hand, looks at K, who looks back and nods >	\$J: no but er // you say that it isn't that easy well // I don't think it's really just a stroke of a pen // to (turn) the delagation // < er så that in // > I have (...) or am [32 I ]32 // am I wrong @ < event: F raises her hand, looks at K, who looks back and nods >
3	\$K: [32 men ]32	\$K: [32 but ]32
4	\$X: ja:	\$X: yes
5	\$F: a asså // penndrag // i all ära // (...) ka ma ju faktist tillåta sej å göra de lätt fö sej // men // ja ja skulle nog vilja att vi kunde // bereda frågan lite innan e va beredda å gå ti beslut [1001 // ]1001 de va ju mer en tanke som kom upp på utskottet å de känns väl / som att den // kanske måste < landa i oss / att vi > behöver diskutera de [33 mer ]33 // ja skulle gäna vilja vänta me de // till (vi har haft möjlighet å kolla) igenom de @ < gesture: J nods >	\$F: well // stroke of a pen is all well and good // (...) one might be allowed to simplify things // but // I think I would like us to // prepare the matter somewhat before er be prepared to decide [1001 // ]1001 that was more of a thought that came up in the committee and I feel like / like it // perhaps has to < settle in us / that we > need to discuss it [33 more ]33 // I would really like to wait a while with it // until (we have had the chance to go) through it @ < gesture: J nods >
6	\$J: [1001 m ]1001	\$J: [1001 m ]1001
7	\$J: [33 < m > ]33 @ < gesture: nods >	\$J: [33 < m > ]33 @ < gesture: nods >
8	\$J: < (gö de) > @ < gesture: nods >	\$J: < (do so) > @ < gesture: nods >
9	\$F: å hur uppföljningen kan ske istället då	\$F: and how the follow up can be done instead
10	\$J: a de va inget (utarbetat) // < de va bara ett [34 // (...)] (de va en) tanke // ]34 en tanke på (Fredrikas tanke) > @ < gesture: J moves his hands around each other >	\$J: well it was nothing (prepared) // < it was just a [34 // (...)] (it was a thought) // ]34 a thought on Fredrika's thought @ < gesture: J moves his hands around each other >
11	\$K: [34 a / nä de va TÄNKT ]34	\$K: [34 yeah / no it was THOUGHT ]34

12	\$K: ja // ha nämnden nåra andra frågor kring delegationen av beslutanderätt // då finns de bara ett tjänsteutlåtande kan vi bifalla de <   > // ... @ < event: several participants says yes, K strikes her gavel >	\$K: yes // do the council have any other questions concerning the delegation of the power of decision // in that case there is only one official report can we consent to that <   > // ... @ < event: several participants says yes, K strikes her gavel >
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In utterance 2, the opposition representative, J, makes a proposal (obviously referring to something that the others already know). His attitude is quite serious and open; the final phrase about him being wrong signals modesty. When the ruling block in utterance 5 expresses a somewhat positive attitude, J immediately agrees with that, makes his commitment weaker by calling it ‘a thought’, and allows the matter to be deferred. This is typical for a proposal from the opposition; in order to avoid a situation where accepting the proposal would be a loss of prestige for the ruling block, the opposition tries to down-grade their own responsibility for the proposal, making it appear to be the result of a cooperation.

The formal decision made here is that the official report is approved, but informally it has also been decided that they will look at participant J’s proposal in more detail. It seems to be the practice that proposals that are prepared in advance so that everybody knows they will be accepted are treated formally. While, in contrast, the proposal that came up without having been prepared as properly, was treated informally. The effect is that the proposals that people already know are going to be accepted go through a very clear decision process, while proposals that are more uncertain receive more vague treatment.

These meetings seem to be a formality fundamentally. The ruling block politicians have already decided on the matters, and deviation from previously made plans is unwanted. Thus, the purpose of these meetings is not so much to decide (interpersonal decisions) as to make already made decisions public and clear (institutional decisions). Because of this, it is not strange that we find so few arguings and reformulations in the recording.

The chairperson is very much in charge of the meeting and the few “real” (interpersonal) decisions made always have her approval. Excerpt 5-30 provides an illustration:

*Excerpt 5-30. V321801, line 1004: Example of an interpersonal decision, and how the chair determines the outcome of it.*

*Towards the end of the meeting the agenda specifies 'other matters', and participant J (Johan) of the opposition has a motion. In utterance 1 he asks permission to present it.*

1	\$J: jag har ett // ett e yrkande om // ett uppdrag till stadsdelschefen // få ja lov å läsa	\$J: I have a // a er motion about // a task for the city district manager // may I read
2	\$K: varsego	\$K: proceed

3	\$J: a // de hanlar om att säkerställa en // rättvis // likvädi{g} bedy+ betygsättning // ... (reading the proposal, 2:41) ... // och även beskriva rutinerna för hur betygsättningen // kvalitetssäkras //	\$J: yeah // it is about securing a // fair // equal gra+ grading // ... (reading the proposal, 2:41) ... // and also to describe the procedures for how the quality // of the grading is secured //
4	\$K: tack Johan	\$K: thank you Johan
5	\$J: varsågo	\$J: your welcome
6	\$K: e de så att du < begär bordläggning på detta > @ < event: J gets up and hands C some papers >	\$K: < is it the case that you require tabling of this > @ < event: J gets up and hands C some papers >
7	\$J: om du vill så okej	\$J: if you like then sure
8	\$K: ja tycker att de e rätt bra [41 att vi (...)]41 // få hon (skickat) ut ett < sånt > @ < event: K gestures towards the papers J just gave C >	\$K: I think it is quite good [41 that we (...)]41 // can she arrange to (send) out one of < those > @ < event: K gestures towards the papers J just gave C >
9	\$J: [41 då gö vi de då ]41 (...)	\$J: [41 then we'll do that ]41 (...)
<i>Six utterances irrelevant for the example</i>		
16	\$K: ha // men då gö [42 vi så att vi bodlägger ]42 // de ärenden som e lagda från Moderatena kan vi göra så <   > ... @ < event: several participants says yes, K strikes her gavel >	\$K: okay // but then we'll [42 do so that we table ]42 // those matters that have been put forward by the Conservatives can we do that <   > ... @ < event: several participants says yes, K strikes her gavel >
17	\$J: [42 (...)]42	\$J8: [42 (...)]42

In utterance 3, participant J makes his proposal, and the chairperson, participant K, then proposes that J requires the matter to be tabled. Participant J clearly takes that as a positive sign (confirmed in utterance 8) and accepts the tabling. Participant K does not worry about checking what the other participants think, neither from her own party nor any others, but simply states that she thinks the proposal looks good and that it is worth looking at more closely (I understand the purpose of tabling as getting time to look closer at the proposal).

#### 5.4.11 V770201 - Strategy Meeting

A consultancy company has a meeting where strategies are to be developed. The manager, participant A, has organized the meeting and planned a way of working on the strategy, but the actual proposals come from the other participants, who sometimes work in smaller groups. Several different participants make proposals, and all proposals are open for criticism. Proposals are generally used as a starting point for a discussion, not as fixed suggestions that can be accepted or rejected. On a more general level, the manager, A, pushes the other participants to come up with ideas and to accept responsibility for different projects that are planned, but he never actually orders anyone to do anything.

In this recording, it is often difficult to discern what is actually decided, which seems to be a problem for the participants (see excerpt 5-15 on p. 177 above). The key to what counts as a decision seems to be that a proposal is made, nobody argues against it, and the discussion is allowed to move on to the next topic. Excerpt 5-31 illustrates this:

*Excerpt 5-31. V770201, line 3452: Typical end of a decision episode.*

*The meeting has covered how to approach a certain group of potential customers, whether or not it is a good idea to send a letter to these customers, and when that could be done.*

*Participant F has said that it will take several weeks to write the letter in question, which was called into question: how can it take weeks to write a letter? In utterance 1 participant F replies to this. In utterance 7 participant E introduces a new topic, without there having been any clear conclusion to the issue about a letter to potential customers.*

1	\$F: ja jo de tar ju en tie minuter kanske / men eh /// ja tror de tar en stund å formulera /	\$F: well okay that takes some ten minutes perhaps / but er /// I think it takes a while to formulate /
2	\$T: ska vi ha som målsättning å genomföra ett sånt seminarium / a då får vi besluta om de nu för att de måste ju också planeras så att säga / eller så [136 lägger vi ner ]136	\$T: if our objective should be to hold such a seminar / well then we have to decide about that now because that has to be planned so to speak / or else [136 we drop ]136
3	\$F: [136 a men ]136 vi tar bara (å genomgår här) (...)	\$F: [136 yeah but ]136 we can just ( go through here) (...)
4	\$T: ja okej	\$T: well okay
5	\$X: m:	\$X: m:
6	\$X: (...) //	\$X: (...) //
7	\$E: <1 >1 <2 >2 a Trollhä+ / Trollhättan energi hade vi också skrivit upp @ <1 clear throat >1 @ <2 snuffle >2	\$E: <1   >1 <2   >2 yeah Trollhä+ / Trollhättan energy was also put on the list @ <1 clear throat >1 @ <2 snuffle >2

Here, the question about sending the letter is left without any clear decision, and the discussion moves on to the next topic. It is difficult to say what was decided.

#### 5.4.12 V770301, V770901 - Board of City District 1 & 3

This is a group of the top administrative officials of a City District in a Swedish city. The two meetings have approximately the same participants and structure, and can be analyzed together. The chair, participant A, makes almost all proposals. The exception is proposals that are written and prepared in advance and have a number in the agenda and a few proposals that are phrased as questions to the chair. An example of such a “question proposal” is shown in excerpt 5-32:

**Excerpt 5-32. V770301, line 1591: A proposal which is not made by the chair.**

*The participants are discussing participation in a fair. In utterance 1 participant J asks if the others think the participation should be coordinated, and the chair (participant A) repeats this question in utterance 2.*

1	\$J: finns de nån anledning å samordna de här	<i>\$J: is there any reason to coordinate this</i>
2	\$A: #1# // #2# a de e väl närmast de så att säga ska vi backa upp de på någe sätt via samordning eller #3# så så att de inte bara rinner ut #4#	<i>\$A: #1# // #2# well that is probably what it is about so to speak should we back it up somehow through coordination or #3# something to make sure it doesn't come to nothing #4#</i>
3	\$J: a de tror ja	<i>\$J: yeah I think so</i>
4	\$C: ja tror de e bra å göra se vicka som e intresserade så får man då bedöma e de så att var å en tar tar de på egen hand eller väljer å göra något gemensamt // men i alla fall att man kanske försöker å se vilka de e som ska vara me (...) så vi får en överblick på de / ja tar gärna på mej de i så fall	<i>\$C: I think it would be good to do that see who is interested and then judge should it be that each person do do it on their own or chooses to do something together // but in case that you perhaps try to see who it is that will participate (...) so we get an overview of it / I'd be glad to accept that in that case</i>
5	\$A: m bra	<i>\$A: m good</i>

Here participant J makes a proposal (utterance 1), phrasing it as a question to the chair, who needs some time to consider it before he answers (the pause in #1# to #2# and the repetition of the question in #2# to #3#). The answer is somewhat positive (the argument in #3# to #4#), and J and C support it immediately.

The more common pattern, however, is that the chair makes a proposal and that he tries to elicit comments and acceptance from the others, as in excerpt 5-33:

**Excerpt 5-33. V770301, line 1086: A typical decision episode, where the chair makes the proposal.**

*Participants are discussing policies for computer support. In utterance 1, the chair summarizes what has been said, adding his own views and arguments, and makes a proposal. In utterances 4 and 8, he asks for the others' attitudes, and gets acceptance in utterance 5, possibly in 6, 7 and 9, too. Utterance 10 is probably some kind of argument for the proposal, although that is unclear. In utterance 12, the chair asks participant L specifically for acceptance, and receives it in utterance 13.*

1	\$A: men kan vi inte göra så att vi skickar me den frågan om vi gör de till vårt adb-råd eller någonting sådant va att e: de för nu de e ju en rätt stor investering vi gör här va s att ja tycker de känns viktigt att som	<i>\$A: but can't we do it like this we pass the question to our computer council or something like that right that er because this is a rather big investment that we are doing right to I think that it feels important that</i>
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	vd ha ett grepp ungefär va befinner vi oss nu va och e: att även dom inte (kraftfulla) rösterna s att säga vi ser dom va // e att man då e fundera på NÅGON form av mer systematisk om de e i enkätform eller va de e men INTE bara s att säga sätta ihop de man har sett å hört utan att vi faktiskt hör EFTER hos på varje ställe där de står en terminal eller en pc så vi får en bild av används den / fungerar grejerna va e de för grejer som inte fungera å va e de mer för stöd man behöver va å så att vi får en chans att göra nån analys av de [147 läget tillsammans här va ]147 //	<i>as ceo have an understanding of approximately where we are now right and er also the not (powerful) voices so to speak we see them right // er and that SOME kind of more systematic is considered be it in the form of a questionnaire or what it is but NOT just so to speak put together what has been seen and heard but that we actually CHECK with each place where there is a terminal or a pc so we get a picture of is it used / do the things work and what other kind of support is needed right and so we get a chance to do an analysis of that [147 status together here right ]147</i>
2	\$L: [147 m m ]147	<i>\$L: [147 m m ]147</i>
3	\$B: (...) //	<i>\$B: (...)</i>
4	\$A: < eller e > @ < gesture: opens his arms and looks around >	<i>\$A: &lt; or er &gt; @ &lt; gesture: opens his arms and looks around &gt;</i>
5	\$C: de tror ja e jätteviktigt	<i>\$C: I think that is really important</i>
6	\$X: (...)	<i>\$X: (...)</i>
7	\$X: (...)	<i>\$X: (...)</i>
8	\$A: ni e me	<i>\$A: you are with me</i>
9	\$C: (...)	<i>\$C: (...)</i>
10	\$I: (...) på två år de e INTE användarproblem skulle ja vilja säga (...) användaren som har samma problem de kan inte bero på användarproblem (...)	<i>\$I: (...) in two years that is NOT a user problem I would like to say (...) the user that has the same problem that can't be due to user problems (...)</i>
11	\$L: ja	<i>\$L: yes</i>
12	\$A: okej <   > @ < gesture: looks at L and makes a fist with the thumb pointing upwards in an "ok-gesture" >	<i>\$A: okay &lt;   &gt; @ &lt; gesture: looks at L and makes a fist with the thumb pointing upwards in an "ok-gesture" &gt;</i>
13	\$L: < okej > @ < gesture: looks at A and nods >	<i>\$L: &lt; okay &gt; @ &lt; gesture: looks at A and nods &gt;</i>

In utterance 1, the chair makes a proposal, partly based on the previous discussion, and then looks around for reactions from the others. Utterance 3 is very quiet and short, and in the time between the end of utterance 1 and the start of utterance 4 the chair mostly looks around at the others. Utterance 4 and 8 show more explicit ways of getting reactions, as does utterance 12, which contains directed eliciting.

For longer discussions, the chair almost always repeats or summarizes the proposal towards the end, making sure it is clear for everybody. Thus, the key to knowing what is a decision becomes that the chair makes a proposal (or refor-

mulates one) and at least one person displays acceptance, though this can be by nodding or mumbling. Strong agreement from the chair can also function as a decision marker, as in excerpt 5-32 above.

The other participants rarely reject proposals made by the chair, but I can only speculate on the reasons for this. Perhaps his authority is great, or his proposals are good and well-prepared.

One can note the chair's use of *va*, translated as 'right' in the transcriptions above. *Va* is usually a feedback elicitor, but used here in a way that rather prevents feedback, since he never waits for the feedback but assumes that the acceptance is there.

## 5.5 Some general observations

Looking back at the previous section and the analyses of the recordings in the corpus, a number of more general observations can be made. These general observations will be presented in this section.

### 5.5.1 Proposal-Acceptance is fundamental

All group decision-making episodes in the investigated groups were oriented around the conceptual pair proposal-acceptance: a proposal was somehow presented, then, discussion followed concerning whether or not to accept the proposal. Proposals can be stanced or non-stanced (see 5.3.6 above), and acceptance may never be given, but the conversation is still oriented around these things.

Note that no other method of group decision-making was found in the corpora studied, though the observation of this fact might seem trivial.

### 5.5.2 Arguing is common

Arguing occurs in all of the groups studied, although the character of argumentation varies considerably. In Culture-Nature Project (A462701), the style is direct and almost ruthless, while in Esperanto Foundation (A792501) it is gentle and careful.

The presence of arguing in group decision-making can be explained by efficiency demands – if all participants do not agree on an issue (or at least if the majority do not agree), then that proposal is not accepted, and no decision is made. This is likely to be inefficient for the group (assuming that the group has tasks to do), and may cause social-emotional tension within the group. Arguing is a way to reach agreement on an issue (or at least an attempt to reach agreement), which, in turn, increases efficiency and decreases social tension (ideally).

This is not to say that arguing is *necessary* in group decision-making activities. Group decision-making may look quite different in some other cultural context. I also find it plausible that there is a cultural tendency to avoid disagreement in



general in Sweden. This tendency would make arguing more likely since it might be used in an attempt to come to a consensus even when a minority is in disagreement.

### 5.5.3 Summaries

In situations where an issue is discussed at length, and several arguments and proposals occur, it is common for a participant (typically the chairperson), to summarize the discussion and reformulate the proposal that seems to have the strongest support. The chairperson for the Board of City District (V770301 and V770901) does this quite regularly; his summaries function as a way to conclude the discussion and make a decision. His summaries (with reformulated proposals) usually receive immediate acceptance from the other participants, and the group moves on to next topic. Excerpt 5-7 on p. 166-7 is an example of this behavior.

The summaries seem to have two main functions. The first is to collect the arguments and modifications that have been given during the discussion. This is not necessarily a completely neutral contribution to the discussion, obviously, but the summarizer may choose to ignore some given arguments or suggested modifications, and he may phrase the summary and reformulation in ways that make his preferred alternative look better.

The other function of the summaries is to “put the discussion back on track,” or in other words, make participants focus on the most important part of the issue, and strengthen the obligation to evaluate the proposal. This obligation stems from the evocative function of proposing, and the obligation may have weakened if the discussion has been going on for a while. Readers more familiar with Conversation Analysis might note that this also may be analyzed as an adjacency-pair of proposal-accept/reject, as mentioned above (see p. 160). Arguings, elaborations etc. that follow the initial proposing are insertion sequences, that is, other adjacency pairs that are used to prepare the second part of the main adjacency pair (Levinson 1983:304 ff). When the insertion sequences become too long and too numerous, the accept/reject can get lost, and the first part of the adjacency pair has to be repeated. This is the function of summarizing that the aforementioned chairperson of the Board of City District seems to be most interested in, and in his case, it has the effect of actually getting acceptance from the others.

#### 5.5.4 Formal procedures

Formal procedures are used extensively in the studied dialogues, although the dialogues vary as far as how many formal procedures are used, and how often. The City District Committee (V321801) uses formal procedures most of the time, while such procedures can hardly be perceived at all in Budget Revision (A322501).

Some examples of formal procedures are use of an *agenda*, *acclamation* and *voting*. Agendas, when followed, lend the discussion a structure where only one issue is discussed at a time, making it possible to dispose the available time more efficiently. There may be other reasons for using an agenda as well, such as allowing participants to prepare themselves for discussion topics. The agenda structure also makes the beginning and end of each topic clear, and that includes the end of decision episodes. Thus, decision episodes that are part of the agenda usually have clear conclusions and results.

The majority of the groups studied use an agenda. Two of the other groups (Budget Negotiation and Budget Revision) follow other written documents, in practice creating an agenda which they follow. Most of these groups adhere strictly to the agenda, leaving it only occasionally. Recording V321801, City District Committee, is the prime example of agenda use. Recording V770201, Strategy Meeting, is the one that most clearly shows how not using an agenda can cause decisions to be unclear.

Acclamation, a formalized proposing-accepting pair of, is used to close an issue. The chairperson (or other leader) puts the proposal to the group, phrasing it as a yes/no question, then, the other participants give simultaneous accept by saying yes. (Often, the procedure is not implemented completely, in the sense that not all participants actually say yes.) For issues where the group has managed to reach consensus (or near consensus), acclamation works fine, but if consensus is not reached and the group still has to make a decision (or a majority wants to make a decision), then voting can be used. Voting procedures may vary somewhat, but in general, each member of the group says yes or no to the proposal in turn, and the alternative supported by most participants wins. The votes of the participants may be weighted, so the chairperson might have 1½ vote; in addition, there may be participants in the activity who are not entitled to vote. An example of voting can be found in appendix 6.

It is interesting to note that although several of the groups studied could have used voting, only one group did so: the highly formalized City District Committee (V321801). It is clear that consensus is preferred in these groups, and voting is only used to make a decision when agreement cannot be achieved (cf. *Deadlocks and stance strength* on p. 206 ff.). Although equal voting (one person, one vote) is widely accepted in Sweden as a fair and good way to make group decisions, it is not perfect: if simple majority decision is used (which is common), there may be a large minority whose opinion is disregarded. This may not be de-

sirable, for ethical or other reasons, and it is probably at least one of the reasons for why voting is not used often.

Another observation about formal features is that most of the groups studied use a chairperson of some kind. This may be a part of the institutional requirements of the group, as for the City District Committee or Bäckmåla Municipality Council, or it may be a more or less natural consequence that the person who has called for the meeting also leads it. The tasks of the chairperson may vary somewhat, but common tasks include distributing the right to speak, controlling what is discussed and for how long, and formulating final proposals in connection with acclamations. The chairperson typically has more power than the others do, in the sense that he can influence the conversation quite easily. In addition, the chairperson is able to prepare issues in advance, giving him a better opportunity to prepare arguments, and he can often choose how issues are presented.

Sometimes there is one formal chairperson and one “informal leader” of the group, that is, a person who has a high status and who influences the other participants heavily. The reasons for this division may vary; in Bäckmåla Local Housing Committee, the only one of the groups studied with an obvious informal leader, the informal leader clearly is more competent and experienced than the other participants, which makes his opinion very important. This kind of situation creates some difficulties, since there may be ambiguity about which tasks each of the two leaders performs. In the Housing Committee, the division of labor is that the formal leader introduces topics and makes non-stanced proposals, then, the informal leader gives his opinion on the issue; see excerpt 5-27 on p. 191-2 for an example of this.

A last thing to note about formal features of the groups studied is that there seems to be a kind of formal bias in the informal groups as well. The corpus contains a large proportion of comparably formal meetings, and this is by no means sure to be a reflection of the proportions of formal meetings for group decision-making in general. However, the formal concepts of agenda, chairperson, gaveling, etc. seems to be wide spread, and there seems to be a tendency for groups to “fall back” on formal procedures when discussions become difficult, at least when the groups are fairly large. An example is the Strategy meeting discussed on pp. 196-7. The meeting is informal – there is no agenda, no proper chairperson, no gavel or structured turn-taking – but still the participants “borrow” formal words and behavior every so often, as in the following excerpt:

*Excerpt 5-34. V770201, line 3875. Example of formal words being used in an informal context.*

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*Participant T is going through a list of tasks that may be done in order to get new customers.*

1	\$T: ska vi börja me ansvarsbiten då // stadsdelsnämndsseminarium // Lena måste ju va me för att hon har ju haft kontakter me den här e // va hette hon	<i>\$T: should we start with the responsibilities then // seminar for city district committees // Lena has to participate since she has been in contact with this er // what was her name</i>
2	\$L: Åse	<i>\$L: Åse</i>
3	\$T: [322 Åse ]322	<i>\$T: [322 Åse ]322</i>
4	\$U: [322 ordningsfråga ]322 / hur lång tid pratar vi om framåt nu /	<i>\$U: [322 question of order ]322 / what is the time scope of this discussion /</i>
5	\$X: m:	<i>\$X: m:</i>

Here participant U in utterance 4 uses the word *ordningsfråga* ('question of order') when he interrupts to pose a slightly off-topic question. The term originally belongs to a formal context where questions of order take precedence over other topics, and it is doubtful that U's question would have passed as a question of order in a formal context. However, it shows that U (and probably most of the other participants) are aware of the formal procedure of dealing with questions of order first, and they use such procedures when they feel a need to. Thus there seems to be a certain bias towards formal procedures in group meetings.

### 5.5.5 Silence

Sometimes proposals are met with silence from one or more of the participants. Of course, in these cases non-verbal/non-vocal communication may be used instead of words; most of the recordings in the present corpus either are not video at all or the video image is not detailed enough to study non-vocal communication. In the recordings that do allow for some study of non-vocal communication (for example Board of City District 1 & 2), it clearly plays a role. In fact, some of the situations that seem like tacit consent are non-vocal consent; nods, looks and facial expressions signal acceptance.

However, non-vocal communication does not explain all silences that follow proposings, rather, silence itself is sometimes interpreted as consent or dissent. Often silence is interpreted as acceptance, as in excerpt 5-29 on pp. 193-5, where not everybody utters accept in utterance 12. This interpretation seems rational in many situations. In a meeting, it may be difficult for all participants to be well informed and involved in each issue, and by simply not saying anything about a proposal the ones who do not know or care much about it leave the decision to others, trusting them to make a proper decision. Further, when participants can rely on this interpretation, it is possible for them to be "lazy" – a specific participant may listen to the ongoing discussion, and as long as he agrees with the other participants' statements, there is simply no need to say anything, so he can just as well remain silent.

Interpreting silence as consent may be a problem, for example, it might mean that a large share of the participants do not actively participate in a decision,

since it diminishes the number of people actually making the decision. This may be a problem for democracy, for decision quality, for shared responsibility, or for some other aspect of the decision context.

In other situations, silence is interpreted as dissent, as for example in excerpt 5-26 on p. 190, from #2#-#3#. One explanation for this is that it seems to be more difficult socially, or less preferable, to object openly to a proposal than to simply not agree, which leads to the principle that absence of acceptance means rejection.

Obviously, these two interpretations clash. One resolution of this clash is to say that a proposing gives an opportunity to object to the proposal, at the same time as it demands that the evocative function of the proposing be satisfied. This means that when a typical proposing is made, at least one accept has to be given in order to satisfy the evocative function of the proposing. Once that has been done, any further silence can be interpreted as, 'I do not make use of this opportunity to object,' which means that the silent person accepts. As a result, if a proposing is met with complete silence, this will be interpreted as reject, while if the proposing receives explicit accept from at least one participant, silence from other participants will be interpreted as accept.

In some cases the phrasing of the proposing or the elicitation of consent could be made in a way that causes silence to mean consent. The evocative function of the proposing will then be to make the receivers stay quiet for a while. The most obvious example of this is perhaps during a wedding ceremony in some traditions, when the officiator says something like, 'If there be anyone who objects to this union, let him speak now or forever hold his peace.'

However, this analysis of the interpretation of silence is not water-tight. First, previous interaction and stances may create expectations among the participants, and it is possible that these expectations override the demand to satisfy the evocative function of the proposing. Let us say a group has been discussing some general question for a while, and reached consensus. Some formal decisions need to be made after that, and the chairperson goes through them quickly, one by one. If these decisions are simple consequences of the general consensus, expectations are strong that everybody agrees on the decisions. In such a case, it is likely that silence is interpreted as consent without any explicit consent. No clear example of this was found in the recordings studied.

Another possible problem for this analysis concerns status. It is likely that status relations play a part in the interpretation of silence: explicit consent may be needed when a lower status person proposes something to a person with higher status, but not the other way around. Unfortunately, the material used in this study is not sufficient to answer such a question.

One might imagine that an authoritarian chair in a group could use the ambiguity of silence to push decisions through without acceptance from the others, by interpreting a silence as consent. No such case was found in our corpus. However,

the behavior of the chair in the Board of City District 1 & 2 could be a way of avoiding clashes. The chair is quite dominant, and his proposals are usually accepted without question. To ensure that the silence his proposals meet is due to general acceptance rather than general rejection, he spends quite some time eliciting explicit feedback.

It should be said that silence following a proposal can be interpreted in ways other than dissent or consent. For example, silence can mean that the proposal was not understood or not perceived, or perhaps that the listener has not made up his mind yet. These options have to be ruled out in order to understand silence as consent or dissent, so the latter interpretations are likely to occur only as a part of an activity that has already started and where communication in general (perception and understanding) has been shown to work. Further, non-verbal communication is likely to play an important role in signaling perception, understanding and hesitation.

### 5.5.6 Deadlocks and stance strength

The Esperanto Foundation recording displays an interesting phenomenon that could be labeled *probing and hinting*. When a proposal appears, the participants seem to be reluctant to reveal their opinion on a certain issue, probably fearing that there may be disagreement. Instead of responding directly, they probe the attitudes of other participants, and provide hints to their own view until they feel fairly safe that the other ones agree with them. This probing and hinting can be carried out with requests for background information, with alternative, non-stanced proposings, with feedback, or with other acts. Excerpt 5-21 on p. 184-5 is an example of this behavior. The effect of this behavior is a “ketchup bottle effect” for proposals and accepts/rejects: first, a long period of time without anybody taking a clear stance, and then suddenly everybody does so.

An explanation for this phenomenon is that there is a tendency that once a person has actually expressed a view on an issue, it takes a lot to change that stance. This has the potential for creating deadlocks, where conflicting opinions cannot be resolved. It is possible that because of this many decision episodes have several “neutral” contributions (eliciting and giving background information, feedback) at the start, since such neutral contributions can be used to probe the attitudes of other participants without needing to take explicit stance. When a participant then actually expresses an opinion, he may be quite certain that the others will agree, and acceptance comes readily from the others.

The need to avoid deadlocks can be satisfied with means other than probing and hinting, such as voting, used in City District Committee (V321801). This meeting has a very different structure compared to Esperanto Foundation. It includes two political blocks arguing against each other and, as long as one block has more votes than the other does, there is no risk of deadlock.

The participants in the Culture-Nature recording (A462701) do not use voting, and deadlocks are quite possible, but there seems to be no fear of taking a stance. There are a small number of decision episodes in the recorded part of the meeting, and so the bravery could be a coincidence, but the researchers are probably used to arguing due to their participation at academic seminars, and it is likely that they bring this habit to the project discussion they are having. They show no reluctance taking stances on an issue, and argue strongly for or against it. The Patent Office recording (A851501) is another exception, although the small number of decision episodes is a problem for analysis of that recording too. Even so, conflicting views seem to be a small problem in the Patent Office. The recording is characterized by long utterances where advanced lines of argumentation are laid out, and everybody is expected to explain his views on the matter, in some detail. As mentioned above (p. 192), serious disagreements do not appear in the recording studied, so we cannot know how deadlocks are handled.

The most common strategy for handling deadlocks seems to be to somehow vary the strength of stances taken in the discussion. Excerpt 5-35 shows an example of this:

**Excerpt 5-35. A851501, line 139. Example of a participant who explicitly weakens her stance strength.**

*During a meeting with the Patent Office, the participants discuss whether a certain item is shaped in a way that is original enough to grant a patent. Participant C gives her view on the issue.*

\$C: ja: ja vet inte heller om de e inte alls så tokigt tycker ja när den inte e de e lite räffling upp å ner de lite prydnad tycker ja no / de förvånar mej att dom va så deciderade på att man inte skulle ta den // alldeles omöjligt tycker ja inte att de e men ja e kan också va me om att man försöker å säga nej till // de / fast ja e inte så negativt inställd

*\$C: well I do not know either if it is not all that bad I think when it is not there are some grooves up and down they are some decoration I think probably / it surprises me that they were so pronounced that one should not take it // I do not find it completely impossible but I er could also participate in trying to say no to // it // but I am not all that negative to it*

Here participant C is quite explicit in saying that she is prepared to change her stance if need be. Another, less explicit weakening is shown in excerpt 5-36.

**Excerpt 5-36. A792501, line 847. Example of a participant who implicitly weakens his stance strength.**

*During a meeting with the Esperanto Foundation the participants discuss whether to buy a certain book series. Here participant A proposes that they do not buy the books (#1# to #2#), but he also says that he is prepared to buy them if the others want to (#2# to #3#).*

<p>\$A: ja / ö: ja vet inte men de de komme väl / nån sorts samlad recension elle nåt sånt där i i ö om dom här ö: så de svårt å veta va man ska göra me dom ännu så länge kanske va #1# vi kanske kan låta dom anstå #2# om de inte e nån som e / särskilt sugen på nånting #3#</p>	<p>\$A: well / er I do not know but I guess there will come / some kind of common review or something like that in in er about these er so it is hard to know what to do with them so far maybe what we #1# maybe we can let them be deferred #2# if there is not anybody that is / particularly interested in something #3#</p>
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Here participant A expresses the opinion that the foundation should leave the books for now and return to them when a review of them has been published. The use of *kanske* ('maybe') in the actual pronunciation of what to do (let them be deferred) signals that the stance is not "carved in stone."

Similarly, a participant may want to strengthen a stance, as illustrated in excerpt 5-37.

*Excerpt 5-37. V770301, line 1144. Example of a participant who makes his stance stronger.*

*The board of City District Committee are discussing a policy for rental contracts.*

<p>\$A: &lt;1 ha &gt;1 å de de så e de ju i mängder av verksamhetsfrågor va e de viktia e ju tycker ja att #1# den formella bindingen få inte göras #2# å å de här ståndpunkten har vi efter de att vi upptäckte att vi hade trygghetsavtal tecknade till år tvåtusentvå va till en fruktansvärd kostnad så att #3# ja släpper inte de här me långa avtal längre utan allt som är över ett år vill ja ha sett innan de går iväg #4# (...) // #5# så e de #6# // e #7# å därför tycker ja att de e viktigt att den punkten finns me #8# men däremot så e de när de blir så me hyreskontrakt ti xempel också att dom e ju ofta tänkta att fungera under många år va #9# men e de långsiktia bindningar i de så vill ja ha sett hur villkoren ser ut va de #10# @ &lt; ingressive &gt;</p>	<p>\$A: yeah and it it that is the way it is in lots of operational questions right er the important thing is I think that #1# the formal binding must not be done #2# and and we have this standpoint since we discovered that we had safety agreements signed until two thousand two right for a terrible cost so #3# I will not let go of this thing with long term contracts but everything that is more than a year I want to see before it is sent away #4# (...) // #5# that is the way it is #6# // er #7# and because of that I think that it is important that that item is included #8# but when it comes to it is like that with rental contracts for example that they are often meant to work for many years right #9# but if it is long term bindings in it then I want to see what the conditions look like right it #10#</p>
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Here participant A makes his stance stronger, first by speaking at some length, repeating his standpoint several times (#1# to #2#, #3# to #4#, #7# to #8# and #9# to #10#), and second by phrasing it as something that he is not willing to compromise with (#3# to #4#). The short phrase between #5# and #6#, *så e de* ('that is the way it is'), is very definite.



The question of stance strength is obviously related to that of task-oriented vs. social-emotional acts that Bales and his followers have been so preoccupied with (see p. 10 ff.). When two members in a decision group have conflicting opinions, there are only so many ways out of the situation. One way is to simply stop discussing it, leaving the matter aside. In Bäckmåla Municipality Council (A850101) this happens a few times, issues are tabled. The interval until the subsequent meeting can be used for informal contacts and negotiations, during which one of the parties can yield in a socially acceptable way. If there is no hurry deciding the matter, this is a reasonable way of dealing with it.

As mentioned above, another way to handle conflicting opinions is to vote. The City District Committee (V321801) is an example of a group where this solution is taken to an extreme – the meeting is highly formalised, and voting is used several times to force the opposition to accept the opinion of the majority. Since this is a political forum where this behavior has a long tradition, it does not cause much tension. Further, in a political meeting of this kind the socially important groups are probably the party groups, and the social-emotional climate within these party groups is what matters, not so much the the climate between the members of different parties.

However, voting was not used in any group but the very formal City District Committee, which is a sign that consensus is favored immensely in Swedish groups.<sup>1</sup> However, when two participants have conflicting views, consensus can only be reached if one party yields,<sup>2</sup> and having to yield bluntly seems to be harmful to a person's prestige or self-esteem. Each matter to be decided is therefore potentially harmful to the social-emotional atmosphere. Making stances weaker or stronger provides a way of maneuvering the group towards consensus, and gives participants a chance to probe the opinions of others before making their own stance overtly strong. Yielding from a weakly expressed stance is less harmful to the persons prestige than yielding from a strongly expressed stance.

To analyze this aspect of face-to-face communication, Erving Goffman (1967:5 ff.) picked up the concept of *face* and made it known to a larger audience of linguistic and sociological researchers. A person's face is, according to Goffman, the image of himself that the person wants to present to others and himself, typically consisting of positive values like friendly, intelligent, wise and beautiful. Utterances (or communicative acts) that challenge this image are *face-threatening*, and when a person is about to say something that he thinks is potentially face-threatening, he may use *face-saving strategies* to avoid the face-threat. In this terminology, participants in group decision-making activities can be said to apply face-saving strategies when they express weaker and stronger stances in order to avoid harming a person's prestige or self-esteem.

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1. See 7.2.1 for a discussion of the scope of the results of this study.
  2. Assuming that compromises are not possible.

What is obvious here is that social-emotional acts and task-oriented acts cannot really be separated, as suggested by the IPA scheme (see section 2.2.5). Moving towards consensus is necessary for completing the task (making a decision), but affects the social-emotional atmosphere as well.

Making a proper investigation of management techniques for social-emotional tension in decision groups would require quite another type of empirical material than what we have at hand here, but certain observations can be made from the material we do have. The first is that humor seems to be a common way of releasing tension created in a discussion (or preventing it from being created); the Patent Office was the only recording without any joking. The second is simply leaving the matter aside and doing something else for a while in order to release tension. Tabling an issue is a formal method that can be used for this purpose, but informal groups use this principle as well. Excerpt 5-5, seen in combination with 5-22, is an example of this; the decision about buying the book is deferred for a while, for no obvious reason except that there was tension (or risk of tension).

### 5.5.7 Status

It would hardly come as a surprise to anyone today to say that in most groups there are differences in status among the members, and that this difference is reflected in the interactional patterns of the group. Nevertheless, in the material used for this study there is very little independent evidence for status relationships between the participants, which makes status difficult to analyze. One might say that people with higher status speak a lot and get their proposals accepted, but if the knowledge about which people have high status is based on who speaks a lot and gets proposals accepted, then one is guilty of circular reasoning.

However, the material does reveal that participants do not speak equally: the least active third of the participants in the recordings contributed with only 1.3% of the utterances. Note also that decisions are very rarely made while the chair (or a more informal leader of the activity) objects openly. Only two such cases were found (one in Bäckmåla Municipality Council and one in Budget Revision). It is likely that there are other persons in the recordings whose consent is also needed, but that their roles are less obvious, making it difficult to say how strong the demand is for their agreement. Excerpt 5-25 perhaps shows an example of a difference in status: J's request to add the previous decision to the protocol is turned down, without any (proper) motivation having been given.

### 5.5.8 Ordering and volunteering

In several of the recordings studied here, for example Board of City District 1 & 2 and Strategy Meeting, there is a manager present who has the formal power to more or less order the other participants to do as he says. However, such behavior is rare; primarily, the managers try to convince somebody to take on the task

voluntarily instead. Even the weaker form of politely giving somebody a task to do is rarely used. One of the few cases can be seen in excerpt 5-38:

*Excerpt 5-38. V770301, line 1784. Example of a manager laying a task on an employee.*

*The Board of City District Committee is discussing setting up a certain kind of crisis team, a 'posom' group. Participant H (Helga) has given much of the background, and in utterance 1 the chair (participant A, Arne) makes a kind of conclusion or summary (#1# to #2#), and says that H should be in charge of creating a posom group (#2# to #3#).*

1	\$A: #1# ja / de som förväntas av oss här de e egentlien bara att peka ut e: tre personer som ska bli informerade om de hela #2# sen tar du initiativ // e: för bildandet av en posomgrupp // och du funderar då på va för utbildning å sånt dom behöver va #3#	\$A: #1# yes / what is expected from us now is really just to point out three people who are to be informed of this whole thing #2# and then you will initiate // er the formation of a posom group // and then you think about what kind of training et cetera they need right #3#
2	\$H: // du ger mej uppdraget att	\$H: so you commission me to
3	\$A: // a de ligger väl e: lagt de på Gun [302 så att säga ]302 så att de ligger ju på ditt delområde	\$A: well I guess it lies er laid on Gun [302 so to speak 302 so it lies in your subarea
4	\$H: [302 m ]302	\$H: [302 m ]302
5	\$H: ja // m	\$H: yes // m
6	\$A: // för de kan ju inte va en ledningsfråga så att säga å ta i utbildningsdelarna å de utan de // [303 de ]303 e väl egentlien information [304 // ]304 om läget å så noterar vi att de här bildas va [305 / e ]305 och sen jobbar du vidare me de enlit de uppdrag du har å sen har vi då att fundera på å kanske så småningom fästa ett protokoll på // tre lämpliga personer som som // kan gå in i detta å de kan väl // du fundera på Helga å så kan vi // byta nära ord om så så noterar vi bara (...) //	\$A: // because it can not be a question for the management so to speak to deal with the training parts and all that but it // [303 it ]303 must be really information [304 // ]304 about the situation and then we observe that this is formed right [305 / er ]305 and then you continue to work on this according to the commission you have and then it lies on us to think about and perhaps after a while attach a protocol to // three suitable people who who // can come into this and I guess you can // think about this Helga and then we can // exchange some words about and and we just observe that (...) //
7	\$H: [303 m ]303	\$H: [303 m ]303
8	\$H: [304 m ]304	\$H: [304 m ]304
9	\$H: [305 m ]305	\$H: [305 m ]305

In utterance 1, the manager, participant A, asks participant H to lead the formation of the *posom* group (#2# to #3#). In utterance 2, participant H asks him to be more precise about the task, while pointing out that this is a commission laid on her by A. Participant A then checks with H that she agrees with him that she is the appropriate person to handle this task, and then proceeds to explain his view on why it is her task. He is obviously concerned that she should accept the task more or less freely.

It is difficult to know the precise reason managers are so reluctant to give orders, but there are several likely motives. One is that it is simply impolite to order people around; this comes from a more general ethical principle that one should not force people to do things against their will. It is perhaps not specific for Swedish culture to consider this impolite in general, but it may be specific that managers in these situations are expected to be polite.

Another possible motive for avoiding ordering others around is that obligation to the task increases if one has taken it on voluntarily, rather than having been ordered to do it. (This may also be culturally dependent, connected to the Swedish emphasis on doing one's duty.) A commitment seems to be a stronger incentive than an obligation created by somebody else (all other things being equal). This is clearly not a binary distinction; a person can be more or less involved in a decision. In addition, the more involved a person is in the decision, the greater the commitment and responsibility for the task are. Thus, when the chairperson in the Board of City District Committee elicits explicit acceptance from the other participants, this can be seen as a way to increase the others' obligation. Similarly when the manager of the consultancy company in the Strategy Meeting refuses to commission one of the consultants to handle a task, it can be seen as a way to uphold commitment to the task:

*Excerpt 5-39. V770201, line 4037. Example of a manager abstaining from giving orders to employees.*

*The participants have decided that they should organize a seminar for some of their potential customers (energy plants). Now, they are to decide who will be responsible for it. Participant A (Adam) is the manager, and in utterance 1 he asks for volunteers.*

1	\$A: a då får vi ta energi // vicka ta på sej de //	\$A: well then we have to take the energy bundle instead // who can take that on
2	\$T: där föreslår ja Fredrik å Ellen /	\$T: I suggest Fredrik and Ellen for that
3	\$F(redrik): de har inte ja tid me // / föreslår Ulf istället	\$F(redrik): I do not have time for that /// I suggest Ulf instead
4	\$E(llen): de f+ bör va nån som har lite erfarenhet från de / ja kan hjälpa till [191 och (...)] // ]191	\$E(llen): it m+ should be someone that has some experience from that / I can help out [191 and (...)]191

*Twelve utterances where the participants explain why they can not take on responsibility for this, and what limited responsibility they can take on.*

17	\$A: < ja men / ta på er ansvaret att ta fram seminarie / de e de / de handlar om de / [196 ja elle nej ]196 > @ < mood: irritated >	\$A: < yeah but accept responsibility to organise seminar / that is what it is / it is about / [196 yes or no ]196 > @ < mood: irritated >
18	\$E: [196 ja ]196 ja kan ha me mej en bit då / å samla in lite information //	\$E: [196 I ]196 I can bring one part / gather some information //
19	\$A: m: /	\$A: m: /

20	\$E: en till då / två stycken [197 (...)]197	\$E: <i>one more / two people [197 (...)]197</i>
21	\$H: [197 Ellen å Ulf]197	\$H(ans): <i>[197 Ellen and Ulf]197</i>
22	\$A: Ellen å Ulf	\$A: <i>Ellen and Ulf</i>
23	\$E: Ellen å Ulf / ja okej / Ulf	\$E: <i>Ellen and Ulf / well okay / Ulf</i>
24	\$A: (...) använda dom resurser som finns	\$A: <i>(...) use the resources there are</i>
25	\$E: så får vi / fråga dom andra sen ///	\$E: <i>and then we can / ask the others later  </i>
26	\$A: vi lever på de här // (...) // < om vi nu inte lever gott så > // ändå så @ < chuckling >	\$A: <i>we live off doing this // (...) // &lt; if we don't live well then &gt; // even so @ &lt; chuckling &gt;</i>

The manager, A, tries to make one (or two) of the consultants volunteer for the task, but they refuse. In utterance 17, he shows some frustration, and Ellen takes on responsibility, followed by Ulf after a while (who accepts by not refusing). In utterance 26, the manager actually scolds the other participants for being so uncooperative. Even so, he does not use his formal power to order anyone. In utterance 22, he comes close to making an order, but the wider context suggests that it is not understood by the others as A having given an order, rather that he repeats the proposal made in utterance 21. This wider context includes the following situation, which had occurred earlier:

*Excerpt 5-40. V770201, line 4019. Another example of a manager abstaining from giving orders to employees.*

*The participants have decided that they should organise a seminar for some of their potential customers; they are now trying to decide who will be responsible for planning it. Participant A (Adam) is the manager, and in utterance 1 he asks for volunteers. Participant T (Tommy) feel the pressure, and replies to this in utterance 2.*

1	\$A: (men de e ju plan+ planera) / vicka kan ta på sej ansvaret å planera // så de blir nåt av	\$A: <i>(but it is to pla+ plan) / who can take on responsibility for planning // so that it does not come to nothing</i>
2	\$T: ja ja vill ju naturlivis ja kan ju inte göra de själv va	\$T: <i>well of course I do not want I can not do it on my own right</i>
3	\$A: nä men de e inte samma [189 sak]189 < /// > @ < uncertain belonging of pause >	\$A: <i>no but that is not the same [189 thing]189 &lt; /// &gt; @ &lt; uncertain belonging of pause &gt;</i>
4	\$T: [189 nä]189	\$T: <i>[189 no]189</i>
5	\$A: som att göra de själv	\$A: <i>as doing it alone</i>
6	\$U: a ja kan hjälpa me hjälpa till också	\$U: <i>well I can help with help out too</i>
7	\$A: men de måste drivas å samordnas å så /	\$A: <i>but it has to be pursued and coordinated and so on /</i>

8	\$E: å så rätt kontaktpersoner skulle vi ha också då på / energi+ / +verken // de [190 gäller stadsdelsnämndena också ]190 (...) vi inte riktar oss ti ekonomichefer å*	<i>\$E: and we should have the right contacts too at / the energy / companies // that [190 applies to the city district committees too ]190 (...) we do not address the financial managers and</i>
9	\$X: [190 (...) ]190	<i>\$X: [190 (...) ]190</i>
10	\$T: ja nä nä / ja säger / ja bara säger att ja	<i>\$T: well no no / I am just saying / I am just saying that I</i>
11	\$A: Tommy tar på sej de	<i>\$A: Tommy takes on that</i>
12	\$T: nä ja tar inte me+ på mej båda dom / som ansvari person nej /	<i>\$T: no I do not take wi+ on both of those / to be the responsible person no /</i>
13	\$A: ett	<i>\$A: one</i>
14	\$T: a ja kan va me å driva / < sdn-grejen > < // > @ < abbreviation: sdn > @ < uncertain belonging of pause >	<i>\$T: yes I can participate in pursuing / the sdn thing &gt; &lt; // &gt; @ &lt; abbreviation: sdn &gt; @ &lt; uncertain belonging of pause &gt;</i>
15	\$A: a då får vi ta energi // vicka ta på sej de //	<i>\$A: well then we have to take energy // who take on that //</i>

In utterance 11, Adam, the manager, tries to make Tommy take on a task, but Tommy refuses (utterance 12). Note the phrasing *ta på sig* ('take on') the task; it is not really possible to order somebody to *ta på sig* something, even though the manager's way of speaking is actually more "order-like" in utterance 11 here than it is in utterance 22 in excerpt 5-39.

Ordering does not really seem to be an option for the manager here.<sup>1</sup>

A third possible motive for asking employees to volunteer for the task rather than ordering them to is that the manager's responsibility for the task then diminishes. When an employee takes on the task voluntarily, that implies that the employee claims to be able to perform the task, that he has time for it, etc. The manager can then rely on that claim, rather than making the judgment himself. (Formally, the manager may still be required to make the judgment, but in practice this mechanism seems to reduce responsibility for the manager.)

### 5.5.9 Unstructured argumentation

Argumentation is common in the investigated recordings, but it is seldom very well structured. In argumentation analysis one often gets the impression that arguing is a simple case of claims being put forward and then arguments for or against these claims, and this may be the case in many written, argumentative

1. It should be said that it is not absolutely clear that A really has formal power to order the other participants to do things; the background information is not perfect. However, it seems very likely that A has this power.

texts. However, in spoken group decision-making, the argumentation is usually blended with other things. For example, since arguments and rejections are potentially threatening to the social-emotional atmosphere (as discussed above), communicative acts can be “disguised” in different ways. Excerpt 5-5 on pp. 163-4 illustrates this. The question put by participant B in utterance 4 might be a way to give information about the proposed book, but it could also be a way to argue against the proposal to buy the book made in utterance 1.

What is more, participants often discuss several proposals at the same time; arguments may be directed against one proposal and for another simultaneously, and it is sometimes difficult to know at which proposal arguments are directed. Different kinds of background information are often intermingled with arguments, and it may be difficult to know what the intended function of an utterance is.

This is perhaps not very surprising – conversation is often like that – but at times there is a tendency to overlook this fact.

## 5.6 Activity description

The (sub) activity of arguing was described in chapter 4 in terms of purpose, roles, rules etc., and the same kind of description can be made for group decision-making.

### **Purpose**

The definition of decision-making made in chapter 3 provides us with the purpose of the activity: choosing one future action and either performing that action or creating an obligation to perform that action.

Group decisions are always public, since at least the other people in the group know about them. This means that unless communication of the choice also performs the chosen action (which is a rather special case, see pp. 103-4), a group decision will always create an obligation to act according to the choice.

### **Procedures**

A very general procedure for making group decisions is as follows:

1. A participant makes a proposal.
2. The proposal is discussed.
3. The proposal is accepted by the other participants.

It is common that step 2 leads to a new proposal being made, which takes the procedure back to step 1.

As shown above, this is not the only way to make a group decision; rather, there are a number of different ways. However, a proposal has to be put forward, and others must accept the proposal after that. Other things may happen before,

between and after these steps, but the proposal and accept have to occur in that particular order.

### **Roles**

As with arguing, there is only one role required by group decision-making: *participant*. However, other roles may be assigned to participants by other structures (for example, chairperson, which seems to be mandatory in formal meetings).

During the course of decision-making, more temporary roles may also appear. The participant who makes a proposal becomes a *proposer*. The participants who are to accept or reject the proposal should be given a corresponding name; I have found no existing word that captures this, but perhaps *proposal target* can be used for this.

Since several proposals can be made during the same decision episode, a participant may very well be a proposer and proposal target at the same time, and these roles may shift during the episode.

### **Rules**

The basic rule for group decision-making is the same as for arguing:

*The Foundation Rule:* Each participant should be a rational, motivated agent, trying to fulfill the purpose of the activity.

This is the only strictly necessary rule, but in many cases the ethics rule also applies:

*The Ethics Rule:* The participants should take each other into ethical consideration.

Both the foundation rule and the ethics rule were discussed in section 4.3, pp. 133, 136 above.

### **Instruments, artefacts and media; and physical environment**

As regards instruments, artefacts and media, there are no particular requirements, or special demands on the physical environment. Group decision-making can be performed in face-to-face spoken interaction, on the telephone, in writing or any other way that allows detailed interaction.

### **Social-emotional environment**

Like arguing, group decision-making is probably culturally dependent on a social-emotional level. Different cultures are likely to have different ways of making group decisions. The present study is not concerned with cross-cultural comparison, but the author of this study is Swedish, as are the participants of the analyzed activities, so, the analyses have been made from a Swedish perspective.



## 5.7 Comparison with previous research

As mentioned above (p. 25), one of the few researchers who has tried to use linguistic methods to study group decision-making is Marjan Huisman (2000; 2001). It is worthwhile to make a closer comparison between her work and the present study. Huisman made video recordings of meetings with three management teams in three Dutch organizations as well as performing interviews and participant observations. Using a combination of methods including a large share of Conversation Analysis, the recordings were analyzed.

Huisman works with Dutch data, and although the Dutch and Swedish cultures are fairly similar, there are likely to be at least some cultural differences between Dutch and Swedish decision-making. Consequently, comparison between Huisman's work and mine must be made with caution, even though such comparison cannot be dismissed altogether on grounds of cultural differences.

Huisman makes several claims that are relevant for the present work. Firstly, she argues that group decisions are not clear-cut, well-defined events (Huisman 2001:70). Rather, she stated that 'decision-making is an incremental activity in which members of an organization move their agendas forward, step by step' (Huisman 2001:70). As an illustration of this, Huisman presents an excerpt from a transcription of a meeting, where the participants discuss whether or not to buy a copy machine (Huisman 2001:73-74). The excerpt spans some 30 contributions, starting with the secretary suggesting that the company needs to purchase a copy machine. The two participants with most formal power agree with her argumentation, and no participants expresses disagreement. Huisman writes

*During the episode, the commitment of [the three participants with most formal power] emerges. We cannot attribute the decision to one specific utterance. The decision encompasses the whole episode in which the future state of affairs is introduced and commitment to create this state of affairs emerges.*

(Huisman 2001:75)

However, at the very end of the excerpt, one of the members with most formal power utters *eenmaal andermaal*, and looks around at the other participants. The utterance is translated by Huisman as *once twice*, and understood by me as referring to the auction phrase *eenmaal, andermaal, verkocht!* (Eng: *going once, going twice, sold!*). As far as I understand, that is a very clear border to the decision, probably created by the speaker with the precise intention of making the decision (more) clear-cut. Though it is clear that the last utterance does not make up the entire decision, it does not seem to be quite accurate to say that the decision emerges vaguely during the whole episode. (However, I do not have access to the recording or the full transcription, or competence to analyze Dutch culture, making my analysis somewhat speculative.) The recordings studied in this dissertation display variation in how decisions are made. Sometimes they start as prepared proposals that the participants have received before the meeting, and though they may be discussed at length during the meeting, they are accepted or rejected

without modification. In other episodes, a problem may arise in the situation and several proposals be put forward and modified before one is presented that gains general support.

Further, Huisman defines decision as a 'commitment to future action', which I consider a bit unsatisfactory (see p. 102). However, apart from decisions, Huisman also talks about 'decision-making episodes' in conversations, episodes where 'participants recursively (1) formulate states of affairs, which can consist of events, situations, and actions (...), and (2) assess those states of affairs' (Huisman 2001:72). It is unclear whether this is meant to be a definition of how decisions are made in conversations, but it seems so. One thing to note about this is that the 'formulation of future states of affairs' has to be understood quite widely – any reference to a possible future action is a formulation of a future state of affairs.

Another, more problematic issue is that Huisman implies that *assessing* a formulated state of affairs is enough for a decision. It is a little unclear exactly what she means with this word, but assessing is unlikely to be enough – it is necessary to report the result as well (although silence can be used for that; see pp. 161-2). Further, if assessing a state of affairs entails something other than simply understanding it, it does not seem to be necessary in order to accept a proposal – I might for example trust the proposer and choose to accept his formulation without evaluating it.

The fourth part of Huisman's description that I am opposed to is that the formulation and assessment of states of affairs must be recursive. Excerpt 5-2 on p. 159 above shows a simple decision-making episode. A proposal is made by participant A in the first utterance, Huisman would call this a 'formulation of future state-of-affairs', namely that Bengt Alkvist will be the person responsible for checking the minutes. Participant A asks the committee members if they have other proposals, to which they answer no. Participant A then asks them if Bengt can be elected, and they answer yes, and so A declares that Bengt has been elected and proclaims the decision by striking his gavel. There is nothing recursive in this.

Huisman writes that it can be quite difficult for the analyst to decide when and whether a decision has been made (Huisman 2001:70), which I agree with (see p. 197). However, a natural question is then how the participants ever know that a decision has been made, in other words when enough commitment has been shown. Huisman claims that different groups use different norms for establishing the existence of a decision (Huisman 2000:93ff), and the present study points in the same direction, although it should be said that formal procedures provide a common norm that many groups make use of: the chair repeats the proposal, elicits and receives agreement, and finally declares the result.

## 5.8 Conclusions

In this chapter, I have investigated interaction in group decision-making. A general conclusion is that group decisions can be quite complex interactionally. Many patterns and strategies are used to reach agreement, and the basic pattern of proposal-acceptance shows considerable variation.

One of the most striking things about the recordings studied is the great variation in handling decisions between the groups. As Huisman also found (see p. 218), each group creates its own patterns for how decisions are handled, a result that strengthens the claim that group decision-making research needs to be done on real-world groups dealing with real issues, not ad-hoc groups with artificial tasks, set up for the purpose of the study.

A number of general observations about the interaction of group decision-making were presented in section 5.5 above, but not as many as I would have expected based on experience from the language of other social activities, such as auctions, travel agency interactions, or interaction between customers and cashiers in shops. It seems like much of the interaction occurs in ways that do not have an obviously discernible pattern, which indicates that the activity of group decision-making is not very structured, or that the degree of conventionalization is low. Why is that so? One explanation lies in the very general nature of the category ‘group decision-making.’ As the concept determination showed (see p. 83 ff.), people can decide about almost anything, and group decision-making can appear in many situations. Such a wide variety of topics and situations works against conventionalization.

Another thing to note is that the analysis of formal procedures in section 5.5 could have been more extensive by following up all traces of formal procedures. However, such patterns are not focused in this thesis; perhaps the title ought to be ‘*interpersonal* group decision-making – language and interaction’.

The activities discussed in the previous sections occur in different types of groups and activity types, although all the participants in all the activities sit down to discuss certain things. They all belong to the public sphere of life, since the recordings in the corpus from the private sphere contained too few decisions from which to form generalizations. Thus, the general observations made here hold for public sphere meetings, while group decisions in the private sphere and in other kinds of activities might be different. However, the level of formality in for example Budget Revision or Esperanto Foundation is quite low, and I suspect that the principles governing the interaction there also hold for activities in the private sphere.



# 6. Word Frequencies

## 6.1 Introduction

With the advent of computers and the ability to store and process large amounts of text (including transcriptions) electronically, linguists have been able to make their research quantitative to a much larger degree than what was possible in the past. The method to use electronically stored corpora to study language was pioneered by European Anglicists in the 1960s and -70s (Leech 1991; Svartvik 1992), and in its simpler and more straight-forward versions (concordances, example search) it is by now a standard tool for many, perhaps most, linguists. More advanced uses of corpora are not as wide spread a method for language research, but are quite established even so.

The largest written language corpora in the world contain billions of words (e.g. the German Mannheim corpus), while the largest spoken language corpora are several orders of magnitude smaller – the largest, British National Corpus, contains 10 million spoken words. In comparison to these, the corpus used here is quite small, and this means that the results gained from it will be less reliable than comparable results from other, larger corpora. Further, the methodologies for quantitative corpus studies are still being developed, and although I intend to resolve a few of the methodological problems in this study, others will remain.

There is one thing that should be pointed out to readers inexperienced with corpus linguistics: in the traditional division of language into expression and content, only the expression part is included in the transcriptions. This is not entirely true, since transcribers interpret the sounds into words, a process that includes understanding and thus language content, and there may also be some limited annotation of the contents, such as parts-of-speech tagging. But on the whole, the meanings of words and utterances are not included in the corpus. This means that questions that may seem obvious for a quantitative analysis of group decision-making language – how many proposals are made? how many accepts

are produced? how often do participants disagree? etc. – cannot be answered in a corpus study.<sup>1</sup>

Still, there are many questions that *can* be answered in a corpus study, and some quantitative results can be interesting in themselves, as for example some distributions of a particular word or expression can be. However, many times quantitative studies are more interesting as *complements* to qualitative ones, rather than *replacements*. This complementing can be done in two ways: either by verifying/falsifying results from qualitative analyses, or by posing questions about language (asking, ‘why this difference?’). In this chapter, I shall attempt both types.

## 6.2 Method

### 6.2.1 General

A number of computer programs for processing transcriptions have been developed at the Department of Linguistics, Göteborg University, primarily by Leif Grönqvist, and to a limited extent by Magnus Gunnarsson (some of these are described in (Allwood et al. 2003)). The output from these programs includes word frequency lists, n-gram frequency lists<sup>2</sup> and vocabulary richness measures along with many other measures. Among all these lists and measures a subset has been selected that will be used to describe the activity type examined here, group decision-making.

### 6.2.2 Verified programs

When using computers for research, one must keep in mind that there might be errors in the programs. Some procedure must be used to ensure the quality of the computer generated measures. I have identified four general stages in the generation of measures and lists, *collection*, *encoding*, *calculation* and *presentation*. Errors can be introduced in each of these stages.

- *Collection (From language to source file)*  
When dealing with spoken language, it is necessary to first record and then transcribe activities in order to get machine readable texts, and there may also be additional annotation to be done, for example of communicative acts<sup>3</sup>. Different kinds of errors can appear in this stage. The recording can fail or be low quality in different ways, but generally, the recordings are accurate. It is more problematic that the person doing the transcribing and annotating may render a particular activity incorrectly. This is a well-

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1. Unless, of course, the corpus is annotated with communicative acts etc.  
2. See 6.8 for explanation.  
3. Both transcription and annotation includes certain analysis, but in the context of measure generation, it is all part of the collection.

known issue, and inter-coder reliability has been discussed widely (Lampert and Ervin-Tripp 1993:196ff; Cucchiarini 1996).

No transcription is necessary when working with written language, so inter-transcriber reliability is not a problem in such cases, although the collection stage can still be identified. The texts used in the corpus have to be collected and, most often, converted to some format other than the original one, for example, from PDF to some XML-based text format. During this process, errors, such as duplicate entries or missed files may occur.

- *Encoding (Consistency of source file)*

The texts in the corpus usually have to be in a specific format. This format includes the file format (for example text files with Latin-1 character encoding) as well as the text format. In our case the transcriptions needed to be in GTS format (see appendix 1). In many cases, there are computer programs that can be used to verify that a corpus source file fulfils the required format. For a sufficiently rich text format, such as GTS, there are numerous checks that *could* be made using a sufficiently sophisticated checking program. However, there is no way to ensure that all relevant checks have been implemented in a given checking program. Crucial errors types in the source files can only be discovered by using the corpus, calculating lists and measures for it. At this point, the necessary checks can be added to the checking program.

Of course, there may be errors in the checking programs, basically of three types: i) a format error can be reported even when there is no error, ii) the wrong type of format error may be reported, or iii) a format error may not be reported even though there is one. The first two types are easily discovered, since the corpus source file that is being checked will be scrutinized in order to search for the reported error. If no such error is found, then attention is turned to the checking program. The third type of error is more difficult to discover, but not more so than discovering which error checks to implement, as discussed above.

- *Calculation*

The programs that generate the lists and measures that are used to analyze the corpus can of course contain errors, in the same way any other program might. This is perhaps the most obvious kind of error when considering the correctness of corpus lists and measures.

- *Presentation*

The final step is often overlooked, especially by end users who do not always separate the calculation of a measure from the presentation of it, and frequently, these steps may indeed be indistinguishable. Commonly though, the measures and lists are first calculated and stored in a way that is not so convenient to read, and then collected and put into some kind of report file. This stage may also introduce errors at times, and sometimes

quite subtle ones. If, for example, a measure is calculated for men and women separately, and the presentation mixes these numbers up, it may take quite some time to discover the mistake. Another kind of error occurs when the presentation is simply misunderstood by the analyst. Let's say frequency lists of 4 different types are generated for 30 sub-corpora. The lists are likely to be quite similar; an analyst may accidentally mistake one list for another.

The list above shows that many of the possible errors in the generation of corpus measures are not actual program errors, but results of usage mistakes. Still, program errors cannot be ignored. I have identified three types of methods for obtaining correct programs, *proof*, *code review* and *testing*.

- *Proof*  
Starting in the 1960's, software developers tried to make programs that could be proven to be without errors, in the same way as mathematical theorems can be proven (Fischer and Grodzinsky 1993:313). Development has continued, to some extent, and some programs can be proven to be correct. However, the process of specifying, writing and proving a program is cumbersome, and mistakes in the specification or proving can result in programs not behaving as expected.
- *Code Reviewing*  
In programs where errors can be fatal, code review is often used to prevent errors. There are different versions of this, for example tandem programming, where two programmers sit together to write the program, or more traditional reviews, where a second programmer reads through the program code.
- *Testing*  
The most widely used method for discovering program errors is testing. One simple way of testing a program is to give it to end-users and see what they say, essentially this is the same thing as beta testing. Another way is to use documented, well described test cases as a basis for testing, that are designed to capture the central/crucial functionality of the program. If the expected output is well defined (there is a 'gold standard'), automated (automatic) testing can be used. Here, specially designed test programs run the programs that are to be tested.

These three methods can of course be combined – parts of a program can be proven and other parts tested, and programs that have been code reviewed are usually tested too.

Keep in mind that all changes to a program may potentially introduce new errors, and that the testing, proving and code review in principle have to be redone each time the program has changed. This means that if an error is found during testing and the programmer corrects it, then the test has to start all over again. In



practice, this requires systematic version management, that is, a system for keeping track of changes to the program.

### 6.2.3 Applications to the present material

The transcriptions used in the present study have all been checked by a person other than the transcriber, in order to improve reliability. This is a way to ensure quality in the collection stage. It also improves quality during the encoding stage, since the checker also corrects encoding errors made by the transcriber. The encoding was further improved by checking the source files with *tran2ctl*, a program developed by Leif Grönqvist. This program has been used to check GTS transcriptions since 1994, amounting to over a decade of beta testing<sup>1</sup>. Further, all transcriptions in the group decision-making sub corpus have also been checked by *GTSEditor*, a completely separate program<sup>2</sup> developed by Magnus Gunnarsson in 2002. Apart from the increased quality of the files in this specific sub-corpus, *GTSEditor* has also worked as a way to test *tran2ctl* – transcription errors found by *GTSEditor*, but not by *tran2ctl*, would indicate errors in *tran2ctl*<sup>3</sup>.

Most of the programs used for this study to generate measures and lists have been used (tested, in effect) in different research projects for several years. Each list was also verified with a method that amounts to very much the same thing as using a ‘gold standard’: two random values were calculated for each list “by hand”, that is, small scripts or third-party programs (such as Emacs) were used to calculate the values from the source files. The same method was used to test each of the measures – the measure was calculated “by hand” for two random groups. The tested values were taken from the report files, in order to test the presentation stage at the same time.

### 6.2.4 Comparison

One of the most difficult things about interpreting statistical measures for a corpus is knowing what to compare your statistics with. Let’s say we find out that the word *kanske* (‘maybe’) has a frequency of 342 in the group decision-making corpus. Is this a large or a small value? We would like to know what the “normal” frequency is for *kanske*, but that is not easy to get. We could try to compile some kind of reference corpus, a “normal” corpus, and see what frequency *kanske* has there, but what is a “normal” corpus? There have been attempts to create such reference or *balanced* corpora, containing texts of different kinds (Francis and Kucera 1964; Dewe et al. 1988; Källgren 1990). However, the first thing one has to ask when trying to put together a balanced corpus is ‘what (relevant) types of language are there?’, and the second question is ‘what are the pro-

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1. Although changes have been made in *tran2ctl* continuously during this period.
  2. By ‘completely separate program’ is meant that no code or design has been reused.
  3. For this particular study, no errors in *GTSEditor* or *tran2ctl* were found.

portions between these types in “normal” language?”. Considering the list of possibly influencing parameters on language – activity type, culture, social institution, gender, social class, geographic location, etc. – the number of types of language is not only enormous, it is also very difficult to specify, since it is far from obvious how many activity types/cultures/social institutions/social classes etc. that should be distinguished.

Of course, one could compile a “pseudo-balanced corpus”, a corpus that is as balanced as possible, containing as many types of language use as possible, but that is problematic. Before we have a proper understanding of what a “normal” corpus is, we will not be able to estimate how close the pseudo-balanced corpus is to that corpus.

In the present work, the activity type group decision-making is studied, and one could argue that in this case a reference corpus only has to be balanced with respect to activity type. I agree with that. Many parameters influence language, and in order to study one of them we need to keep the other parameters (reasonably) *constant*, but not necessarily “normal”. Activity type is assumed to be one of the most important factors for language, and as long as the reference corpus is balanced with respect to activity type, the other parameters (culture, social institution, gender, etc.) have to be approximately the same as in the group decision-making corpus, but they need not reflect “normal language”. The problem with this is the same as for a general balanced corpus, although to a lesser degree: we do not know how many activity types there are, nor do we know their proportion in “normal language”.

In this work, rather than forming comparisons to any “normal” language, they will be made with other activity types. Two such activity types are included, *informal conversation* (IC) and *professional/official* (P/O); these are described in section 6.3 below. The transcriptions for these activity types were taken from the Göteborg Spoken Language Corpus (Allwood et al. 2003).

### 6.2.5 Significant difference

When finding a quantitative difference between two corpora, one must ask whether or not the difference is significant. What does this mean, precisely? If the corpora were complete in the sense that they contained all instances of the language that they are meant to be corpora of, then every measured difference would be significant in the sense that it reveals a difference in the target data. A difference may be a small one, but that is beside the point. Usually, however, the corpus only contains a small amount of the kind of language that the researcher wants to investigate. In such cases the interesting question is: If the corpus were expanded to include substantially more material of the same kind, what are the chances that the difference would remain?

The corpus is a sample, but it is not obvious what it is a sample of, what the “language population” is. In the case of the group decision-making corpus, one

might ask if it contains ‘all words/utterances that have ever been produced in GDM’ or ‘all words/utterances that have ever been produced in GDM and all words/utterances that will ever be produced in GDM’, or perhaps ‘all words/utterances that have been, or could be, produced in GDM’. (More restrictions should of course be added. For example, that the group decision-making should be performed in Swedish, by adult speakers, in modern times, etc.)

This insecurity about what the corpus is makes it seem like corpora cannot be used for quantitative studies at all, but that judgment is too harsh. With a proper awareness of what kind of texts the corpus contains, the results from a quantitative study *can* be meaningful. A corpus is a perfect sample of the kind of language that is in the corpus, and the challenge for the analyst is then to understand the difference between the language of the corpus and the kind of language that the analyst would like to study (in this case, the language of group decision-making). This also means that a difference between two corpora that are intended to capture two language types does not necessarily mean that there is a difference between these two language types. The conceptual step from corpus to language type will have to be qualitative.

Now, let’s return to the question at the start of this section – how do we know if a quantitative difference between two corpora is significant? If it can be assumed that the measure in question follows a normal distribution (‘the bell curve’), a whole set of standard statistical methods can be used to extract information about the sampled language from the corpus, including methods to test statistical significance<sup>1</sup>. I do make this assumption, and two such tests for statistical significance are used in this study, the *t-test* and the  $\chi^2$ -*test* (‘chi square’, /kai skweɪ/)<sup>2</sup>. I will not go into the mathematical details about these statistical tests, since there are plenty of textbooks on the subject, such as (Djurfeldt et al. 2003), but I shall describe the tests here briefly.

- *The t-test*

The t-test is a way to test a difference between two populations, while

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1. If we believe in some other distribution than the normal one, other statistical methods can be used.
  2. A third test that could be used is the *Mann-Whitney ranks* test, advocated by (Kilgarriff 2001). There are some difficulties with Mann-Whitney, however. First, it requires samples of the same size, and for the small corpora used here it would be difficult to construct samples that respect transcription boundaries (i.e. not splitting any transcriptions onto two different samples), and it is far from obvious how the test would be affected if these boundaries are not respected in the samples. There is simply not a natural way of dividing the corpus into equal-sized samples. Further, the word frequencies would be quite low in many of the samples, which would make the test unusable for many words. Thus, Mann-Whitney ranks test is not used in this study, although a comparison would be interesting.

taking the variation within a population into consideration. Let's say we sample men and women from a certain category, ten of each, measuring their heights. The result is that the men are 183 cm on average, and the women are 166 cm on average. If the variation within these groups is very small (the men are between 180 and 186 cm and women are between 165 and 168 cm), this difference in average height is quite stable. The t-test would then say that the probability is high that the difference is real. In other words, it would show that even if we sampled many more men and women, men would still be taller than women, with a probability of, for example, 99.9%. If, on the other hand, the variation within the two groups is high – the men are between 143 and 211 cm, and the women are between 144 and 193 cm – then the t-test would say that the probability is much lower that the difference is real, for example 75%. If the variation within each group is large, the average value is less reliable; the t-test takes this into consideration.

- *The  $\chi^2$ -test*

The  $\chi^2$ -test is less sophisticated, and does not concern itself with intra-group variation. Let's say we pick 10 married heterosexual Canadian couples, and 10 married heterosexual French couples, and measure who is the taller, the husband or the wife. The result of this measurement is that in 8 of the Canadian couples the husband is taller, and in 10 of the French couples the husband is taller. The  $\chi^2$ -test will tell us what the probability is 86% that this difference between French and Canadian couples will remain if we measure many other couples.

It is worth stressing that both the t-test and the  $\chi^2$ -test concern only whether there is a difference at all, not the size of the difference. They only test statements like 'x is more common in A than in B'. A statement like 'x is twice as common in A as in B' requires other statistical tests.

It is not obvious how the statistical tests should be applied to the corpus data, therefore, it is necessary to discuss statistical significance in relation to the measures more closely. I have identified four kinds of measures:

#### *Activity Measures*

A measure like 'number of speakers per activity' is obviously related to the activities in the corpus, and each recording can be seen as a sample. A corpus is then a series of samples, and the variation within this series can be calculated. A t-test can be performed to see if a difference in number of speakers per activity for two corpora is statistically significant. Thus, the t-test can be used for any measure that can be applied to each activity, and such measures are called *activity measures*.

### *Utterance Measures*

Other measures, for example ‘average number of words per utterance’ (MLU, mean length of utterance), can be seen as being related to each utterance in the corpus. Each utterance is a sample, therefore, t-tests can be performed to examine statistical significance on the difference in MLU between two corpora.

However, MLU can also be seen as an activity measure (average MLU for the activities in the corpus), and I consider this a more reasonable view. When each utterance is seen as a sample, the order between the utterances is completely disregarded. When MLU is seen as an activity measure, in contrast, the utterances “remain” within their respective activities. An activity with many exceptionally long utterances will be treated as an exceptional activity, rather than allowing all exceptionally long utterances blend in with utterances from the other activities.

Under other circumstances it might be better to see MLU as an *utterance measure*, but not in this case. I have not found any measures that were fit to be treated as utterance measures.

### *Word (Token) Measures*

Word frequencies can be seen as activity measures – for example, the relative frequency of a certain word<sup>1</sup> can be calculated for each activity in a corpus, and the average value can then be calculated and compared with that of another corpus. This would be the average relative frequency for a word type. Another way to do this is to look at the relative frequency of the word in the corpus as a whole, disregarding the distribution of the word among the activities. This would be the total relative frequency. These values are often quite close to each other, but they may be very different, particularly if the sizes of the activities in the corpora differ a lot. As an example we can look at the words *någonstans* (‘somewhere’) and *typ* (‘type’) in the group decision-making (GDM) corpus compared to the informal conversation (IC) corpus (see section 6.3 for a description of the IC corpus):

*Table 6-1: Example of total relative frequency compared to average relative frequency.*

	Corpus	Abs. freq.	Total ppm	ppm/recording
<i>någonstans</i>	GDM	73	278	278
	IC	33	338	366
<i>typ</i>	GDM	62	236	156
	IC	54	554	620

- 
1. The relative frequency for a word in a corpus is the number of occurrences of that type divided by the total number of tokens.

For *någonstans* the average relative frequency (ppm/recording) and the total relative frequency (total ppm) are about the same, while these frequencies differ greatly for *typ*, especially in the GDM corpus. This means that for *typ* there is one or more activity that is considerably larger than average that has relative frequencies that are considerably different (higher) than average.

Should we care about the total relative frequency or the average relative frequency? Well, that depends on the word and the explanation we give for the difference. If we say that the word *could* appear in this activity, then the total relative frequency is what matters. If we say that the word *must* appear in this activity, then we should consider the frequency as an activity measure, at which point, the average relative frequency is more interesting.

If we decide to look at the total relative frequency, the  $\chi^2$ -test can be used to test for statistical significance. Each word is then a sample that has two possible values: *någonstans* (if that is the word we are interested in) or some other word. Differences between activities within the same corpus are ignored.

Measures that apply to each word in this way are called *word measures*.

#### *Corpus Measures*

Some measures are related to the corpus as a whole rather than to each activity or word. An example is ‘number of words covered by bigrams that occur more than once’.<sup>1</sup> This measure indicates how stereotypical the corpus is, but it is difficult to predict how the measure will behave when comparing corpora of different sizes. In addition, the measure calculated for an individual activity can be quite different from the corpus as a whole. In this case, the corpus can not be seen as a series of samples, so a test of statistical significance is impossible. Such measures are called *corpus measures*.

### 6.3 Basic properties

The group decision-making (GDM) corpus used in this study primarily contains recordings from meetings (project groups, committees, etc.), and few casual conversations (e.g. three friends planning a vacation together). Further, most of the speakers are male, and although precise information about their age is unavailable, the impression is that few of them are below 30 or above 65 years of age. All participants speak Swedish, and there is no indication that any of them have a foreign background. Most of the recordings have been made in and around the

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1. First a frequency list of all bigrams is generated. Then all bigrams in that list with a frequency of 1 are stripped away. After that the corpus is processed again, and each word is compared to the list: if the word occurs in a bigram that is represented in the list, then the word is counted.

Gothenburg area between 1989 and 2004. The recordings were described in more detail in section 5.2 above.

The activity types informal conversation (IC) and professional/official (P/O) have been chosen in order to contrast group decision-making. Informal conversation ('small talk') is a somewhat elusive activity type, and can perhaps be characterized as lacking a clear purpose. Participants change topics rather freely, the conversation can be interrupted almost at any point without rendering the conversation incomplete and there seems to be no particular structure for the conversation to follow. At the same time, it seems unreasonable to assume that human beings would spend as much time as they do on informal conversation if it was completely useless. A possible explanation is that the purpose of informal conversations is indirect – what we talk about matters less than the fact that we talk. Another possibility is that there are so many topics and purposes under the heading informal conversation that it is difficult to generalize.

Whatever the purpose of informal conversation, people often engage in it, and as an activity type, it has been studied quite a lot<sup>1</sup>. It is less common for informal conversations to contain group decision-making episodes, and any informal conversations in the present case that contain a considerable amount of group decision-making have been excluded in order to make the contrast to the GDM corpus clearer.

Professional/Official is chosen as the name for a rather wide group of activities, which all have at least one participant who performs the activity as a part of her profession, or at least in an official role, such as board member. It includes talk between bus driver and passenger, customer and shop assistant, customer and travel agent, hotel guest and reception clerk, as well as talk in non-deciding board meetings, in courts, and at trade union meetings.

We shall now look at the basic properties of the three corpora.

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1. The reason for this is not entirely clear, but it seems to be a wide-spread idea that informal conversation is more "natural" than other kinds of conversation. In the literature, however, there is only argumentation for 'naturally occurring conversation' as opposed to written language or elicited speech, but there seem to be some kind of conceptual slide from 'naturally occurring conversation' via 'natural conversation' to 'informal conversation'; see for example (Sacks 1984) or (New Zealand Ministry of Education 1998).

I do not see what would make this activity type so special. I see nothing abnormal, non-standard or advanced (as opposed to "basic") about a conversation between a customer and an assistant in a shop, or between two fishermen making plans for the day.

*Table 6-2: Basic properties of the corpora Group Decision-Making, Informal Conversation and Professional/Official.*

	GDM	IC	P/O
Recorded activities	18	21	108
Tokens	265 927	98 435	190 949
Tokens/Activity	14 774	4 687	1 768
Duration (hours)	29.47	9.11 <sup>1</sup>	26.95 <sup>2</sup>
Speakers/Activity	9.9	4.1	7.3

Table 6-2 shows the basic properties of the three corpora GMD, IC and P/O. Compared to the other two corpora, GDM contains few, very long activities. The t-test shows that there is less a than 0.05% risk that the difference in mean tokens/activity does not reveal a true difference in the normal distribution. In other words, there is little risk that if the corpora grew considerably, the difference would disappear. As mentioned above, this calculation is based on the assumption that the tokens/activity has a normal distribution within each activity type. The number of speakers per activity is also larger for GDM than for IC and P/O, and the differences are statistically significant on the 99.9% level or better.

The difference in length of the activities between the three corpora is not surprising. Several of the GDM activities are board or committee meetings (see section 5.2 for details), which often last between one and three hours. The IC activities are usually friends having a cup of coffee together, phone conversations between friends, or something similar, and do not usually last as long. The P/O activities, finally, include rather brief interactions between a customer and sales person at a car rental service, travel agency, or some other business institution, and the activities are often just a few minutes long.

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1. Time information was unavailable for one recording (6% of the tokens), and its duration was estimated by assuming the same speed (tokens/minute) for it as for the recordings in IC that do have time information.
  2. Time information was unavailable for 28 recordings (10% of the tokens), and its duration was estimated by assuming the same speed (tokens/minute) for it as for the recordings in P/O that do have time information.



## 6.4 Simple words and utterances

### 6.4.1 Speed, word length and utterance length

*Table 6-3: Average speaking speed and lengths of utterance and word.*

	GDM	IC	P/O
Mean Length of Utterance (MLU) per Activity	18	11	7.7
Average Speed (tokens/minute)	158	185	117
Word Length per Activity (letters per word)	4.05	3.76	3.83

Table 6-3 shows the average lengths of utterances and words, as well as the average speaking speed, for activities in the three corpora. The differences have been tested for statistical significance as activity measures, using the t-test, and all differences are significant. However, the difference in word length between IC and P/O is only significant on the 95% level.<sup>1</sup> The remaining differences are significant at least at the 99.5% level.

The utterance length is considerably larger in GDM than in the other two activity types. There are several explanations for this. First, many of the activities in GDM are meetings with quite a few participants (see table 6-2). This situation probably prevents verbal feedback, which causes utterances to be longer. The long utterances are an effect of little verbal feedback.<sup>2</sup> Another explanation is that sometimes a member of a group makes very long presentations about some issue, giving extensive background information; these situations cause very long utterances.

The third explanation to the long utterances during group decision-making is that arguments and proposals often require fairly long utterances, because future acts, consequences, and argument structures are described.

The long words in GDM can be explained largely by the fact that many of the recordings come from the area of public administration, where there are quite a few long, descriptive terms. In Swedish, compounds are written as single words, which create fairly long words, such as *samarbetsnämnden* (the council of cooperation), *fastighetsförvaltningen* ('real-estate management'), and *bostadsbyggnadsprogram* ('program for building dwellings').

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1. That is, there is a 5% risk that the difference in the sample does not reflect a difference in the activity type.
  2. See also p. 245.











## 6.4.2 Overlaps




*Table 6-4: Overlap statistics. Not all differences are statistically significant. The numbers for which there are no significant differences compared to GDM have been stricken through. The significance level is 99.5%.*

	GDM	IC	P/O
Avg. amount of overl. tokens per tok. and rec. (%):	9.2	<del>11.7</del>	<del>7.5</del>
Avg. amount of overl. per utterance and rec. (%):	26.5	<del>20.2</del>	13.1

Table 6-4 shows the number of overlaps in the three corpora. When counting overlapped tokens (i.e. where the length of each overlap occasion is considered), there are no statistically significant differences. However, when ignoring the length of the overlaps, we see that GDM and IC contain considerably more overlaps than P/O. One would perhaps expect that the formality of the meetings that many of the GDM activities are taken from would prevent overlaps, but that does not seem to be the case.

*Table 6-5: Overlap type distribution. Not all differences are statistically significant. The numbers for which there are no significant differences compared to GDM have been stricken through. The significance level is 99%.*

Overlap types			% of all overlaps, in average		
Name	Description	Illustration	GDM	IC	P/O
Initial-Complete	A and B start speaking at the same time, then B stops and A continues.	A:  B: 	4.5	9.6	<del>6.1</del>
Final-Initial	A starts speaking alone, then B starts speaking, then A stops speaking and B continues alone.	A:  B: 	32.1	<del>36.9</del>	<del>35.1</del>
Complete-Complete	A and B start speaking at the same time and then stop speaking at the same time.	A:  B: 	0.8	<del>0.9</del>	3.6
Medial-Complete	A starts speaking alone, then B starts speaking, then B stops speaking and A continues alone.	A:  B: 	40.3	<del>42.5</del>	<del>40.6</del>
Final-Complete	A starts speaking alone, then B starts speaking, and then A and B stop speaking at the same time.	A:  B: 	6.6	<del>6.1</del>	10.2

More than 2	More than two speakers speak at the same time.	A:  B:  C: 	12.2	2.0 <sup>1</sup>	0.6
Other	Cases where the analysis program has not managed to analyze the overlap type, either due to unusual situations, or due to the transcription not following the specified format (GTS).		3.7	2.0	4.0
<i>Total</i>			100.2 <sup>2</sup>	100	100.2 <sup>2</sup>

There are a number of different types of overlaps; table 6-5 provides statistics for some of the most common types. Comparing GDM and IC we see that GDM has more overlaps with more than two speakers, but fewer initial-complete overlaps. IC activities often consist of few speakers who make short utterances, giving a lot of verbal feedback (cf. p. 245), and who speak on a comparably equal basis (cf. verbal equality p. 238 ff.). This creates many situations where one speaker has stopped talking and it is somewhat unclear whether he will continue, or if he is waiting for feedback from the listener. Initial-complete overlaps are to be expected. Here is an example:

**Excerpt 6-1. A320602, line 545.**

*Two speakers, A and B, are having some sandwiches and engaging in small-talk. They have now come to talk about the love life of a mutual friend.*

1	\$A: [148 ja de ]148 har varit slut / flera gånger om vet [149 du ]149	\$A: [148 yes it ]148 has been over several times you [149 know ]149
2	\$B: [149 å ]149 börjat på nytt	\$B: [149 and ]149 started again
3	\$A: ja //	\$A: yes //
4	\$B: [150 var e han ]150 nu då	\$B: [150 where is he ]150 now then
5	\$A: [150 men nu ]150	\$A: [150 but now ]150
6	\$A: ja nu har han flyttat tillbaka till sin före detta	\$A: well now he has moved back in with his ex

Here, overlap 150 is initial-complete. After A's *yes* in line 3, it is somewhat unclear if A has more to say, then A and B start talking at the same time.

In GDM, overlaps involving more than two participants involved are more common than in the other two corpora. The explanation is probably that, in the GDM activities, there are often more than two participants discussing the same issue, and they are often actively involved in the discussion. In IC, there are fewer participants in general, which is true to a lesser degree for P/O as well. In P/

1. Only significant on the 95% level.

2. The total of these figures exceeds 100 due to rounding to the nearest tenth.

O one might also expect that the participants are somewhat less involved in the activities; the P/O corpus consists largely of short, business-like encounters, which rarely are long enough for the participants to become involved enough to produce many overlaps. In contrast, excerpt 6-2 below shows how several participants in a group decision activity can discuss a subject.

*Excerpt 6-2. A850701, line 243.*

*Meeting with the building committee of the municipality in a rural area in southern Sweden. In utterance 1, the chair, R, introduces a topic, an application for a building permit. This is discussed for a while, and in utterance 24, the chair proclaims the decision.*

1	\$R: ... // sju elektriker Knut Eriksson Axelssonsvägen hundrasex Lessebo garage å tomt på Berket Snickarebo ett sjuttitre Bäckhult ///	\$R: ... // seven electrician Knut Eriksson Axelssonsvägen one hundred six Lessebo garage and lot at Berket Snickarebo one seventythree Bäckhult ///
2	\$B: (...) garaget här /	\$B: (...) the garage here /
3	\$V: ja alltså [21 byggnadslovet ]21 har han tidigare på själva bostadshuset men de [22 gäller ]22 inte garaget	\$V: well yes he has [21 the building permit ]21 since before for the house but that does not [22 include ]22 the garage
4	\$R: [21 ja ]21	\$R: [21 yes ]21
5	\$R: [22 mm ]22	\$R: [22 mm ]22
6	\$B: han söker för garaget nu	\$B: he is applying for the garage now
7	\$V: ja just [23 de ]23	\$V: yes that is [23 right ]23
8	\$Z: ja [23 de e bara de ]23 ja	\$Z: yes [23 that is the only thing ]23 yes
9	\$B: e:u: här e ju också närmare gränsen än fyra å en halv meter	\$B: er it is also closer to the border than four and a half meters
10	\$V: < ja just de > @ < very quiet >	\$V: yes that is right @ < very quiet >
11	\$B: men grannens medgivande finns här / dom har ingenting å erinra så att / då behöver inte byggnadsnämnden heller ha de	\$B: but the neighbour's permission is here / they have nothing to object so / in that case the building committee does not need to have that either
12	\$V: < nähä > @ < very quiet >	\$V: no okay @ < very quiet >
13	\$R: e: ligger inte de på samma område de då / som den [24 förra här ]24	\$R: er is not that in the same area as that / as the last [24 one here ]24
14	\$E: [24 näej ]24	\$E: [24 no ]24
15	\$V: [24 nä ]24 de var (...)	\$V: [24 no ]24 it was (...)
16	\$R: jasså e de de // jaha du	\$R: okay is that so // okay
17	\$B: men här e0 inget hinder för byggnaslov	\$B: but there is no impediment for building permit
18	\$R: e hur var det me [25 grannens ]25	\$R: er what about [25 the neighbor's ]25
19	\$V: [25 de ]25 finns	\$V: [25 it is ]25 here
20	\$R: de finns	\$R: it is here
21	\$V: ja	\$V: yes

22	\$R: vi k+ då: kan vi bevilja byggnadslov då	\$R: we c+ in that case we can grant building permit then
23	\$X: < ja > @ < comment: several participants >	\$X: < yes > @ < comment: several participants >
24	\$R: svaret e ja <   > ... @ < event: strike of chairperson's gavel >	\$R: the answer is yes <   > ... @ < event: strike of chairperson's gavel >

In this short decision episode, no less than five participants join in, even though the issue is quite simple.

P/O contains more complete-complete overlaps and more final-complete overlaps than GDM. For complete-complete a possible explanation is that the P/O activities are often part of social activities with fairly well-defined activity structures, such as activities in shops or travel agencies. In such situations several participants can guess what is about to happen, and talk at the same time. One example of this is when customer and agent in a travel agency greet each other at the same time:

**Excerpt 6-3. A790605, line 44.**

*I is a customer, and B is an assistant in a shop for computer games. This is the start of the recording.*

1	\$I: [11 hej ]11	\$I: [11 hi ]11
2	\$B: [11 hej ]11	\$B: [11 hi ]11
3	\$I: e: (...) ha ni nittonhundra+ e nittonhundranittis+ / +fem //	\$B: er (...) do you have nineteen hundr+ er nineteen hundred ninety / five //
4	\$B: m:	\$B: m:
5	\$I: de dä kan ja ja [12 (...) ]12	\$I: I can do that [12 (...) ]12
6	\$B: [12 ska du ha ]12 fem+ femte utgåvan / ska du ha eller	\$B: [12 do you want ]12 the fif+ fifth edition / is that what you want
7	\$I: a	\$I: yes

Here it is overlap 11 that is complete-complete. There is no video recording of this activity, and so we cannot know for sure what is happening, but it is likely that participant B has just finished doing something, and is turning his attention to participant I. The *hi* from participant I is used to signal that he is ready to help participant B, and B has probably already guessed this, anticipates the greeting, and says *hi* at the same time participant I does.

There are also more final-complete overlaps in P/O than in GDM, but in many of these cases, one or both of the utterances are unfortunately inaudible, and it is very difficult to find an explanation for this pattern.

### 6.4.3 Equality and dominance

The distribution of tokens and utterances between speakers in an activity can be captured with the measures *equality* and *dominance*. Equality for a recording is based on the participation for each participant  $p$ :

$$participation_p = \frac{p's\ contribution}{total\ contribution}$$

For example, if speaker A contributes 340 out of 2141 words in a recording, then A's participation is  $340/2141 = 0.16$ .

The average participation, always 1 divided by the number of participants, is used to calculate the *participation deviation* for each participant  $p$ :

$$participation\ deviation_p = |p's\ participation - average\ participation|$$

The sum of all participation deviation is used to define equality:

$$equality = 1 - \frac{participation\ deviation_{tot}}{participation\ deviation_{max\ tot}}$$

The theoretical maximum for the total participation deviation occurs when a single participant makes all utterances. A little algebra reveals that this boils down to

$$2 \cdot \left(1 - \frac{1}{N}\right)$$

The final definition of token equality is as follows:

$$equality = 1 - \frac{\sum_{p \in P} \left| \frac{Tok_p}{Tok} - \frac{1}{N} \right|}{2 \cdot \left(1 - \frac{1}{N}\right)}$$

where  $P$  is the set of participants,  $Tok_p$  is the number of words uttered by  $P$ ,  $Tok$  is the total number of words, and  $N$  is the number of participants. This results in a value between 0 and 1, where 1 means absolutely equal and 0 means not equal at all. The definition of utterance equality is the same, with the exception that the number of tokens is replaced with the number of utterances.

Dominance is a little easier: it focuses on the participant that speaks most, and how much more that participant speaks than the average speaker, expressed in percent:

$$dominance = 100 \cdot \left( \frac{Tok_{max}}{Tok_{tot}} - \frac{1}{N} \right)$$

where  $Tok_{max}$  is the number of words uttered by the participant who speaks the most, and  $Tok_{tot}$  is the total number of words in the recording.

*Table 6-6: Equality and dominance. Not all differences are statistically significant. The numbers for which there is no significant difference compared to GDM have been stricken through. The significance level is 99.5%.*

		GDM	IC	P/O
Average Equality	token	0.535	0.684	<del>0.586</del>
	utterance	0.623	0.857	0.720
Average Dominance	token	248%	54%	<del>189%</del>
	utterance	228%	32%	<del>151%</del>

Table 6-6 shows that group decision-making is less equal than informal conversation in all cases, while the difference between GDM and P/O is smaller, and not statistically significant except in the case of equality of utterances. In the GDM activities there is almost always a chairperson or similar who typically makes all other utterances, which causes low equality and high dominance. There are also more participants in general in GDM, also making equality less likely, especially at the utterance level (in an activity with only two participants, which is not uncommon in neither IC nor P/O, the participants quite naturally make the same number of utterances).

## 6.5 Lexical variation

### 6.5.1 Introduction

Some activity types may be less lexically varied than others in the sense that words and phrases may be repeated more often. There are different ways of measuring this, but it is difficult to say what the statistical significance would be in this case, since we usually see lexical variation as a property of an entire corpus rather than of individual activities or utterances. An activity type that follows a very strict schema may be lexically varied within each activity instance, but the instances may be very similar to each other, and may then consider the lexical variation low in that activity type<sup>1</sup>.

However, looking at three different measures for lexical variation – *theoretical vocabulary*, *stereotypicality*, and *hapax share* – we can get a general idea of the differences between the three corpora.

### 6.5.2 Theoretical vocabulary

Theoretical vocabulary (Muller 1964) is based on the type-token ratio (TTR), the number of word types divided by the number of tokens. The problem with TTR

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1. Under other circumstances the lexical variation for each activity may be more interesting, but that would probably require more homogeneous activities than the ones in present case.

is that it is sensitive to corpus size: adding 1000 tokens to a corpus of 1000 tokens will perhaps add 300 new types, while adding 1000 tokens to a corpus of 1 000 000 adds perhaps 30 new types, since most of the types in the 1000 token addition are already represented in the existing, 1 000 000 word corpus. Theoretical vocabulary means that a fixed size sample is drawn from the corpus, and the number of types is calculated for that sample. In fact, all possible samples of the fixed size are made, and the average number of types is calculated. In detail:

To calculate theoretical vocabulary (vocab), we observe that the average frequency that a certain word type will have in a sample of  $m$  token is the same as the probability that at least one of its tokens will be part of that sample. The probability for a *single* token *not* to be part of the sample is:

$$\frac{N_{token} - m}{N_{token}}$$

where  $N_{token}$  is the total number of tokens in the corpus and  $m$  is the size of the sample.

The *presence probability* for a type, the probability that at least one token of a type is part of the sample, is the complement of the probability that not a single token of the type is part of the sample. This is calculated as the product of the probabilities for each of the tokens of the given type:

$$1 - \prod_{i=0}^{f_w-1} \left( \frac{N_{token} - i - m}{N_{token} - i} \right)$$

where  $f_w$  is the number of tokens of the type in the corpus. Here, the size of the corpus is adjusted for each multiplication, since it represents the removal of a word (the one that is sampled).

The number of types in the sample, on average, will be the sum of the presence probability for each of the types in the corpus:

$$\sum_{w \in Types} 1 - \prod_{i=0}^{f_w-1} \left( \frac{N_{token} - i - m}{N_{token} - i} \right)$$

or, more elegantly:

$$Vocab_m = N_{type} - \sum_{w \in Types} \prod_{i=0}^{f_w-1} \left( \frac{N_{token} - i - m}{N_{token} - i} \right)$$

where  $Types$  is the set of all types in the corpus, and  $N_{type}$  is the number of members in that set.<sup>1</sup>

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1. Muller (1964) makes the assumption that the size of the sample is considerably smaller than the corpus, and approximates sampling without replacement (which is the case here) as sampling with replacement (which yields a somewhat simpler



Table 6-7: Theoretical vocabulary.

	GDM	IC	P/O
Vocab 10 000	2 157	1 999	2 060

Table 6-7 shows the theoretical vocabulary for the three corpora with the sample size set to 10 000. As seen in the table, GDM is lexically more varied than the two other corpora.

### 6.5.3 Stereotypicality

Turning to stereotypicality (developed by Leif Grönqvist), we define it using theoretical vocabulary:

$$stereotypicality = 1 - \frac{Vocab}{Vocab_{max}}$$

where  $Vocab_{max}$  is the largest possible value for vocab, usually the same as the size of the sample (10 000 in table 6-7 above). If the variation is very high,  $Vocab$  will come close to  $Vocab_{max}$ , the quotient close to 1, and  $stereotypicality$  will come close to zero. The stereotypicality for different n-gram lengths shows how stereotypical the corpus is.

Figure 6-1: Stereotypicality. The Y-axis shows the square root of the stereotypicality for the different n-gram lengths on the x-axis.

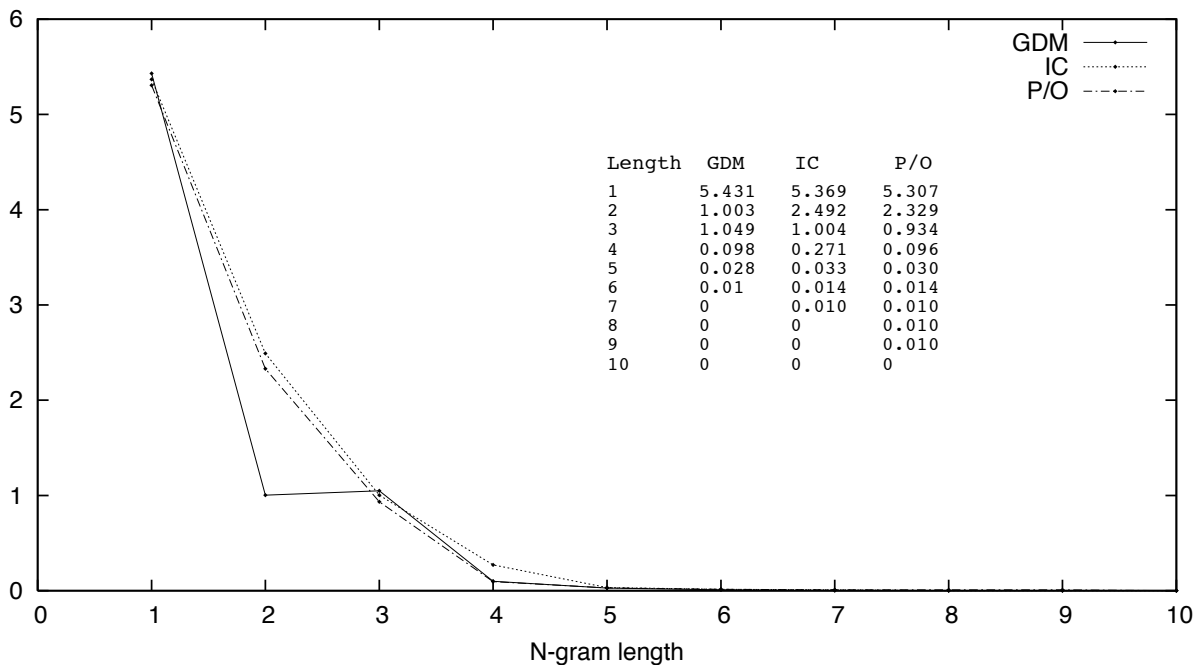


Figure 6-1 shows the stereotypicality profile for the three corpora. In order to see the differences more clearly, the square root of the stereotypicality has been

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formula). I do not make that assumption.

used on the y-axis instead of the raw stereotypicality value.<sup>1</sup> The general principle is that the steeper the curve is, the less stereotypical the corpus is. We see that the general tendency is, as with theoretical vocabulary, that GDM is lexically more varied than the other two corpora. For trigrams, however, the GDM curve makes a leap and is more stereotypical than the other corpora. It is difficult to say what causes this.

#### 6.5.4 Hapax share

A third measure of lexical variation is the *hapax share* (developed by Leif Grönqvist and Magnus Gunnarsson); the share of n-grams occurring only once. The number of hapaxes can be compared to the total number of tokens (of the given n-gram length) to get a percentage. The higher the percentage of hapaxes, the higher the lexical variation.

A problem with this measure is that the size of the corpus affects the amount of hapaxes. The share of hapaxes for an average sampling of a corpus can be calculated similarly to the method used in the case for theoretical vocabulary. Assume a corpus  $K_0$  with  $s_0$  number of tokens, and that we select a sample of  $s_1$  tokens from this into a sub corpus  $K_1$ . An n-gram type  $W$  can get the frequency 1 in  $K_1$  in many different ways (normally). One of these is as follows:

The first n-gram that is selected for  $K_1$  is of type  $W$ , i.e. it belongs to the subset  $W$ . After that, an n-gram is selected for  $K_1$  that is not of type  $W$ , i.e. it belongs to  $CW$ . Then another n-gram from  $CW$  is selected, etc. until  $s_1$  tokens have been selected. The probability for this to happen is

$$\frac{\text{size of } W}{\text{size of the corpus}} \cdot \prod_{j=1}^{s_1-1} \frac{\text{size of } CW}{\text{size of the corpus}}$$

which, more precisely, is

$$\frac{f_w}{s_0} \cdot \prod_{j=1}^{s_1-1} \frac{s_0 - (f_w - 1) - j}{s_0 - j}$$

where  $f_w$  is the frequency of type  $W$ .

This is thus the special case where the single occurrence of  $W$  is selected first. The order of the selection of the tokens in  $K_1$  is not important, however, so there are  $s_1$  occasions where the single occurrence of  $W$  can be selected. This means that the probability of  $W$  to be a hapax in  $K_1$  is

$$p(W, C_1) = s_1 \cdot \frac{f_w}{s_0} \cdot \prod_{j=1}^{s_1-1} \frac{s_0 - (f_w - 1) - j}{s_0 - j}$$

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1. Using the square root results in a more narrow range: a range from 1 to 100 is reduced to a range from 1 to 10. The diagram then becomes lower, and in our case that means that it can be presented with greater detail.

The number of n-gram types in  $K_1$  with frequency 1 will be the sum of their probabilities:

$$sum(freq\ 1) = \sum_{w \in Types} \left( s_1 \cdot \frac{f_w}{s_0} \cdot \prod_{j=1}^{s_1-1} \frac{s_0 - (f_w - 1) - j}{s_0 - j} \right)$$

This can also be generalized to calculate the number of n-grams with frequency g:

$$sum(freq\ g) = \sum_{w \in Types} \left( \binom{s_1}{g} \cdot \prod_{i=0}^{g-1} \frac{f_w - i}{s_0 - i} \cdot \prod_{j=g}^{s_1-1} \frac{s_0 - (f_w - g) - j}{s_0 - j} \right)$$

Using this formula, the share of hapaxes in the three corpora can be compared.

*Table 6-8: N-grams with frequency 1, in percent of the total number of n-grams of the specified length.*

N-gram Length	Total tokens	Hapaxes in GDM	Hapaxes in IC	Hapaxes in P/O
1	97 427	6.05%	4.79%	5.15%
2	88 288	37.23%	33.74%	35.39%
3	81 119	74.52%	72.40%	73.97%
4	74 494	93.35%	92.29%	92.87%
5	68 401	98.77%	98.16%	98.27%
6	62 918	99.74%	99.60%	99.43%
7	58 093	99.92%	99.87%	99.68%
8	53 821	99.95%	99.95%	99.76%
9	49 989	99.97%	99.98%	99.79%
10	46 560	99.97%	99.99%	99.82%

Table 6-8 shows the share of hapaxes with a length of 1-10 for the three corpora. The IC corpus is the smallest one, and for the other two corpora the values are calculated assuming a sample size equal to that of the IC corpus, shown in column 2.

The differences are small, but the general tendency is that GDM has more hapaxes than the other corpora, with the exception of n-grams longer than 8 words, where IC has more hapaxes. N-grams of this length are rarely repeated (as the numbers in table 6-8 show), and the repetitive nature of some of the GDM activities (e.g. moving on to the next item on the agenda) generates some repeated, long n-grams, which apparently show up in this measure.

### 6.5.5 Comparison

Theoretical vocabulary and stereotypicality measures thus show that the lexical variation in group decision-making is larger than in informal conversation and professional/official. The values for hapax share are somewhat more difficult to interpret, but it could mean that group decision-making has a larger variation of single words than the other corpora, and also a set of fixed phrases that are used more than once.

## 6.6 Parts-of-speech distribution

Transcription tagging was done using the parts-of-speech tagger developed by Nivre & Grönqvist (2001). The tagger has an error rate of 3%, and uses the traditional nine parts-of-speech (nouns, verbs, adjectives, adverbs, pronouns, conjunctions, interjections, numerals and prepositions), in addition to *feedback words* and *own communication management words*. Feedback words are words used primarily for feedback, ‘the giving or eliciting of information concerning contact, perception, understanding and attitude, by regularised linguistic means’ (Allwood 1993b). (The term *back channelling* has been used for a part of the feedback phenomenon, but with a different analysis.)

Own communication management includes a number of phenomena that can be grouped under two main headings: *choice* and *change* (Allwood 1995). Choice-related OCM concerns how a speaker can signal that she is planning what to say (typically manifested in “hesitation sounds”). Change-related OCM concerns how speakers can change things in an utterance that they have already made. This includes removing a word, replacing a word with another one, and adding new words. Self-corrections are examples of phenomena under this header. Words used primarily for OCM are called own communication management words (OCM words).

Table 6-9 shows the distribution of parts-of-speech in the three corpora. These numbers have been considered activity measures, and the differences between GDM and the other two corpora have been tested for statistical significance using the t-test<sup>1</sup>. When the significance level for this is less than 99%, the numbers have been grayed out.

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1. Since the part-of-speech tagger has an error rate of 3%, and since it could be the case that the tagger performs better with transcriptions from one activity type than another, the significance level could be lower than 99%. The most common error type comes from words that the tagger does not have in its lexicon, and usually the default part-of-speech in such cases is noun.

*Table 6-9: Distribution of parts-of-speech in the three corpora. Values whose difference to GDM has a statistical significance less than 99% (t-test) have been printed in gray.*

Part of speech	GDM	IC	P/O
adjectives	3.5%	<del>4.0%</del>	<del>3.0%</del>
adverbs	16.7%	<del>17.4%</del>	14.7%
conjunctions	8.9%	7.7%	5.8%
feedback words	4.9%	<del>6.3%</del>	8.5%
interjections	0.1%	0.5%	2.4%
nouns	12.6%	11.2%	<del>11.8%</del>
numerals	1.3%	<del>0.9%</del>	4.7%
own communication management words	2.3%	1.2%	<del>1.7%</del>
prepositions	7.4%	6.2%	5.9%
pronouns	21.9%	23.1%	20.6%
verbs	19.3%	20.4%	18.2%
inaudibles <sup>1</sup>	1.3%	<del>1.3%</del>	2.6%
total:	100%	100%	100%

Table 6-9 shows that GDM contains more conjunctions and prepositions than IC and P/O. Since the utterances are longer in GDM than in the other two corpora, it is not surprising that more conjunctions are used, to join the phrases in the utterances. Prepositions are not as directly connected to utterance length, but indirectly via clausal complexity: the large number of prepositions signals many prepositional phrases, which leads to longer utterances. Other phenomena besides long and complex utterances can of course cause an abundance of conjunctions and prepositions, but considering the activity type of group decision-making, with lines of argumentation and descriptions of solutions to problems, the given explanation is reasonable.

Long and complex utterances can also be the cause of OCM-word frequency, since the speaker will need more time to plan her speech, and will more often want to change something already said, compared to informal conversation.

The abstract events and solutions that are discussed in GDM may also make it more difficult to use pronouns for referring, and nouns are needed more often. This would explain the difference between GDM and IC, but P/O has fewer pronouns than GDM without having more nouns. However, P/O has much more numerals than GDM, and it is possible that the dates and prices that are

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1. When the transcriber cannot hear what is said.

often discussed in the P/O recordings function as referents, rather than phenomena referred to with nouns and pronouns.

Feedback is discussed on pp. 267-11 below.

## 6.7 Constructions

Using frequency lists for words and n-grams (see sections 6.8 and 6.9 below), a number of constructions that are especially common or uncommon in group decision-making were revealed. These constructions are presented coherently in this section, and the underlying frequency lists are presented in the following two sections.

The concept of constructions (as well as the term) has been used in linguistics for a long time, but during the 1980's and -90's it received renewed interest through the works of Charles J. Fillmore, Paul Kay and Adele Goldberg (Fillmore 1988), (Fillmore and Kay 1995), (Goldberg 1995), (Kay 1997). A lot could be said about constructions, but for our purposes, a simplified explanation will be enough: a complete construction is a syntactical pattern with a certain holistic meaning. It differs from a mere n-gram by a) allowing not only words, but also word generalizations (parts of speech etc.), and by b) requiring a sense of completeness (holistic meaning). We will not worry about incomplete constructions here.

The constructions that were found are quite different and are on different levels of generality. They have been grouped here under six headings: *reflections of activity procedure*, *presenting argumentation and opinions*, *referring to abstract phenomena*, *interjectional constructions*, *lexicalized phrases*, and *other constructions*. This is by no means meant to be a complete categorization of all possible constructions, simply a convenient way of presenting the constructions found here.

### Notation

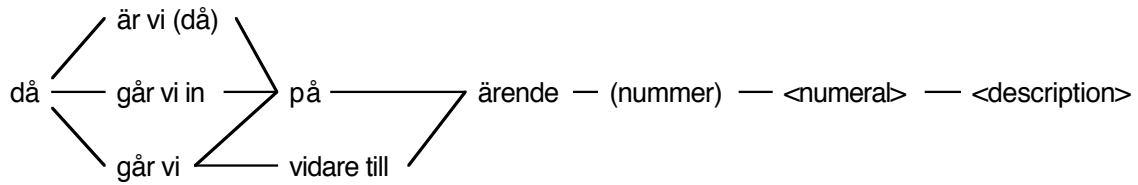
The constructions should be read from left to right, and lines represent possible connections. Round brackets ( ) surround optional components, and slashes / separate alternatives. Category names (e.g. parts-of-speech) are surrounded by angle brackets < >.

### Reflections of activity procedure

Some of the formal meetings that occur in the GDM corpus follow a fairly strict procedure, and some constructions are used to move (or attempt to move) the activity on to a new step in the activity procedure.

#### *Moving on to the next paragraph*

In the n-gram lists, several variations of *då är vi på ärendet* ('then we have reached item') were found:



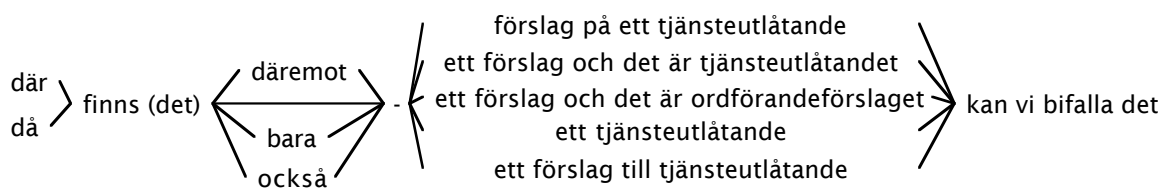
Examples:

- då gå vi vidare ti ärende numme sju: e information om klagomålshantering
- då e vi på ärende numme tretton / uppföljning av revisionsredogörelsen
- *then we proceed to paragraph number seven er information about complaints administration*
- *then we have reached paragraph number thirteen follow-up of revision report*

This construction is used by the chairperson of the City District Committee (V321801) to move on to the next paragraph on the agenda.

#### *Summary and elicitation of accept*

Several long n-grams were found that come from a rather long construction with comparably little variation:



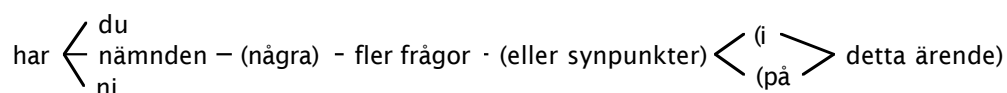
Examples:

- då finns de bara ett föslag å de e tjänsteutlåtande kan vi bifalla de
- dä finns också ett tjänsteutlåtande kan vi bifalla de
- där finns de föslag / på ett tjänsteutlåtande kan vi bifalla de
- *then there is just one proposal and that is the official report can that be approved*
- *there is also an official report can that be approved*
- *there is suggestion / of an official report can that be approved*

This construction is used by the chairperson of the City District Committee (V321801) to close a discussion and get verbal accept for the proposal.

#### *Elicitation of questions I*

The 6-gram *har nämnden nåra frågor i detta* ('does the committee have any questions about this?') has close relatives too, and these can be generalized to the following construction:

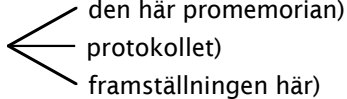


Examples:

- ha nämnden nåra fler frågor
- ha nämnden nåra fler frågor i detta ärendet
- ha ni nåra fler frågor elle synpunkter
- *does the committee have any other questions*
- *does the committee have any other questions on this issue*
- *do you have any other questions or comments*

This construction is used by the chairperson of the City District Committee (V321801) to check if the other members have more questions on an issue, and to signal that she is prepared to move on to acclamation and closing the topic.

In Bäckmåla Municipality Council (A850101), the chairperson uses a similar construction:

(är det) någon (mer) som vill (fråga eller) yttra sej — (över 

Examples:

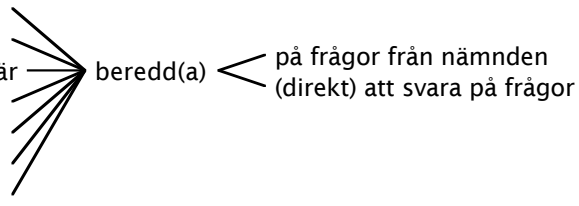
- e de någon som / vill fråga eller yttra sej över / protokollet
- e de någon som vill yttra sej
- någon mer som vill yttra sej
- *is there anybody who would like to ask or say anything about the minutes*
- *is there anybody who would like to say anything*
- *anybody else who would like to say anything*

These two constructions seem to have more or less the same function in the two activities, but they are strictly confined to their respective meetings and speakers.

### *Elicitation of questions II*

The 7-gram *jag är beredd att svara på frågor* ('I am ready to answer questions') is the most common instantiation of a construction used by one of the administrative officials present at the City District Committee meeting, when he invites the committee members to ask him questions about a presented proposal.

men — jag är  
 och i övrigt så — är jag  
 förvaltningen är —  
 då — är jag  
 jag är  
 och jag tror att — vi är  
 där också — vi är



Examples:

- å i övrit så e ja beredd å svara på frågor
- fövaltningen e beredd å svara på frågor



- å ja tror att vi e beredda direkt att svara på <frågor
- *and apart from that I am prepared to answer questions*
- *the administration is prepared to answer questions*
- *and I think we are prepared immediately to answer questions*

All the constructions presented here are idiosyncratic, by which I mean that they are used by a single person only. Further, all of them come from quite formal meetings. This type of construction, constituting a complete communicative act at the level of activity procedure, seems to have difficulties getting started across speakers and kinds of group decision-making.

### Presenting argumentation and opinions

#### *Argument linking*

One common bigram is *så att* ('so that'), which can be used in constructions for linking a statement with a conclusion or a reason, or, an argument is linked to a claim.

< *claim* > — *så att* — < *argument* >

Group decision-making contains plenty of argumentation; one example is shown here:

- \$H: e / ja skulle gärna villa veta hur / e gammal e / fröken Odner / och e / bruka de vanligt å avkorta / avkorta deras befordrings+ / +tid // nu / kanske nu tror ja nog att hon e mycke mycke kvalificerad / så att de ente av den orsaken / men ja skulle gärna villa veta om de är bruklit / hur gör ni i skolan /
- \$H: *er / I would very much like to know how / er old miss Odner is / and er / is it common to shorten / shorten their time / to promotion // now / perhaps I am quite sure that she is very very qualified / so that it is not for that reason / but I would very much like to know if it is customary / how do you do in school /*

Here H puts a question about Odner's age, and to make sure that his question is not taken as a criticism of her competence, he first asserts that he believes Odner to be qualified. Using the bigram *så att* he then links that statement to the conclusion that his question cannot be motivated by doubts of her competence.

Here is another example:

- \$A: ... och de e klart de e väl en angelägenhet för // kommunen i sin helhet att e // å samhället här / i synnerhet // att e asfalteringen kommer te stånd / på gatona / så att de blir nån likställighet // över de hela // ...
- \$A: ... *but of course I suppose it is a matter for // the municipality as a whole that er // and the village here / in particular // that the asphaltting is made / on the streets / so that there is some kind off uniformity // for all this /...*

Here the argument is that there should be uniformity as regards the asphaltting in the municipality, and the claim is that asphaltting is a matter for the municipality as a whole.

*Fact-comment*

The next construction has its root in the complex questions that are often discussed in the GDM recordings, and that call for linguistic tools for information structuring. The construction is a kind of comment construction:

< *fact* > ——— < *comment* >

First some fact or line of argument is presented, and then this is commented upon, typically an evaluation, an interpretation or an explanation.

Examples:

- blir de vettigt om vi skriver så // rekommenderad reservdelslista innehåller dom som (...) vi har försökt denna lista innehåller få data per produkt å så behöver man precisera de kanske / vilka data som ska me // å de e väl dom data som vi alltid haft me i rekommenderade reservdelslistan / på nåt sätt
- ... sen / har de kommit / nya bestämmelser / å de e ju aktuellt för oss här / det gäller entreprenadavtal mellan kommun å renhållningsentreprenörer / där har man inte haft några enhetliga såna bestämmelser att följa här i landet tidigare men det har man fått fram nu / å de e väl tacknämlit å ha dessa nya // avtals+ / +bestämmelser å rätta oss efter när vi skall göra upp nu / här inom de närmsta månaderna / ...
- men de skulle väl innebära att de e inget problem s att säg i den nya utrustning vi skaffar då va de e marginell summa s att säg i sammanhanget va och de dröjer väl inte så länge om många ställer dom här kraven så dröjer de inte länge innan alla skärmarna e där va å de e väl positivt i sej va
- *is it reasonable to write like that // recommended list of spare parts contains those that (...) we have tried this list contains little data per product and then we have to be more precise perhaps / which data should be included // and I guess that is the data that we always have included in the recommended list of spare parts /one way or another*
- *... then / there have also come / new regulations / and there it is topical for us here / it concerns outsourcing contracts between the municipality and waste contractors there have not been any unified such regulations to follow in this country before but that has been produced now / and I guess that is praiseworthy to have these new contract / regulations for us to adhere to when we are going to strike a deal now / in course of the next few months*
- *but I guess that would mean that there is no problem so to speak in the new equipment we acquire then right that is a marginal amount so to speak in this context right and I guess it does not take long if many people make these demands then it won't take long before all screens are there and I guess that is positive in itself right*

As we see, the link is often the conjunction *och* ('and'), and the comment has the clause adverb *väl*, which weakens the commitment by the speaker to the comment, much like English 'I guess'. It seems to be important that the first part is a "fact" and the last part is an "opinion", in the sense that the speaker intends the first part to be uncontroversial and the last part to be what the listener should evaluate and hopefully agree with. Needless to say, this categorization of the presented claims is not necessarily objective.

*Scope narrowing*

The last construction in this section is used to narrow the scope of a statement from the general to something more specific:

för — < *possessive* > — del

- detta löne+ / +ärende e ju delvis beroende på i vilken löneklass eller lönegrad vi inplacerar / vederbörande när dom kommer hit första gången / nu har ju fröken Odner varit ute tidiare men e / kommunalkamrern sa ju de att / de e liksom på prov dom sätter dom i denna / lönegrad för å se va dom går för å då har han ju funnit att han / tycker att hon bör flyttas upp på grun av sin / kvalificerade arbete å tjänstgöring / så för min del tror ja vill / tillstyrka framställningen
- sen så: för min del skulle vi lika gärna kunna strunta i å jobba i Access // alltså // men e // de vet vi ju att de blir mycke enklare för alla om vi gör de
- nä ja tror de e så att nu har vi snackat ihop oss om en lösning som e e rätt lätt å köpa politist och som löser dom akuta behoven för våran del
- *this issue about / salary is partly dependent on in which salary category or salary degree we place / the person concerned when they come here first time / miss Odner now has been out before but er / the Municipal Clerk said that / it is kind of a test when they are put in this salary degree in order to see what they can do and then he has discovered that he / /thinks that she should be elevated because of her / qualified work and performance / so on my behalf I think I would like to approve of the presentation*
- *and then on my behalf we could just as well stop working in Access // like // but er // we know so much that it will be much easier for everybody if we do so*
- *no I think it is like this that now we have reached an agreement on a solution that is quite easy to accept politically and that solves the most pressing needs on our behalf.*

This construction is quite common in GDM, and one explanation for this is that one often seeks general solutions to problems, and that it is then necessary to separate the general from the particular.

**Referring to abstract phenomena**

Since group decision-making concerns future actions and states-of-affairs, there is often a need to refer to abstract entities (such as actions and states-of-affairs). This is reflected in some of the constructions found in several of the recordings in the GDM corpus.

*Keyword referral*

This construction uses a keyword to refer to a more complex question.

det här med — < *keyword* >

Examples:

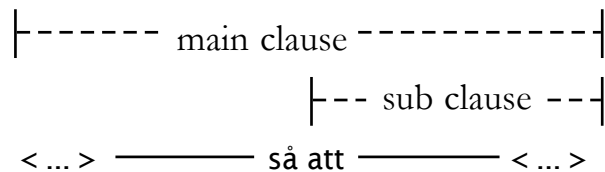
- ja men sen får du också så ta reda på me facket hur de blir de här me pengarna

- ja skulle vilja se de här me granskningen
- men vi gör så att vi går bakvägen från de här me seminarier / å bakåt ska vi då göra nåra brevutskick / som vi föreslår
- *yes but after that you also have to find out with the union what is going to happen with this thing with the money*
- *I would like to see this thing with the review*
- *but we will do like this that we use the backdoor from this thing with seminars / and backwards if we should send any mails then / like we are suggesting*

This is a quite simple way to refer to a question that has been discussed earlier.

#### *Meaning extraction with 'så'*

Another complication arising from complex referring phrases is that they are difficult to integrate to super-ordinate clauses. The bigram *så att*, discussed above with the function of linking an argument with a claim, can also be used to make complex referents fit more easily into a super-ordinate clause structure:



Examples:

- ja men de e ju verkligen tycker ja e viktiga grejer för att ja menar den dan nu nä de här allt e klart va å hon säger upp sej då va så måste du ju gå å å prata med chefen så småningom /// men då då får ju också vara som så att ni inte // beblandar er me varandra å liksom så att de framgår liksom
- men / om de nu e så att vi e överens om dom här abstrakta // problemställningarna va / så: / se vi då att de dyker upp då vissa: / problem /...
- a: e styrelsen tyckte att vi skulle göra de om de e så att folk vill å kan så sa vi vi bara glömde säga de förut
- *yes but it really is I think er important questions because I mean the day when all this is finished right and she resigns right then you have to go and talk to the manager anyway sooner or later /// but then then it has to be the way that you do not // mix with each other and like so that it is clear like*
- *but / if it is like this that we agree about these abstract // problems right / then / if we see that certain problems / arise /...*
- *yes er the board though that we should do it if it is the case that people want to and have the possibility then we we just forgot to say that before*

In all these examples the word *så* (translated ‘the way’, ‘like this’ and ‘the case’ respectively) functions as a kind of proxy in the main clause for the meaning of the sub clause. This “meaning extraction” makes it easier to refer to the sub clause as a whole.

### Interjectional constructions

A number of constructions found in the corpora function mainly to express an attitude of the speaker, this can be called interjectional constructions.

#### *The 'how' interjection*

The first of these is *vad* <property>, which has a straight-forward correspondent in the English *how* <property>, as in the following example:

- du kom upp till < bb > å va alldeles knäckt för att hon hade fått ett dödfött barn e hon med barn igen då va rolit me de e klart de kanske inte e så rolit @ < letter >
- *you came up to the hospital and were completely broken because she had had a stillborn child is she pregnant again how fun but then again perhaps it is not all that fun*

This expression is a quite simple interjection.

#### *Heller interjection 1*

The construction <invective> *heller* is also largely an interjection, although it also functions as a rejection (a no answer). The following example illustrates this:

- vänta här du nä vänta nu det e inte god natt inte / fasen heller här finns två frågeformulär // å dom skall man fylla i // ...
- *wait here you no wait now it is not good night / heck no there are two questionnaires // and you are meant to fill them out // ...*

*Fasen heller* (and variations with other swear words) is used here both as an interjection and as a rejection of the (implicit) suggestion that the task is completed ('it is good night').

#### *Heller interjection 2*

The third interjectional construction is *väl* <negation> ... *heller*.

- ... men ja tycker inte man skall bli hon e väl inget biafrabarn heller
- ... *but I do not think there is reason to she is no Biafra child is she*

This construction strongly elicits supportive feedback, namely that the listener should also deny whatever it is that is negated. The word *heller* is optional, and when present the utterance takes on the character of an exclamation, which is why the construction is called interjectional here.

All these interjectional constructions were less common in the GDM corpus than in the other two corpora, probably as result of the GDM activities being more formal than the others are, in general. Exclamations of this kind are avoided in formal situations.

### Lexicalized phrases

Some constructions found are best explained as phrases corresponding to single words. These are listed in the following table.

*Table 6-10: Lexicalised phrases more common found in GDM than in the other two corpora.*

Parts-of-speech	Common phrases	Uncommon phrases
Adverbs	<i>så att säga</i> ('so to speak') <i>och så vidare</i> ('and so on')	<i>i alla fall</i> ('anyway')
Feedback		<i>du vet</i> ('you know')
Own Communication Management		<i>vad heter det</i> ('what is it called')
Pronouns	<i>det/den/de här</i> ('this/these')	
Verb	<i>gå igenom</i> ('go through')	<i>vara tvungen</i> ('to have to') <i>komma ihåg</i> ('remember')

The adverb phrases *så att säga* ('so to speak') and *och så vidare* ('and so on') are more common in GDM than in the other two activity types. *Så att säga* can be used to cushion another phrase somewhat, signaling that it should not be taken too literally, as in the following example:

- *de de de de har väl ja också som // känsla då då att de skulle // kunna räcka så att säga*
- *that that that that is my feeling too // kind of then then that it could / be enough so to speak*

Here it is the expression *kunna räcka* ('be enough') that is being cushioned. Sometimes the phrase *så att säga* also seems to be used only to gain time for planning or perhaps to add a formal touch to the utterance:

- *nej // nej å kostnaderna kan vi väl kanske inte göra så mycke åt mer än att ändra så att säga antalet / lärare över tiden*
- *no // no and I guess we cannot do very much about the costs but to change so to speak the number of / teachers over time*

*Så att säga* has a clearly formal ring, and cushioning is probably performed in other ways in less formal situations, which explains the high frequency of the phrase in GDM.

The phrase *och så vidare* ('and so on') has a function similar to that of *så att säga*, where the speaker signals that a phrase just uttered is only a part of what the speaker has in mind. The listener is instructed to infer a longer range of phenomena than what has been said. The following example illustrates:

- *sen saknar ja ju e // granskning / vem kallar ti granskning (vilka kallas ti) granskning å så vidare på denna*
- *and then I miss er // review / who makes the call for review (who is called to) the review and so on at this*

Here the speaker does not list all activities associated with reviewing, but lets the listener infer what other activities are intended. The phrase *och så vidare* is also moderately formal, which explains its high frequency in the GDM corpus.

The phrase *i alla fall* ('anyway'), is uncommon in GDM compared to the other corpora; it is often used to return to a previous subject after some deviation (Ottesjö 2005). To a large degree, group decision activities seem to stick to one topic at a time, without much deviation; thus, there is not much need for such return phrases.

The feedback eliciting phrase *du vet* ('you know') is also uncommon in GDM; again, this is probably due to its quite informal connotations.

The phrase *vad heter det* ('what is it called') is less common in GDM than in the other corpora. It is typically used to signal that the speaker is searching for a word and need more time, which makes it a case of own communication management. It is possibly a sign of low concentration – in group meetings the participants are perhaps more focused, or maybe conversations do not change topics as often as in informal conversations. Here is an example from IC:

- *men då när ja sitter vet du så röker ja först en cigarett själv // ja sen så sitter ja då å ö: virkar eller nej inte virkar gör ja ju inte va heter de stickar eller syr eller nånting eller läser en bok // sen så kommer Karin Linjös vid tie i sju*
- *but then when I am sitting you know I first smoke a cigarette myself // and then I sit there like and er crochet or no not crochet I do not do that what is it called knit or sow or something or read a book // and then Karin Linjös come around ten to seven*

A similar explanation can be made for the infrequency of the phrasal verb *komma ihåg* ('remember') in GDM. In group meetings most issues are probably fairly well prepared, hence, there is no problem in remembering things, and the participants do not have to speak about it. Here is an example from an informal conversation:

- *nä men så blev de så att då fortsatte ja som svetsare då sen så börja ja jobbet tillsammans med han Runar Styrbord om du kommer ihåg han*
- *no but that was how it was so then continued as welder and then I started the job with that bloke Runar Styrbord if you remember him*

The demonstrative pronoun phrase *det/den/de här* ('this/these', in singular neuter, singular uter, and plural) is more common in GDM than in the other corpora. Its high frequency could be due to the fact that participants in the GDM recordings often look at maps or written papers together, and refer to places in these documents with demonstrative pronouns. Another reason is the rather complex concepts that are discussed during group decision-making, and which are referred to using a simple 'this/those' (cf. the previous section *Referring to abstract phenomena*). An example from GDM:

- *de de e väl så att denna ut+ uthyrningstaxan så den e att // den e // i i de ingår att hyresgästen själv städa efter sej // så e de ju och de här e ju inte me*

nån städning så då kommer de ju ovanpå i så fall // bortsett från typ storstädning å så

- *it it is probably like this that this rent+ rental fee like it is that // it is / it it is part of it that the tenant does the cleaning // so it is and this is not with any cleaning so that will come on top in that case // apart from like thorough cleaning and things*

Here, *det här* refers to the way that a city arranges for lease of its premises, an issue that has been discussed for 5-10 minutes.

The phrasal verb *gå igenom* ('go through') is used frequently in the GDM activities, where the participants go through agendas, item lists, etc., and to present or explain issues. Example:

- \$T: a: en del e exempel men / sexti kunder att gå igenom de för varje grupper plus dom man ha själv då va de de blir ganska mastit / ja
- \$T: *yes some of them are examples but / sixty customers to go through that for each groups plus the ones everybody has by themselves like that that can be quite heavy / yes*

Here, a proposal has been made that the group should split up into sub groups, and each such sub group should *go through* a list of customers and come up with ideas of how to work on them.

The phrase *vara tvungen*, 'to have to' is less common in GDM, and this could be due to the fact that the GDM activities are group activities. In the corpora it seems like it is used primarily for individuals, and not for groups. It is difficult to say if there is simply another word that is used for group obligation, or if it is indeed the case that groups do not 'have to do' things. It is perhaps more reasonable to say that group obligations (for example the ones that appear after group decisions) are uncomplicated and need not be discussed.

## Other constructions

### *The 'as regards' construction*

There is one construction common in GDM that is used for focusing on a certain aspect or part of something more complex:

när det gäller — < *referring phrase* >

*När det gäller* ('as regards', 'when it comes to') starts a sub clause, and makes what is said in the main clause apply to the referring phrase. An example is given here:

- ... / så att ja lutar över här åt att man skulle registrera / märket utan någon disclaimer // i de andra fallet när de gäller Wasa lilla runda // så e ja också // tveksam / ...
- ... / so I am leaning towards saying that one should register / the brand without any disclaimer // in the other case when it comes to Wasa lilla runda // then I am doubtful // as well /



The phrase is used in this case to make the doubt expressed afterwards apply to *Wasa lilla runda*. It is a quite formal way of focusing on a particular aspect, which explains its relatively high frequency in GDM.

#### *The 'I don't know' construction*

The last construction discussed here is the phrase *jag vet inte* ('I do not know'), which is significantly less common in GDM than in the other corpora, but it is not obvious why. It is sometimes used as a kind of hedge, to decrease the speaker's responsibility for what is said:

- \$B: ja de tycker ja e väldigt vanligt också ja vet inte de kanske kan bero på rökningen att man får riktig man får hosta å grejer /...
- \$B: yes I think that is very common too I don't know perhaps it is because of the smoking that you get real you cough and stuff / ...

This kind of backing away from one's own statement is perhaps too informal for most group decision activities, following the principle *if you do not feel certain, do not say it*.

## 6.8 N-grams

### 6.8.1 Introduction

The term *bigram* refers to two words occurring next to each other here, three words next to each other is called a *trigram*, etc; the general term is *n-gram*. The term is somewhat unfortunate, since *gramma* means letter rather than word. However, the terminology is established, and the alternative word *collocation* (which has also been suggested) is already "taken" – it is often used for n-grams that occur more often than expected (e.g. *strong tea* as opposed to *powerful tea*).

We shall now have a look at the most common n-gram types. N-grams in the corpora have low frequencies; for that reason, the lists have been limited to the 20 most common types of for each n-gram length, in any of the three corpora. In order to make the lists explicit and concentrate on the words that stick out for GDM, the lists include only n-grams that are significantly more common in GDM than in both the other two corpora, or that are less common in GDM than in the other two corpora. Frequencies have been considered word measures; thus, the  $\chi^2$ -test has been used to test significance, with a significance level of 99.5%.

Translating n-grams is very tricky, and the English translations given in the tables below are to be read with some discretion.

## 6.8.2 Bigrams

*Table 6-11: Bigrams that are significantly more or less common in GDM than in IC and P/O, and belong to the twenty most common bigrams in any of the three corpora. Numbers are given in parts per million (PPM).*

	More common				Less common		
	GDM	IC	P/O		GDM	IC	P/O
<i>så att</i> ('so that')	4 865	1 688	3 701	<i>ja det</i> ('yes it')	3 028	4 168	4 104
<i>att det</i> ('that it')	4 683	3 137	3 476	<i>det var</i> ('it was')	2 947	6 082	4 044
<i>det här</i> ('this')	4 581	1 484	3 061	<i>var det</i> ('was it')	1 261	2 356	1 593
<i>och det</i> ('and it')	3 888	1 665	2 369	<i>vet du</i> ('you know')	134	1 744	799
<i>att vi</i> ('that we')	3 268	442	1 374	<i>nä det</i> ('no it')	738	1 688	1 172
<i>vi har</i> ('we have')	3 081	759	1 741				
<i>har vi</i> ('have we')	2 128	294	1 267				
<i>att eh</i> ('that er')	1 772	408	793				

The most common bigrams are largely simple combinations of the most common words: *vi har*, *har vi*, *det var*, *var det*, *att vi*, *att eh*, *och det*, *vi har* and *har vi*. These are discussed in the word section below. Similarly, we have already seen that feedback words in general are uncommon in GDM; this holds true for *ja* ('yes') and *nä* ('no') too. Since *det* ('it') is a common word with which to start a main clause, the frequency of the bigrams *ja det* and *nä det* will follow the frequency of the words *ja* and *nä*.

The list also contains support for some of the constructions discussed above. *Det här* ('this') is the most common demonstrative pronoun, and *vet du* ('you know') is an informal feedback eliciting phrase.

*Så att* participates in three principal constructions, which were all discussed in the construction section above. The first is the adverb phrase *så att säga* ('so to speak'). The second links an argument with a claim, and the third helps fit a sub clause into a main clause. All these uses have their natural place in GDM.

## 6.8.3 Trigrams

*Table 6-12: Trigrams that are significantly more or less common in GDM than in IC and P/O, and belong to the twenty most common trigrams in any of the three corpora. Numbers are given in parts per million (PPM).*

	More common				Less common		
	GDM	IC	P/O		GDM	IC	P/O
<i>att det är</i> ('that it is')	1 416	986	1 041	<i>ja det är</i> ('yes it is')	1 097	1 516	1 597

<i>och det är</i> ('and it is')	1 297	481	776	<i>i alla fall</i> (‘anyway’)	549	1 368	847
<i>så att det</i> ('so that it')	902	296	601	<i>jag vet inte</i> (‘I don’t know’)	544	1 122	782
<i>det här med</i> (‘this thing with’)	608	160	142	<i>det var ju</i> (‘it was’)	391	937	621
<i>när det gäller</i> (‘as regards’)	574	49	136				
<i>att vi har</i> (‘that we have’)	570	62	149				
<i>och så vidare</i> (‘and so on’)	561	234	142				

The trigram list shows some of the constructions discussed above: *jag vet inte* ('I do not know'), *det här med* ('this thing with'), *och så vidare* ('and so on'), *när det gäller* ('as regards') and *i alla fall* ('anyway'). We also see trigrams consisting of some of the bigrams discussed above and one common word, *att det är* ('that it is'), *och det är* ('and it is'), *så att det* ('so that it'), *att vi har* ('that we have'), *det var ju* ('it was'<sup>1</sup>) and *ja det är* ('yes it is').

#### 6.8.4 4-grams

**Table 6-13: 4-grams that are significantly more or less common in GDM 4-grams in any of the three corpora. Numbers are given in parts per million (PPM).**

	More common			Less common
	GDM	IC	P/O	
<i>är det så att</i> ('is it so to/that')	214	0	85	
<i>så att säga va</i> ('so to speak right')	156	0	35	
<i>och det är väl</i> ('and I guess that is')	138	0	14	

The phrase *så att säga*, here followed by the feedback elicitor *va* ('right'), was discussed in the construction section above.

The 4-gram *är det så att* contain the most common bigram that is particular to GDM, *så att*, together with the second most common bigram overall in all corpora, *är det*. *Så att* was discussed in the section about constructions above, and *är det så att* is a consequence of the use of *så att* and the fact that *är det* is a common bigram.

1. *Ju* is difficult to translate. It is a sentence adverb and a kind of “consensus claimer”, saying that what is claimed is common knowledge or self evident.

The 4-gram *och det är väl* is a trace of the construction *fact – comment* discussed above, p. 250.

### 6.8.5 N-grams of length 5 to 10

The n-grams that are 5 or more in length have quite low frequencies; it is not meaningful to compare them between the activity types (the statistical significance is too low). However, seen more holistically, the lists clearly bear marks of the activity type.

*Table 6-14: The twenty most common n-grams of lengths 5 and 6, with frequency of 3 or more, in GDM.*

5-grams	6-grams
<i>det är ju så att</i> (‘the way things are is’)	<i>det är ju det som är</i> (‘things are as they are’)
<i>är det ju så att</i> (‘the way things are is’)	<i>och så vidare och så vidare</i> (‘and so on and so on’)
<i>det är ju det som</i> (‘that is what’)	<i>det är ju det är ju</i> (‘it is it is’)
<i>ja men det är ju</i> (‘yes but it is’)	<i>ett tjänsteutlåtande kan vi bifalla det</i> (‘an official report can that be approved’)
<i>jag tror att det är</i> (‘I think it is’)	<i>och då är det så att</i> (‘and then it is like this that’)
<i>det är ju inte så</i> (‘it is not like that’)	<i>är väl i och för sej</i> (‘is in and of itself’)
<i>jag vet inte om det</i> (‘I do not know if it’)	<i>det är väl i och för</i> (‘it is in and of’)
<i>är det så att det</i> (it is like this that’)	<i>då finns det bara ett förslag</i> (‘then there is just one proposal’)
<i>det är ju det är</i> (‘it is it is’)	<i>då går vi vidare till ärende</i> (‘then we proceed to issue’)
<i>och det är ju det</i> (‘and it is what’)	<i>då är det så här att</i> (‘then it is like this that’)
<i>så att säga va och</i> (‘so to speak right and’)	<i>ett två tre ett två tre</i> (‘one two three one two three’)
<i>det är klart att det</i> (‘of course it’)	<i>har nämnden några frågor i detta</i> (‘does the committee have any questions about this’)
<i>då är det så att</i> (‘then it is like this that’)	<i>i och med att vi har</i> (‘since we have’)

<i>då är vi på ärende</i> (‘then we have reached issue’)	<i>nä då finns det bara ett</i> (‘no then there is only one’)
<i>för att det är ju</i> (‘because it is’)	<i>är beredd att svara på frågor</i> (‘am ready to answer questions’)
<i>ja just det det är</i> (‘yes right it is’)	<i>är det någon som vill yttra</i> (‘is there anybody who would like to say’)
<i>jag tycker att det är</i> (‘I think that it is’)	<i>det någon som vill yttra sej</i> (‘there anybody who would like to say something’)
<i>men det är klart att</i> (‘but of course it’)	<i>det är det jag tänker på</i> (‘that is what I am thinking of’)
<i>och så vidare och så</i> (‘and so on and so’)	<i>där är det ju så att</i> (‘it is like this that’)
<i>så att det är ju</i> (‘it is like that’)	<i>då är det ju frågan om</i> (‘then the question is’)

**Table 6-15: The twenty most common n-grams of lengths 7 and 8, with frequency of 3 or more, in GDM.**

7-grams	8-grams
<i>det är väl i och för sej</i> (‘it is in and of itself’)	<i>det är ju riktigt det är ju riktigt</i> (‘that is correct that is correct’)
<i>jag är beredd att svara på frågor</i> (‘I am ready to answer questions’)	<i>då finns det bara ett förslag och det</i> (‘then there is only one proposal and that’)
<i>nä då finns det bara ett förslag</i> (‘no then there is only one proposal’)	<i>finns det bara ett förslag och det är</i> (‘there is only one proposal and that is’)
<i>är det någon som vill yttra sej</i> (‘has anybody got anything to say’)	<i>kan vi bifalla det då är vi på</i> (‘can that be approved then we have reached’)
<i>att det är ju det är ju</i> (‘that it is it is’)	<i>nä då finns det bara ett förslag och</i> (‘no then there is only one proposal and’)
<i>det bara ett förslag och det är</i> (‘it is just a suggestion and it is’)	<i>är ju riktigt det är ju riktigt det</i> (‘is correct that is correct it’)
<i>det är ju riktigt det är ju</i> (‘that is correct that is’)	
<i>då finns det bara ett förslag och</i> (‘then there is just one proposal and’)	

---

*då går vi vidare till ärende nummer*  
(‘then we proceed to issue number’)

---

*ett tjänsteutlåtande kan vi bifalla det då*  
(‘an official report can that be approved then’)

---

*ett två tre ett två tre ett*  
(‘one two three one two three one’)

---

*finns det bara ett förslag och det*  
(‘then there is just one proposal and that’)

---

*för asfaltering av Parkvägen från  
Stenslandavägen till*  
(‘to put black top on Parkvägen from Stenslandavägen to’)

---

*har nämnden några fler frågor i detta*  
(‘does the committee have any other questions about this’)

---

*har nämnden några frågor i detta ärendet*  
(‘does the committee have and questions about this issue’)

---

*jag lämnar ordet fritt med anledning av*  
(‘I open the floor for debate because of’)

---

*ju riktigt det är ju riktigt det*  
(‘correct that is correct it’)

---

*kan vi bifalla det då går vi*  
(‘can that be approved then we proceed’)

---

*kan vi bifalla det då är vi* (‘can that be approved then we have’)

---

*tva tre fyra fem sex sju åtta* (‘two three four five six seven eight’)

---

**Table 6-16:** The twenty most common *n*-grams of lengths 9 and 10, with frequency of 3 or more, in GDM.

9-grams	10-grams
<i>det är ju riktigt det är ju riktigt det</i> (‘that is correct that is correct it’)	<i>nä då finns det bara ett förslag och det är</i> (‘no then there is only one proposal and that is’)

---

*då finns det bara ett förslag och det är*  
 ('then there is only one proposal and  
 that is')

---

*nä då finns det bara ett förslag och det*  
 ('no then there is only one proposal  
 and that')

---

The lists contain many longer version of the n-grams discussed previously; the longer n-grams show support for the constructions discussed above (see p. 246 ff.).

The n-gram *det är ju riktigt* appears in certain variations in the lists above, and it stems from a single utterance where the phrase *det är ju riktigt* ('that is correct') is repeated four times in a row.

## 6.9 Word types

### 6.9.1 Introduction

We shall now look at the most common words for each part-of-speech. Individual words have much higher frequencies, generally, than n-grams, so we shall look at the 50 most common words with a frequency of 10 or more, for each part-of-speech and corpus. As for n-grams, the  $\chi^2$ -test has been used for the significance test, 99.5% level, and only words that are significantly more or less common in GDM compared to both IC and P/O are considered.

Kilgarriff (2001) criticizes the  $\chi^2$ -test for setting off many false alarms, in other words, claiming significant difference where there is none. This is true, but it applies to Mann-Whitney (which Kilgarriff recommends) as well, although in a lesser degree. In this study, the effect of the false alarms is lessened somewhat by the requirement that only cases where a word is significantly more or less common in GDM than in IC *and* P/O are considered.

### 6.9.2 Adjectives

*Table 6-17: Adjectives that are significantly more or less common in GDM than in both IC and P/O, and belong to the fifty most common adjectives in any of the three corpora. Numbers are given in parts per million (PPM).*

	More common			Less common			
	GDM	IC	PO		GDM	IC	P/O
<i>olika</i> ('different')	980	328	357	<i>bra</i> ('good')	778	1 427	1 235
<i>nästa</i> ('next')	545	246	314	<i>sådan</i> ('such')	732	1 755	1 070

<i>själva</i> ('-selves, own')	481	174	197	<i>själv</i> <sup>1</sup> ('-self, 'own')	309	482	543
<i>vissa</i> ('some, certain')	473	164	144	<i>jävla</i> ('bloody')	19	370	293
<i>viktigt</i> ('important')	316	41	80	<i>god</i> ('good')	50	216	282
<i>intresserad/intresserade</i> ('interested', sing/pl)	309	51	69	<i>tvungen</i> ('have to')	23	123	96
<i>intressant</i> ('interesting')	236	51	37	<i>sjuk</i> ('ill')	11	72	117
<i>övriga</i> ('other', 'remaining')	156	31	37				
<i>ytterligare</i> ('more, another')	110	10	32				

The table above suggests that the GDM corpus contains more formal language than the other two corpora: *viktigt* ('important') and *intressant/intresserad/intresserade* ('interesting/interested') are formal, positive evaluations that correspond to the more informal *bra* ('good, well') and *god* ('good'). Similarly, the swear word *jävla* ('bloody') is avoided in formal contexts, and the word *ytterligare* ('more, another') is rarely used in informal language. *Vissa* ('some, certain') is also somewhat formal, which could explain its high frequency in GDM.

*Nästa* ('next') is common GDM, probably because of the discussions about upcoming meetings (next week), and the next paragraph on the agenda.

*Övriga* ('other') is used in the phrase *övriga frågor* or *övriga ärenden* ('other issues'), which is a standard item on agendas for formal meetings; this seems to be the explanation for its high frequency in GDM.

The plural *själva* ('-selves, own') is more common in GDM, while the singular *själv* ('-self, own') (with lower certainty) is less common. This is probably an effect of the group functioning as a subject, like in the following excerpt:

- dom gör de ju också men vi gör de ju väldigt bra själva
- *they do it too but we do it very well ourselves*

The word *sjuk* ('ill, sick') is naturally used in private contexts, referring to people who are ill. It is not surprising that it is more common in IC than in GDM, but more so that it is even more common in P/O. It turns out that 17 of the 22 occurrences in P/O came from the exact same recording, in which sick leave is discussed.

The word *tvungen* was discussed on p. 256 above.

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1. Significant difference on the 99.9% level compared to P/O; but only on the 97.5% level compared to IC.



The word *olika* can be used either to specify that things differ, but also as a kind of plural article:

- ... // sen få vi se på de hela å vi vet / erfarenhetsmässigt att // vi behöver olika alternativ för att / de kan stöta på patrull av olika anledningar // överklaganden / miljöproblem eller vad de nu e fö nått / ...
- ... // *then we have to look at the whole thing and we know / from experience that // we need several alternatives because / it can be checked for several reasons // appeals // environmental problems or what have you / ...*

It seems that this use of *olika* is more common in GDM than in the other two corpora; the reason is probably the formality – this use of the word has a clearly formal ring.

The word *sådan* ('such') is less common in GDM than in the other corpora; the reason seems to be that it often is used in a construction that comes close to OCM, and can be used in situation where the speaker cannot find a word (note that *sådan* is pronounced *sån* here):

- jaha du har en sån där // kassettbandspelare som går runt
- *oh you have like a // cassette recorder that goes around*

It can also be used to prepare the listener that an unusual word is coming, or perhaps rather something that the speaker is not used to:

- jaha de e en sån där live upptagning
- *okay it is like a live recording*

Both these uses are quite informal, and it is not surprising that they do not appear often in GDM.

### 6.9.3 Adverbs

*Table 6-18: Adverbs that are significantly more or less common in GDM than in both IC and P/O, and belong to the fifty most common adverbs in any of the three corpora. Numbers are given in parts per million (PPM).*

	More common			Less common			
	GDM	IC	P/O		GDM	IC	P/O
<i>här</i> ('here')	14 675	7 267	10 205	<i>bara</i> ('just', 'only')	2 384	3 993	3 311
<i>väl</i> ('probably?')	4 748	3 890	2 396	<i>igen</i> ('again')	400	944	729
<i>alltså</i> ('so, thus')	3 028	2 309	1 682	<i>aldrig</i> ('never')	229	1 067	415
<i>egentligen</i> ('really')	1 056	431	463	<i>beller</i> ('neither')	297	616	474
<i>vidare</i> ('further')	843	287	208	<i>hem</i> ('home')	111	554	410
<i>sedan</i> ('then')	839	164	341	<i>precis</i> ('exactly')	309	523	474
<i>med</i> ('with')	786	380	367	<i>hemma</i> ('home')	80	472	314
<i>därför</i> ('because of this, so')	728	441	330	<i>ihåg</i> ('remember')	92	421	341

<i>redan</i> ('already')	439	133	197	<i>tillbaka</i> ('back')	217	431	905
<i>igenom</i> (‘through’)	385	113	181				

In the adverbs, we see traces of argumentation in group decision-making. *Därför* ('because of this, so'), *alltså* ('thus, so') and *vidare* ('further') are all words that can be used to link arguments to standpoints or other arguments.

*Väl* is translated as 'probably' in the table above, but there is no proper English correspondent. It can be used to admit or consent something (e.g. *ja, det kan vi väl göra*, 'yes, I guess we can do that'), but also as a kind of interrogative or eliciting particle corresponding to an English tag question (*du har väl varit i Finland?*, 'you have been in Finland, haven't you?'). This last use seems to be the most common use of the word in the GDM corpus, although in a weaker form, as more of a feedback elicitor:

- *men de e ju // eftersom ni e me på listan så är ni väl me i i diskussionen*
- *but it is // since you are on the list you take part in in the discussion don't you*

In this use, *väl* can be a polite way of presenting an opinion or an argument, since it is quite open for objections. Similarly, the word *egentligen* ('really, to be precise') can be used to weaken the strength of a taken stance, as discussed on p. 206 ff:

- *yes några andra synpunkter kommentarer // < | > principfrågorna har vi väl egentligen knäckt förra gången*  
@ < cough: X >
- *yes any other views comments // < | > we cracked the principal questions last time didn't we*  
@ < cough: X >

The temporal adverbs *sedan* ('then') and *redan* ('already') are used when locating events in time, typically when reporting a previous sequence of events, which is not uncommon in group decision-making, as a part of giving background information.

However, the reason for the high frequency of the word *här* ('here') in GDM is somewhat unclear. One explanation is that the word is often part of a phrasal demonstrative pronoun *den/det/de här* ('this/these'), discussed on p. 256 above.

*Med* is usually seen as a preposition ('with'), and when tagged as an adverb it is typically the particle of a phrasal verb. In such phrasal verbs *med* usually has a meaning of inclusion: *vara med någon* ('to be with somebody'), *komma med* ('to accompany'), *ta med* ('bring'). The presence of this kind of expressions could be an

effect of the negotiation and putting of proposals that are part of group decision-making:<sup>1</sup>

- ja: ja vet inte heller om de e inte alls så tokit tycker ja när den inte e de e lite räffling upp å ner de lite prydnad tycker ja no / de förvånar mej att dom va så deciderade på att man inte skulle ta den // alldeles omöjlit tycker ja inte att de e men ja e kan också va me om att man försöker å säja nej till // de / fast ja e inte så negativt inställd
- *yes I don't know either if it really is not all that bad I think when it isn't there are some grooves up and down it's some decoration I think / I am surprised that they were so convinced that it should not be taken // I don't think it's completely impossible but I er can also partake in trying to say no to // it / but I am not all that negative to it*

*Igenom* is usually used in the phrase *gå igenom* ('go through'), which in Swedish, as in English, can mean either to pass through (a doorway) or to scrutinize (a document). In the GDM corpus it is the latter meaning that is more common, and it is used for example when referring to the scrutinizing of a list of issues, or a proposal (see p. 256).

The two forms of home, *hemma* and *hem*, are obviously part of the private sphere, and are not common in GDM. Their presence in P/O is explained by the fact that there are many travel agency dialogues in P/O, where return trips are often discussed. On the way back, the original departure location is often referred to as 'home'.

Some less common adverbs in GDM appear to have an important share of usage in informal phrasings. The word *bara* ('just, only') can be used to add dramatic effect:

- men de tycker ja e så äckligt dels för dom som kommer efter å känner de dä stanken dels för en själv de e ju sånt lite utrymme så rukt+ lukt+ eller röken bara pyr in i en va // ...
- *but I think that is so gross both for those what come after and sense that stench and for yourself it is such a small space so the smul+ smel+ or the smoke just smolders into you right // ...*

The use of the verb *pyra* ('smoulder') is somewhat unusual here, but is probably a development of the participle *inpyrd* ('ingrained, reeking'), and means that the smoke enters and stays in the clothes and hair of the person. The adverb *bara* adds the effect that there is no end to this entering, the process can go on without obstruction. This "dramatic" use of *bara* is quite informal.

Similarly, *aldrig* ('never') is often used in exaggerations for something that is unlikely; such exaggerations are informal:

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1. The written phrase *vara med* is pronounced *va me* here.

*Excerpt 6-4. A320201, line 767.*

*Two speakers are talking about the children av a common friend.*

1	\$B: e de den lille Sune	\$B: is that the little one Sune
2	\$A: ja	\$A: yes
3	\$B: kan aldri lära mej de ja de e den lille	\$B: I never learn that yes that is the little one
4	\$A: den lille heter Sune	\$A: the little one is called Sune

A parallel to this is the word *precis* ('exactly'), which can be used as a kind of "understatement mark":

- ... men vinden som sagt var den ha vart så kall så bada har ju inte varit precis det största nöjet denna sommar // ...
- ... *but the wind as I said before it has been so cold that swimming has not exactly been the most enjoyable experience this summer // ...*

The implication is that swimming has been far from the most enjoyable experience; this kind of sarcasm is also rather informal.

*Ihåg* was discussed on p. 255 above, and interjectional phrases containing *beller* were discussed on p. 253.

The word *igen* ('again') is less common in GDM, but the reason for this is not obvious. It can be explained partly by the fact that a more formal synonym is used in more often in GDM, *ytterligare*, but that does not explain the entire difference. The word *igen* seems to appear mostly in descriptions of what has happened, or some more or less ongoing event; however, GDM concerns itself primarily with future events (see also the verb section below).

*Tillbaka* ('back') is used in IC in descriptions of how people have moved around, typically as parts of descriptions of previous events. Example:

- jo / hon kom dit i eh / i november eller någonting sådant där och så skulle hon stanna hon hade visum för tre månader / och så nu över jul och nyår så hade dom varit / och / på / öarna där någonstans vid TRINIDAD hade dom varit / och när dom kom tillbaka nu och skulle in på trettondagsafton skulle in i igen i < ca+ > < ca+ > kom nu i Caracas landa där /
- *yes / she came there in er / in November or something like that and then she should stay for she had a visa for three months / and now for Christmas and New Year they had been / and / on / the islands there somewhere at TRINIDAD they had been / and when they came back now and were going in on Epiphany were going in again in Ca+ Ca+ come now in Caracas land there /*

In P/O the most common use is when a customer receives change from a cashier or other sales person.

- tackar < | > då blir de sex kronor tillbaka varsego vill du ha en påse å ta de i @ < event: the till opens and closes >
- *thank you < | > and there is six crowns back here you are would you like a bag for that*  
@ < event: the register opens and closes >

Neither of these two types of episodes is common in the GDM activities.

#### 6.9.4 Conjunctions

*Table 6-19: Conjunctions that are significantly more or less common in GDM than in IC and P/O, and belong to the fifty most common conjunctions in any of the three corpora. Numbers are given in parts per million (PPM).*

	More common			Less common		
	GDM	IC	P/O	GDM	IC	P/O
<i>och</i> ('and')	29 697	26 193	24 009			
<i>att</i> ('to', 'that')	28 175	17 572	17 562			

As discussed above (p. 245), conjunctions in general are more common in GDM than in the the other two corpora, so it is not surprising that the most common conjunction *och* ('and') is more common in GDM.

The word *att* can either be a subjunction ('that') or the infinitive marker ('to'), but it is the former use that is more common in GDM. The reason for this is probably the use of verbs such as *think, suggest, say, claim* etc., which take that-clauses as complements. These verbs are abundant in GDM (see below 'verbs').

#### 6.9.5 Feedback words

Traditionally, feedback words have not received much attention, most likely because of the fact that traditionally spoken language has been ignored by linguists, to a large extent. Feedback words are uncommon in most written language genres; these have a primarily monological character. Thus, there is no accumulated knowledge of the finer distinctions between different kinds of feedback words, as there is for many other words. Consider the sounds [*ja:*], [*a:*], [*jaʔa*], [*a:a*], [*m:*], and [*m:m*]. Which of these are words and what difference in meaning is there? A linguist giving this problem some attention may come up with an analysis of it, but the transcribers who produced the texts in the corpora have not had any special training in this, and they have used somewhat different strategies for rendering these sounds. This means that the precise rendering of the feedback words cannot always be trusted. Therefore, abroad grouping of the feedback words has been made here, and all the words with a frequency of 10 or more are presented here:

*Table 6-20: Feedback words in the three corpora. Numbers are given in parts per million (PPM). Numbers that are printed in gray are not significantly different compared to GDM.*

Word	Translation/Explanation	GDM	IC	P/O
<i>ja/ab/jaa/a/jaja</i>	variations of 'yes'	21 879	26 512	32 419
<i>m/mm</i>	like in English	6 669	5 874	10 533

<i>nä/nej/näeh/näej/neej/nää/ne/nee</i>	variations of 'no'	5 901	11 949	9 480
<i>va</i>	feedback elicitor, 'right'	5 013	3 442	4 705
<i>jo/jovisst/jodå/jojo/joo</i>	variations of <i>jo</i> , the contrastive yes comparable to the French <i>si</i>	1 582	2 677	1 992
<i>jaha/aha</i>	'okay, is that so' (positive)	1 517	<del>1 633</del>	1 899
<i>just</i>	'exactly'	880	<del>806</del>	1 288
<i>okej</i>	'okay'	830	465	2 167
<i>visst/javisst</i>	'sure, of course'	783	<del>631</del>	1 315
<i>kanske</i>	'maybe'	498	<del>486</del>	<del>431</del>
<i>jaså/jasså</i>	'is that so'	425	837	<del>442</del>
<i>precis</i>	'exactly'	355	<del>176</del>	1 032
<i>ha</i>	'okay'	313	<del>393</del>	666
<i>bra</i>	'good'	127	<del>103</del>	404
<i>hm</i>	like in English	120	2 357	791
<i>nähä/nähej/nehej</i>	'okay, so' (negative)	120	<del>207</del>	295
<i>nja/mja/naej/njae</i>	'well' (mild disagreement)	100	<del>217</del>	<del>115</del>
<i>yes</i>	English borrowing	85	<del>21</del>	<del>142</del>
<i>se</i>	'look'	42	<del>21</del>	76

Most of the words with significantly different frequencies are less common in GDM, suggesting that feedback words are less common in general in GDM than in IC and P/O. The parts-of-speech table above shows that this is the case for P/O, but the difference compared to IC is not statistically significant. However, looking a bit closer at the numbers we see that the significance level is just slightly below the threshold of 99.5%, and the significance test used for the part-of-speech distribution above is the t-test, while the less strict  $\chi^2$ -test is used for the individual words. Further, there are more participants, and listeners, in GDM, so there are more people who *could* give feedback. Despite this, there is less feedback in the GDM corpus.

Accordingly, it is likely that many of the differences in table 6-20 are due to a generally lower degree of verbal feedback in the GDM activities. This is not surprising, since there are more participants in these activities, and we can assume that feedback in groups tends to be less verbal, for practical reasons.

The exception to this is the feedback elicitor *va*, which is more common in GDM than in IC (and has about the same frequency in P/O). GDM and P/O evidence a lot of information giving, arguing or other kind of explanation, where the speaker often has rather large pieces of information to present. This informa-

tion is often split up in chunks using *va*, enabling listeners to give feedback, while packaging the information in a way that is easier to receive. Here is an example:

- men kan vi inte göra så att vi skickar me den frågan om vi gör de till vårt <1 adb-råd >1 eller någonting sådant va att e: de för nu de e ju en rätt stor investering vi gör här va s att ja tycker de känns viktigt att som ledning ha ett grepp ungefär va befinner vi oss nu va och e: att även dom inte (kraftfulla) rösterna s att säga vi ser dom va // e att man då e fundera på NÅGON form av mer systematisk om de e i enkätform eller va de e men INTE bara s att säga sätta ihop de man har sett å hört utan att vi faktiskt hör EFTER hos på varje ställe där de står en terminal eller en <2 pc >2 så vi får en bild av används den / fungerar grejerna va e de för grejer som inte fungera å va e de mer för stöd man behöver va å så att vi får en chans att göra nån analys av de läget tillsammans här va  
 @ <1 acronym: adb >1  
 @ <2 acronym >2
- *but couldn't we do like this that we pass that question if we do so to our computer council or something like that right that er it because now it is a rather big investment that we are doing here right to I think it feels important that we as management have control of roughly where we are now right and er that also the not (strong) voices so to speak that we see them right // er that they er consider SOME kind of more systematic be it in shape of a questionnaire or what have you but NOT just so to speak put together what has been seen and heard but that we actually find OUT on at each place where there is a terminal or a <2 pc >2 so we get a picture of is it used / does the stuff work what kind of stuff doesn't work and what other kind of support that is needed right and so we get a chance to make an analysis of the situation together here right*  
 @ <2 acronym >2

Here, A makes a summary of what has been said during a discussion, and phrases it as a proposal, along with arguments. The result is a large piece of information, which is split up in small chunks using *va*.

### 6.9.6 Interjections

*Table 6-21: Interjections that are significantly more or less common in GDM than in both IC and P/O, and belong to the fifty most common interjections in any of the three corpora. Numbers are given in parts per million (PPM).*

More common	Less common		
	GDM	IC	P/O
<i>hej</i> ('hi')	61	339	2406
<i>oj</i> ('oops')	57	400	149
<i>fan</i> ('damn')	11	760	266
<i>hallå</i> ('hello')	23	174	176
<i>aj</i> ('ouch')	8	123	112

Interjections in general are less common in group decision-making than in the other two corpora, as discussed above (p. 245), indicated clearly here. Occasions where words like *hej* ('hi'), *hallå* ('hello'), *oj* ('oops') and *aj* ('ouch') could be used do not come frequently in group meetings. As stated in connection with other parts-of-speech, swear words like *fan* ('damn') are usually considered informal.

### 6.9.7 Nouns

*Table 6-22: Nouns that are significantly more or less common in GDM than in IC and P/O, and belong to the fifty most common nouns in any of the three corpora. Numbers are given in parts per million (PPM).*

More common				Less common			
	GDM	IC	P/O		GDM	IC	P/O
<i>frågan, fråga, frågor</i> (‘question’)	1 991	339	1 054	<i>fan</i> (‘bastard’)	19	565	250
<i>sätt, sättet</i> (‘way, manner’)	1 201	647	681	<i>klockan</i> (‘clock, time’)	172	380	309
<i>del</i> (‘part’)	900	359	479	<i>dagen</i> (‘the day’)	149	318	282
<i>timmar</i> (‘hours’)	442	113	160	<i>tur</i> (‘turn; luck’)	88	216	234
<i>förslag</i> (‘suggestion, proposal’)	420	650	16	<i>bilen</i> (‘the car’)	65	174	421
<i>kommunen</i> (‘the municipality’)	389	0	0				
<i>ordförande</i> (‘chairperson’)	381	10	0	<i>fel</i> (‘error, wrong’)	69	174	224
<i>nämnden</i> (‘the committee’)	358	0	0				
<i>kontakt</i> (‘contact’)	294	10	64				
<i>ärende, ärendet</i> (‘issue, paragraph’)	526	0	21				
<i>synpunkter</i> (‘views, comments’)	267	10	59				
<i>herr</i> (‘mister’)	256	21	5				
<i>papper</i> (‘paper’)	251	62	96				
<i>uppdrag</i> (‘mission’)	229	10	16				
<i>antal</i> (‘number’)	206	0	64				
<i>grupp</i> (‘group’)	206	41	80				
<i>konflikt</i> (‘conflict’)	206	0	5				



<i>nummer</i> ('number, figure')	202	0	75		
<i>beslut</i> ('decision')	385	0	21		

The fact that most of the recordings in the GDM corpus are from formal meetings is clearly visible here: *frågan/frågor/fråga* ('the question/questions/question'), *förslag* ('proposal, suggestion'), *ärende/ärendet* ('issue/issues, paragraph/paragraphs'), *papper* ('paper'), *synpunkter* ('views, comments'), *ordförande* ('chairperson'), *uppdrag* ('mission'), *grupp* ('group'), *nummer*<sup>1</sup> ('number'), *konfliket* ('conflict'), *beslut* ('decision') and *kontakt*<sup>2</sup> ('contact') all have to do with meetings.

Several of the recorded groups are associated with public administration; words like *nämnden* ('the committee') and *kommunen* ('the municipality') naturally show up in such contexts.

The words *herr* ('mister') and *ordförande* ('chairman, chairperson') are usually used in the phrase *herr ordförande* ('mister chairperson'), when starting to talk in a formal meeting. The formality of the activities also explains why *fan* ('bastard'), and *tur* ('luck'; 'turn') all are uncommon in GDM, since these belong to the informal and private sphere. *Antal* ('number') usually occurs in the phrase *ett antal*, a rather formal way of saying 'some' or 'several'.

The word *sätt*, and its definite form, *sättet*, mean 'way' or 'manner.' These are often used when talking about proposals or parts of proposals: *på något sätt* ('in some way'), *på det sättet* ('in this way'), *på annat sätt* ('in another way'), *på samma sätt* ('in the same way'), *på det ena eller andra sättet* ('one way or another').

Most of the occurrences of the word *timmar* ('hours') come from the two budget activities (A321601 and A322501), where the cost of the project is measured primarily in man-hours.

The word *del* ('part') often occurs in the phrases like *för min del*, discussed on pp. 251 above.

The word *klockan* is used primarily for time (hour) references – *vad är klockan* ('what time is it'), *klockan två* ('two o'clock'), etc. – these kinds of references do not seem to be common in GDM. The participants in IC discuss what they have done and what they will do, and time references are sometimes made for that. In the P/O corpus there are quite a few bookings made (travel agencies and car hire companies), and time references are prominent there too. However, in GDM the future actions discussed are usually only referred to using the date, not hour. It is really only when discussing the next meeting that exhibit references to the hour.

- 
1. Typically used to refer to paragraphs on the agenda.
  2. Often used as a formal version of 'talk to': *I will contact the applicant.*

The word *bilen* ('the car') occurs in the P/O corpus because the travel agency and car hire companies, while in IC, the participants talk about their cars, which seem to play a prominent role in their lives. In GDM, however, there are few opportunities to talk about cars, since the groups themselves rarely have cars of their own, and transportation is seldom an issue.

*Dagen* ('the day') can be used either to contrast evening/night, or for the 24-hour calendar unit. It is less common in GDM than in the other corpora, and there seem to be several reasons for this. Evening or night activities are rarely mentioned in the GDM recordings, since these conversations mostly deal with public and official matters, which are – broadly speaking – dealt with during daytime, while private matters are dealt with during evenings and nights. This explains why *dagen* is more common in IC than in GDM, but not why it is more common in P/O as well. The reason for this is that there are several recordings of court room interactions (trials) in the P/O corpus, where *dagen* in the sense of calendar unit is used often ('that day', 'during the day', 'the day before', etc.).

The word *fel* ('wrong, error, fault') does not occur many times in the three corpora (18 times in GDM, 17 in IC, and 42 in P/O); it is difficult to see any clear pattern in the uses.

### 6.9.8 Numerals

None of the individual numerals sticks out; an automatic categorization of the numerals in the corpora was made.

*Table 6-23: Numeral types in the three corpora. Numbers without statistically significant differences compared to GDM have been printed in gray.*

Type	GDM	IC	P/O
Cardinal 0-9	4 647	3 690	9 442
Cardinal 20-99	2 096	1 096	5 676
Ordinal 0-9	1 733	1 178	2 723
Cardinal 10-19	1 339	961	3 613
Cardinal 1000-999999	1 212	83	666
Cardinal 100-999	984	424	2 199
Ordinal 10-19	363	165	1 555
Ordinal 20-99	239	31	862
Cardinal 1000-	162	83	<del>224</del>

As shown in table 6-23, cardinal numbers are more common than ordinal ones, in general. For all types but cardinal numbers from 1000 to 999 999, P/O has the most and IC has the fewest. P/O contains quite a few business related activities, where prices and costs are discussed. GDM also contains conversations that concern money, but to a lesser degree. In IC, finally, money is discussed more

rarely. This explains the distribution of cardinal numbers, but money is seldom spoken of in ordinal terms. Dates, however, are often referred to using ordinal numbers. As mentioned, dates are often referred to in P/O (see discussion of *da-gen* in the noun section).

The exception to this pattern, cardinal numbers 1000-999 999, is due to the fact that the groups recorded in GDM corpus often discuss costs associated with their respective organizations, and these numbers often fall into this interval. In P/O, the amounts mentioned are usually to be paid by private persons, and they are smaller.<sup>1</sup>

### 6.9.9 Own communication management

There are two distinct types of OCM words found in the corpora: hesitation sounds and interrupted words,<sup>2</sup> shown in the table below.

*Table 6-24: Types of OCM words, in PPM. Numbers with no significant difference compared to GDM have been printed in gray.*

	GDM	IC	P/O
hesitation sounds	1.7	0.7	<del>1.4</del>
interrupted words	0.6	<del>0.5</del>	0.4

There are considerably fewer hesitation sounds in IC than in GDM, which could be an effect of the long utterances in the GDM activities. The difference in interrupted words between GDM and P/O is harder to explain.

### 6.9.10 Prepositions

*Table 6-25: Prepositions that are significantly more or less common in GDM than in IC and P/O, belonging to the fifty most common prepositions in any of the three corpora. Numbers are given in parts per million (PPM).*

	More common		Less common
	GDM	IC	P/O
<i>i</i> ('in')	15 564	13 744	12 303
<i>med</i> ('with')	9 050	7 390	7 165
<i>om</i> ('about')	4 496	2 966	2 928
<i>av</i> ('of, off')	3 924	2 238	2 124
<i>utan</i> ('without')	892	565	479
<i>under</i> ('under, below')	858	534	532

1. 1 euro  $\approx$  9 Swedish crowns.
2. To be more precise, the parts-of-speech tagger only recognizes these two types of OCM words.

<i>utav</i> ('of')	854	359	245
<i>inom</i> ('within')	423	154	117
<i>angående</i> ('concerning')	191	9	32
<i>kring</i> ('around')	183	31	21
<i>utifrån</i> ('from outside')	168	10	16
<i>beträffande</i> ('concerning')	107	0	27

Prepositions are more common in general in GDM than in the other two corpora, as discussed above (p. 245). Some of the prepositions have a clearly formal ring, such as *utav* ('of'), *angående* ('concerning'), *beträffande* ('concerning') and, to some extent, *kring* ('around').

### 6.9.11 Pronouns

*Table 6-26: Pronouns that are significantly more or less common in GDM than in IC and P/O, and belong to the fifty most common pronouns in any of the three corpora. Numbers are given in parts per million (PPM).*

	More common				Less common		
	GDM	IC	P/O		GDM	IC	P/O
<i>vi/ oss/ vår/ våra</i> (we/us/our)	25 975	8 848	18 244	<i>jag</i> ('I')	18 820	30 443	20 889
<i>en/ ett</i> ('a, an, one', common/neuter)	17 852	13 990	14 879	<i>du, dej</i> ('you', subject form, object form)	6 437	19 533	17 062
<i>som</i> ('that, which, who')	11 704	8 109	8 097	<i>vad</i> ('what')	4 134	6 405	5 403
<i>detta, denna</i> ('this', common/neuter)	3 039	482	548	<i>han</i> ('he')	3 440	9 587	5 015
<i>annat/ andra</i> (‘other’, sing/ plural)	1 495	872	873	<i>ingen</i> (‘nobody, no’)	770	1 252	1 171

The words *denna* and *detta* are demonstrative pronouns that are used mostly in southern Sweden; some recordings in the GDM corpus are made in that area, which explains the high frequency.

*En* and *ett* are primarily indefinite determiners ('a, an'), for common and neuter gender, and their presence signals indefinite noun phrases. A possible, but quite speculative, explanation for this is that the descriptions of past or future events occurring in GDM include references to things that are not referred to again a number of times. The frequencies of *en* and *ett* are boosted by such references,

since the indefinite form typically is used only the first time a reference is made to a certain phenomenon.

*Som* ('that, which, who') is tagged as pronoun primarily in relative clauses, *mannen som sitter på bänken* ('the man who is sitting on the bench'), and signals a more complex clause structure, something that has been mentioned before.

The group functions as an agent in GDM, which results in high frequencies for plural pronouns like *vi* ('we'), *oss* ('us'), *vår* ('our', sing.), *våra* ('our', pl.), and low frequencies for singular pronouns like *jag* ('I'), *du* ('you', sing. subject form), *dej* ('you', sing. object form) and *han* ('he').

When *vad* is tagged as a pronoun, it is usually used in the interjectional construction *vad <property>*, discussed on p. 253 above.

The word *ingen* ('no, nobody, none') is less common in GDM than in the other corpora, but it is difficult to say why. It is possibly a parallel case to the adverb *aldrig* ('never') discussed above, or that it is used in exaggerations that are more common in informal situations:

- nej men inte om gå upp klockan fyra varje morgon de orkar ju ingen människa va
- *no but not about going up at four o'clock every morning nobody can put up with that*

Even more mysterious is the fact that *annat,andra* ('other') is more common in GDM than in the other corpora. I have not been able to find a reasonable explanation for this.

### 6.9.12 Verbs

*Table 6-27: Verbs that are significantly more or less common in GDM than in IC and P/O, and belong to the fifty most common verbs in any of the three corpora. Numbers are given in parts per million (PPM).*

	More common				Less common		
	GDM	IC	P/O		GDM	IC	P/O
<i>är</i> ('be', pres.)	29 480	27 610	2 576	<i>var</i> ('be', past)	6 010	12 820	7 549
<i>har</i> ('have', pres.)	16 704	13 107	14 118	<i>ha</i> ('have', inf.)	2 761	3 490	3 476
<i>kan</i> ('can, be able to', pres.)	8 398	7 483	6 761	<i>vet</i> ('know', pres.)	1 960	4 598	3 077
<i>säga</i> ('say', inf.)	3 257	1 375	1 874	<i>hade</i> ('have', past)	1 937	4 700	3 077
<i>finns</i> ('be, exist', pres.)	3 127	1 211	1 810	<i>sade</i> ('say', past)	671	1 150	1 437
<i>göra</i> ('do, make', inf.)	2 932	2 238	1 645	<i>gick</i> ('go', past)	221	1 109	783

<i>gäller</i> ('concern', pres.)	1 098	154	405	<i>gjorde</i> ('do, make', past)	381	944	708
<i>kunna</i> ('know, be able to', inf.)	1 075	544	474	<i>blev</i> ('be, become', past)	278	862	495
<i>lägga</i> ('put, lay', inf.)	465	216	218	<i>såg</i> ('see', past)	126	831	383
				<i>heter</i> ('be called', pres.)	416	718	751
				<i>åka</i> ('go', inf.)	118	698	783
				<i>brukar</i> ('have the habit of', pres.)	149	595	325
				<i>kom</i> ('come', past or imp.)	370	1 334	729

A general tendency regarding verbs is that present tense is more common in GDM – *är* ('am/is/are'), *har* ('has/have'), *kan* ('know/knows/can/is able to'), *finns* ('is/are,exists'), *gäller* ('hold/holds, concern/concerns') – while past tense is less common in GDM – *var* ('was/were'), *hade* ('had'), *sade* ('said'), *gick* ('went'), *gjorde* ('did, made'), *blev* ('became'), *såg* ('saw'), *kom* ('came'). Future tense, including conditional future, is formed with the infinitive and certain auxiliaries, which explains the high frequencies of *lägga* ('lay, put'), *göra* ('do, make') and *säga* ('say') in GDM. Further, *ha* ('have', inf.) is used in some more complex, past tense verb constructions, such as *kunde ha gjort*, *borde ha gjort*, *måste ha gjort* ('could have done', 'should have done', 'must have done'). Group decision-making is concerned with future actions, so this pattern is not surprising.

*Kunna*, with the present tense form *kan*, is a cognate of the English 'can', but is also used for 'know' and 'to be able to'. In the GDM corpus, it is usually used to present possible future actions:

- just de // s att fundera / vi kan ju också göra så här att vi låter den gå runt men för guds skull gå inte härifrån ikväll utan ha fyllt i den // för ni måste fylla i den
- *exactly // so considering / we can also do like this that we pass it around but for heaven's sake do not do not leave tonight without having filled it out // because you have to fill it out*

Here, the speaker presents a possible solution to a problem (passing the thing around), which is a possible future action.

The high frequency of *säga* can be explained by its infinitive form (see above), but it is also commonly used in the phrase *så att säga* ('so to speak'), discussed on p. 254 above, the same goes for *gäller*, discussed on p. 256-7.

*Vet* and *heter* are present tense, which makes it a little surprising that it is uncommon in GDM. *Vet* can be explained by its presence in the feedback eliciting phrase *du vet* discussed on p. 255 above. The word *heter* means ‘has/have the name of’, like the German *heißen*. As discussed on p. 255 above, it is part of the phrase *vad heter det* (‘what is it called’), which is used when searching for words, and is perhaps a sign of low concentration – in group meetings the participants are perhaps more focused, or maybe the conversations do not change topics as often as in informal conversations. The frequency of the verb in the P/O corpus can be explained by the fact that many names are exchanged, of people, places and companies.

The word *åka* (‘go’) is frequent in the P/O corpus because of the travel agents asking where the customer wants to go. In IC it is used because the participants discuss what they are going to do, but that holds for the GDM corpus as well. However, the group meetings in GDM rarely discuss transportation. It might be that this is a consequence of the groups being social entities, and that physical transportation is handled by the individual group members without group decisions.

The word *brukar*, translated as ‘have the habit of’ in the table, is a kind of auxiliary that often corresponds to simple present tense in English (*jag brukar gå till biblioteket ganska ofta*, ‘I go to the library quite often’). It is less common in GDM than in the other corpora, but it is difficult to say why. It is possible that this is a parallel case to the adverb *aldrig* (‘never’) and the pronoun *ingen* (‘no, nobody’) discussed above, and that it is used in a type of generalization that is avoided in formal situations:

- ja // å ja kika runt omkring den du vet att de brukar alltid växa svamp runt den stenen
- yes // and I looked around it you know that it always grows mushroom around that stone

## 6.10 Conclusions

In this chapter, a study of word frequencies in a corpus of group decision activities was presented. The results provide a lot of support for claims made in previous chapters: in chapter 5 it was claimed that group decision activities contain proposals, and traces of this have been shown several times by the word frequencies (long utterances, p. 233; long n-grams, p. 263 ff; adverbs, p. 266-7; nouns, p. 273). Similarly chapter 5 claimed that arguments are common, while chapter 4 is based on the assumption that arguing is an important part of group decision-making. It is in this chapter that traces of arguing appeared many times (long utterances, p. 233; complex utterances, p. 245; constructions, p. 249-51 ff; adverbs, p. 266; feedback, pp. 270-1).

The definition given on p. 105 stipulates that decisions concern future actions, an idea that is supported in the verb section, where future and present tense

were shown to be common in group decision-making. In chapter 5, the need to make stances in debates stronger or weaker was discussed, and traces of this was found in the word frequencies (adverbs, p. 266). Further, chapter 5 also claimed that different groups develop different patterns for how decisions are made, a claim that was supported in the frequency study (p. 249).

Although quite a few reflections of group decision-making were found in the frequency lists and measures, there were not as many as one could have expected as compared to other activity studies (e.g. Allwood 1996b; Allwood 2001b). Instead, many of the traits found derive from the fact that most of the recordings in the GDM corpus come from formal meetings. Group decisions need not be made in formal meetings, however, so the imbalance between formal and informal conversations is a weakness of the corpus. On the other hand, this also shows that group decision-making is not so much a social activity type as a sub activity type – the recorded activities that were both formal meetings and group decision making activities mostly exhibited formal meeting traits. The social activity type formal meeting and the public administration domain were visible in the distribution of parts-of-speech (few interjections), in constructions (e.g. *så att säga* p. 254), n-grams (e.g. bigrams p. 258), words (e.g. *ärende* p. 273), the number of participants, and the length of the activities. The dominance measure was also affected by the structure of many of the groups, containing one chairperson and a number of other members.

The fact that group decision-making is a sub activity is probably also the reason behind the high degree of lexical variation that was found in GDM – the activities are collected from several social activity types, making the range of subjects wide and boosting lexical variation.

The frequency study also provides some new information about the language of group decision-making. The activity includes presenting and explaining present problems and possible future actions, as well as arguing for and against alternative solutions. Problems and actions are typically abstract and complex entities, which prompts use of complex clauses (pp. 245, 277), long utterances (p. 233), a high degree of OCM (p. 245), and general linguistic mechanisms for referral (pp. 251-2). All in all, the results is difficult language, and it must be expected that great communicative ability – both to understand others and to make oneself understood – is vital for successful group decision-making.

One last comment concerns methodological issues. The threshold for differences to be counted as statistically significant has been set to 99.5% most often. This means that 1 difference out of 200, on average, is wrong. Kilgarriff's (2001) criticism (see p. 263) also makes it likely that the error rate is even higher. Thus, some of the differences that form the basis of the conclusions made here are likely to be false. However, this will hardly affect the overall picture. (The significance level is in many cases much better than 99.5%, so the average significance level is higher.)



# 7. Concluding discussion

## 7.1 A holistic description of the dissertation

Each of the chapters 2 through 6 differ considerably in character, and I shall now attempt to bring them together to form a more coherent view of the subject of this dissertation. In the sections that follow, I shall try to draw conclusions, and sketch out how future research could build on this work.

As shown in chapter 2, considerable research has been done on group decision-making. Social psychologists and communication scholars have established a research field concerned with group decision-making, and they have often been interested in what makes group decisions good or bad. There has been a strong preference for experimental methods, and only recently have any attempts been made to study naturally occurring decisions in groups that exist independently of research. The present work supports this late development. The chapter on argumentation showed that arguing cannot be separated from the context in which it occurs, and the chapter on the interaction of group decision-making (chapter 5) showed that each group develops its own conventions for what counts as a decision and how decisions are made. Huisman (2000; 2001) reported similar results, while Frey (1994) and Putnam & Stohl (1990) based their arguments for a naturalistic approach on a more general understanding of groups. It should come as no surprise that I am a strong supporter of this naturalistic development, and chapters 4, 5 and 6 use recordings of naturally occurring activities for their empirical basis. However, this is not to say that experimental research on group decision-making is completely meaningless. Experimental studies have been used in the past with considerable success, and will continue to do so. However, groups that are put together for research experiments are a particular kind of group, and the differences and similarities between this type of groups and other types must be understood before it is possible to transfer research results from one kind of group to another.

When I started looking at existing research on group decision-making, I expected a close connection to argumentation analysis, and was surprised to find how separate these research fields are. Attempts have been made to bring the fields

together (see p. 35 ff.), but they are still fairly isolated from each other. This dissertation constitutes an attempt to bring the two fields together. The example study of argumentation in naturally occurring spoken interaction that was presented in chapter 4 can be compared to the analysis of group decision-making activities in chapter 5. It is obvious from these examples that argumentation and group decision-making can be studied with very much the same methods and in close connection with each other.

One of the reasons that argumentation analysis and group decision-making research have been kept apart is probably that argumentation has largely been studied in order to find out which argumentation is good. The investigations have been very much connected with logic and the concept of truth. Further, argumentation analysis has concentrated largely on written or at least monological argumentation. For that reason, the connection to spoken, interactive and often unstructured group decision-making has not been obvious. In chapter 4, one school of argumentation analysis, pragma-dialectics, was discussed and modified to better suit the needs of group decision-making research, and to show how linguistic methods can be used to study argumentation. Pragma-dialectics is fundamentally open to pragmatics and thus to conversational aspects of argumentation, and for that reason, it was well suited for this kind of adaptation. Four modifications were made to the pragma-dialectical model: i) the underlying pragmatic theory, taken from Grice, Austin and Searle, was replaced with Allwood's more modern theory; ii) normative aspects were separated from descriptive ones; iii) the set of overlapping rules was replaced with a set of non-overlapping ones; and iv) the analysis of unexpressed premises was modified somewhat.

The basic attitude towards argumentation analysis, captured in the key terms externalization, functionalization, socialization and dialectification, remains unaltered in the version of pragma-dialectics suggested here, as do the reconstruction and analytical overview. Similarly the analysis of fallacies as breaches of a set of rules remains, although the rule set has been altered.

The kind of detailed study of interaction in naturally occurring activities that is used in chapters 4 and 5 is similar to the works of Huisman, Jacobs & Jackson, and others who have employed Conversation Analysis to study group decision-making and argumentation respectively (see sections 2.4.1 and 2.5.5). However, as shown in chapters 4 and 5, a detailed study of conversation need not assume the theoretical framework or methods of CA. The theoretical basis for the analyses made here has been Allwood's view of communication as action and cooperation (see section 2.4.2); the methods used can be classified mostly as 'general linguistic methods'. These methods and Allwood's theory may seem to be a major change compared to previous work in group decision-making (as well as CA theory and method), but although their roots are quite different, Giddens' Structuration Theory (ST) is roughly compatible with Allwood's view, in that it views language and communication as a part of human social interaction. Note that although there are considerable differences, the development oriented

branch of group decision-making research (see section 2.3.3) is akin to the work done here. Differences between the methods lie in the fact that this work studies groups on a more detailed level than ST, and in that there is no attempt here to describe the surrounding social structures to the extent that ST does.

Since the present work finds itself in the cross roads of several scientific disciplines – a linguistic study of phenomena that traditionally belong to social-psychology, communication research and argumentation analysis – considerable care was taken to specify the object of study. The concept determination in chapter 3 is an effort to make an empirically grounded description of what a group decision is, conceptually speaking. The risk of disregarding some important aspect of the concept of decision was minimized by investigating how the central words are used, and by systematically going through different aspects of concepts. The analysis concluded in a (somewhat stipulative) definition of decision in general and group decision in particular. This definition was used as a basis for selecting the empirical material used in the more direct studies of the language of group decision-making in chapters 5 and 6.

Communicative acts is one subject that has been prominent in the research done by social psychologists and communication scholars as well as the pragma-dialecticians (although they have not been called communicative acts); considerable space has been used in this dissertation to show how this is dealt with by linguists. The way communicative acts are handled by social psychologists and communication scholars strikes a linguist as naïve, while the way they are handled by the pragma-dialecticians comes across as outdated and inefficient. In chapters 4 and 5 communicative acts were identified that are related to the goals of arguing and group decision-making respectively. These taxonomies make it possible to analyze and increase the understanding of arguing and group decision-making in general.

It should be noted that the communicative acts presented in this dissertation are not really intended to replace the communicative acts of Interaction Process Analysis, and are only meant to replace the ones used in pragma-dialectics to an extent. Rather, they are meant to show that the set of communicative acts used in the analysis of spoken interaction must depend on the activity type of the interaction and the purpose of the analysis since the range of possible human actions are more or less infinite. Both the IPA coding scheme and Searle's speech act taxonomy are attempts to create general sets of communicative acts that may be used for all kinds of interactions. Unfortunately, this only hides the underlying purpose of the analysis. In the case of IPA, the underlying purpose seems to be to study social-emotional tension in small groups, while the purpose in the case of Searle's speech acts is more difficult to capture (though the relation to truth seems to play an important role). For people interested in studying social-emotional tension in small groups, the IPA coding scheme may be a good choice; in the same way, Searle's taxonomy may be useful for some other analytical pur-

pose. However, trying to use one single taxonomy for all kinds of interactions is hardly likely to produce interesting results.

Chapters 5 and 6 were general investigations of the language in group decision-making activities, using corpus linguistic methods. Chapter 5 described a qualitative, detailed study of interaction in several types of group decision-making activities, and the analysis was based largely on communicative acts. It was similar in character to Huisman's study of decision-making in meetings (see section 5.7); in fact, both studies came up with the result that different groups employ different patterns for making decisions. There were also differences between the two studies, concerning the analysis of the decision-making episodes as well as in the material. Huisman used recordings of meetings in three Dutch organizations, and did not try to capture decision-making in informal groups. Further, she reaches the conclusion that group decisions are episodes where participants recursively formulate states-of-affairs and assess these, which is somewhat different from the basic view of group decisions presented in this dissertation. Here, group decisions are oriented around the communicative acts proposing and accepting.

Chapter 6 investigated the same recordings that were studied in chapter 5, but originated from a quantitative study of word frequencies, comparing group decision-making with two other activity types. To the best of my knowledge, nothing similar has been done before in group decision-making research. There are considerable methodological limitations concerning word frequency studies of this kind, but quantitative, empirical results also bring a kind of stable basis to the analysis, which is a great advantage. In combination with qualitative studies such as the one in chapter 5, word frequency studies can make considerable contributions to the understanding of verbal interaction.

As mentioned at the start of this section, the purpose of this chapter is to bring together the previous chapters of the dissertation, and to discuss and draw conclusions from the work as a whole. I shall also discuss what could have been done instead, and what kinds of studies can be made in the future as follow-ups to this one.

## 7.2 Results

In this section, the most important general findings from the previous chapters will be presented. These are not presented in order of importance.

### 7.2.1 The scope of this study

The group decision-making (GDM) corpus used in this study primarily contains recordings of meetings of different kinds (project groups, committees, etc.), and only a few casual conversations (e.g. three friends planning a vacation together). Further, most of the speakers are male, and although precise information about their age is unavailable, the impression is that few of them are below 30 or above 65 years old. All participants speak Swedish, and there is no indication that any

of them have a foreign background. Most of the recordings are made in and around the Gothenburg area between 1989 and 2004.

The size of corpus is considerable when compared to many other corpora used in research (see for example (Huisman 2000:32 ff.)), but when considering how many different types of decision-making groups there are in the world, it is tiny. In addition, even if one only considers groups that fit the description above, the corpus cannot be said to be representative enough to make any strong claims about this subset of decision-making groups. However, what can be said about decision-making groups based on this study is that what occurs in the recordings used here also occurs in decision-making groups (of course). We know then with certainty for example that there is variation in the decision patterns of decision-making groups in general. When it comes to the distribution of certain phenomena in decision-making, generalizations have to be made with greater caution. For example, the formal bias that was displayed in these recordings seems likely to exist in most decision-making groups that fit the description at the start of this section, and the orientation around proposing-accepting is probably valid for all group decision-making, at least in western culture. However, these two last generalizations are based on general intuition for Swedish and Western culture, so more definite claims will have to wait until comparable studies have been made for other cultures and groups.

### 7.2.2 What is group decision-making?

A number of findings from the previous chapters relate to the nature of group decision-making, and how we shall conceive of it. The most important of those findings are presented and discussed in this section.

#### **Group decision-making is about obligations for future action**

Chapter 3 contained an empirically based investigation and determination of the concept of decision; in addition, it set out definitions of decision in general and group decision in particular:

A decision is an event where a set of agents A chooses one out of at least two alternative future actions, and either performs that action, or forms an intention to make that action happen. If a decision is made public (becomes known to others), an obligation to follow the decision arises for a set of agents B.

Group decisions are decisions where the set of choosing agents (A) contains more than one member. Often, the obligation primarily holds between these members. Such self-imposed obligations are usually called commitments, and group decision-making is then often about setting up commitments. It is hard to say anything about the proportions between decisions with different configurations of members in A and B, but it is reasonable to believe that the increased popularity of democracy in Sweden (and as far as I know this is a

general trend in the Western society) has increased the proportion of decisions where A and B are the same and contain more than one member. Put simply, the people affected by the decision should also participate in the decision. The Patent Office recording discussed on page 190 ff. is interesting in this aspect. It is an old recording (late 1960's), and follows a rather different pattern than the other recordings studied here. There is no proper background information about the recording, but it is at least similar to situations where a manager listens to advisors, and then makes an individual decision on the issue. It is possible that such situations were more common in the past (say, 50 years ago), and that the high frequency of "commitment oriented" decisions is a recent development. To answer this question properly empirical material rather different from that which I have at hand would be necessary; certainly, it would be interesting to compare the two.

### **Group decision-making is a sub activity**

Both the qualitative study in chapter 5 and the word frequency study in chapter 6 point out that group decision-making is not so much a social activity as a sub activity. Group decision-making can occur in many different types of social activities, and the conventions involved in decision-making are likely to vary with the activity type. The present study does not reveal precisely how social activity affects the decision-making of groups, but only that decision-making patterns vary with the studied groups. Another kind of material is necessary to find patterns connected with specific activity types (cf. *Causes for decision patterns*, p. 301 ff.).

If group decision-making is different in different social activities, one may ask whether it is reasonable to make studies of group decision-making in general, as opposed to focusing on group decision-making in specific activity types. What is group decision-making like in family meal-time conversations? In company board meetings? Non-profit associations? Project meetings in manufacturing industry? With such a "particularist" approach to group decision-making, the description of properties of group decision-making in general will have to wait until group decision-making in different activity types can be compared.

A more cautious conclusion is to say that great care has to be taken when transferring results from group decision-making in one activity type to group decision-making in another activity type. A proper understanding of the activity types is necessary, in addition to an understanding of the relevant aspects of group decision-making. Moreover, the validity of the result transfer has to be shown.

### **Arguing is a part of group decision-making**

Already in chapter 2, arguing was presented as a part of group decision-making; chapter 4 was devoted entirely to arguing. Thus, it is not very surprising that the result of the studies made here show that arguing is common in group decision-

making. Traces of arguing are visible in the word frequency data (chapter 6), and closer scrutiny of group decision-making recordings in chapter 5 also revealed that arguing was common in these recordings. However, when argumentation has been studied elsewhere, it has often been studied in isolation, even though it is clear that – at least for argumentation occurring in group decision-making – arguing always has a higher purpose (for example to make a decision). People do not argue for the sake of arguing (usually), but to achieve something else. In some cases there may be exactly two well-defined, well-known, mutually exclusive alternatives that participants must choose between, and participants have clear and explicit opinions on which of the alternatives should be chosen from the start. In such cases, the arguing that occurs is likely to be clearly for or against these alternatives, and hopefully the party who has the best arguments wins. However, there are also many cases, perhaps most, where the problem area is less well-defined. The participants are then likely to try to find a solution to the problem, but not necessarily by arguing each other into accepting their own opinion. Considerable time and effort may be spent on finding acceptable compromises, finding ways of rejecting proposals without offending anyone, discussing and trying to understand the possibilities and limitations for the issue at hand, etc. Arguing for and against proposals, negotiating between conflicting interests, and investigating current, future and past situations may become intermingled and mutually dependent in intricate ways. Analysis of the argumentation by itself is bound to have considerable gaps.

Another consequence of the fact that arguing is a means to an end is that it is part of a more general social context, where the quality of an argument contains other aspects than logical validity. The participants in the Esperanto Foundation recording described in chapter 5 (see p. 184 ff.) are very cautious about committing themselves to a certain position on an issue before they are sure that this position is not in conflict with other participants' opinions. "Good arguing" for them seems to include avoiding conflicts and generally retaining a nice atmosphere in the group. Similar considerations can be found in other recordings. This connects directly to Bales' two main parameters in his model of small groups – the tension between social-emotional aspects and task-oriented aspects (see p. 12) – although I have found no research that show in detail how (task-oriented) argumentation interacts with social-emotional aspects.

Further, argument strength is related to this issue. Two arguments may be logically valid and still work in opposite directions concerning a certain claim. Then how are we to know which argument is more important? Pragma-dialectics does not provide any model for handling this, and I have not proposed any such model either. It is possible, however, that in actual arguing people combine the logical "weight" of an argument with other aspects of it, in order to avoid social-emotional tension.

### 7.2.3 What is communication in group decision-making like?

I shall now turn to the communication found in group decision-making, which is indeed the focus of this dissertation, and present the most important results from this area.

#### **Group decision-making is oriented toward proposing-accepting**

The interaction in group decision-making is oriented toward the communicative act of proposing, and its desired counterpart, accepting. Standard proposing can be characterized as follows:

- i) It presents or points out a future or on-going action A as a possibility.
- ii) The sender S wants A (not) to take place.
- iii) S wants the receiver(s) to consent to A (not) taking place.

The eliciting function in III is what connects proposing to accepting, and although there may be many communicative acts produced before an accepting occurs, and although accepting may indeed never come, it is still sought by the proposer, and a proposing is always an attempt to elicit accepting.

An important, quite common variation of proposing is called *non-stanced proposing* here, and it differs from standard (stanced) proposings in that the sender does not reveal whether or not he wants the action to take place. This also has consequences for the eliciting part, which is changed from seeking acceptance to seeking evaluation:

- i) It presents or points out a future or on-going action A as a possibility.
- ii) The sender S does not reveal if he wants A to take place.
- iii) S wants the receiver(s) to evaluate A.

Other communicative acts in group decision-making (rejecting, arguing, eliciting information, etc.) are somehow dependent on the pair proposing-accepting – arguments are for or against proposals, giving and requesting information has the purpose of enabling proposings or acceptings, etc.

Accepting can be, and is often, done implicitly, but the accept still has to be communicated in some way. A group decision can only be made if a proposal is put forward (non-stanced or stanced) and an accept is given (explicitly or implicitly).

#### **Different groups, different standards**

The study of interaction in group decision-making in chapter 5 showed clearly that different groups develop different standards for how decisions are made and what counts as a decision. These standards differ concerning who makes the proposals, whose accept is necessary, how proposals are made, how turn-taking is managed, whether and how decisions are delimited, and so on. This result is



supported by Huisman's study (Huisman 2000), and by the studies of phase models done by social-psychologists (see p. 8-9, 12).

This has consequences for how group decision-making can be studied – ad hoc groups that are put together for the sake of a group decision-making study will not necessarily say much about how real-world groups make decisions. This constitutes support for the naturalistic paradigm (p. 22 ff.), but also raises questions about how generalizations concerning group decision-making can be made. My hope is that further research will reveal which parameters are important for these patterns (meeting frequency? social activity? leader strength? following an agenda? group size?), and different types of decision-making groups can then be constructed according to these parameters. This is discussed further below (p. 301 ff.).

### **Advanced language**

Group decision-making concerns future actions, and how these actions relate to the present situation. There is plenty of argumentation, and sometimes rather complex relations between abstract entities have to be explained and motivated. This means that the language used in group decision-making often is quite advanced. Utterances are typically long, which means that interaction is sparse, that is, a speaker communicates large pieces of information without synchronizing the communication with the receiver. Further, there are indications that the clause structure often is more complex during group decision-making than in other situations. Further, since group decision-making often is found in formal situations, the formal words, phrases and constructions used there can make the resulting language even more complex. One conclusion is that participants who are less skilled at using the language in question will be disadvantaged in group decision-making. Second language speakers, people with little training in talking and arguing about abstract matters and people who lack linguistic proficiency for other reasons will have difficulty participating fully in such discussions. If no compensatory measures are taken, a system that relies heavily on group decision-making will discriminate against these groups (which may or may not be desired).

### **Participants vary their position strength**

There is a certain tendency that once a person has actually expressed an opinion on an issue, it takes a lot to change that position. Bluntly yielding from a position to which a participant has committed himself seems to be harmful to a person's prestige or self-esteem. This could easily create deadlocks, in which conflicts cannot be resolved; some kind of strategy may be necessary to deal with this. *Voting* is one way to avoid deadlocks, (see p. 179), but the most common strategy for handling deadlocks seems to be to somehow vary the strength of stances taken in a discussion. Expressing stances more weakly or strongly provides a way of maneuvering the group towards consensus, and it gives participants a chance to probe the opinions of the others before making their own stance strong. Yield-

ing from a weakly expressed stance is less harmful to a person's prestige than yielding from a strongly expressed stance.

Participants use different techniques for signaling how strongly they commit themselves to the expressed position, such as phrasing proposings as questions rather than expressing them more directly. Compare the following two proposings:

- a) I think it would be a good idea to buy a new photo copier.
- b) Wouldn't it be a good idea to buy a new photo copier?

Both a) and b) express the same proposal, but the commitment by the speaker to the proposal is weaker in b).

Further, participants can use hedge phrases and words to diminish their commitment to what they have just said, sometimes stating explicitly that they are prepared to change their opinion. On the other end of the scale, participants can signal that their commitment to a position is strong, for example by repeating it, but also by stating explicitly that they are not prepared to change their mind.

The question of stance strength is obviously related to task-oriented vs. social-emotional acts, which Bales and his followers have been so preoccupied with (see p. 10 ff.). Because of the connection between loss of prestige and yielding from a stance, each matter to be decided is potentially harmful to the social-emotional atmosphere. Making a proper investigation of how social-emotional tension is managed in decision groups would require quite another type of empirical material than what is at hand here, but certain observations can be made from the material that is available. The first is that humor seems to be a common way of releasing tension that has been created in a discussion (or preventing it from being created). The second is that simply leaving the matter aside and doing something else for a while also seems to release tension. Tabling an issue is a formal method that can be used for this purpose, but informal groups use this principle as well.

Considering the way participants vary their stance strength, and the different strategies used to maneuver the group towards consensus, it becomes clear that social-emotional acts and task-oriented acts cannot really be separated, as suggested by the IPA scheme (see p. 11). Moving towards consensus is necessary for completing the task (making a decision), but affects the social-emotional atmosphere as well.

### **Consensus is preferred**

There seems to be a general preference for consensus in group decisions; a desire for all participants to agree on the solution, without the need for voting or making orders. This is perhaps most obvious in the Budget Negotiation recording (see p. 179 ff.), where the managers obviously have decided beforehand what the outcome of the discussion should be, but they still allow the project leader to argue his case, and they put forward arguments for their view too. They could

have simply told the project leader that the budget was too expensive, but they prefer to make it into something that at least looks like consensus. Further, all but one of the recordings that were investigated, voting is never used. The groups keep talking until everybody agrees, not only until there is a majority for one proposal. The exception to this is the very formal and political meeting with the City District Committee, where the ruling block shows little interest in getting support from the opposition, rather, it pushes its proposals through by voting.

This preference for consensus may be particularly strong in Swedish culture, which often is characterized as consensus-oriented, collectivist, conformist, etc; but there may also be a more universal tendency for consensus. In a group of motivated, rational agents who take each other into ethical and cognitive consideration (see section 2.4.2), alternatives that everybody supports are naturally preferred. First, because it is unethical to make somebody unhappy unless it is necessary, and second, because such behavior is irrational in the long run, since dissatisfied people do not tend to participate in the decided action or its consequences with much enthusiasm.

### **Formal bias**

The corpus used for the empirical basis of chapters 5 and 6 contains a large proportion of comparably formal meetings, which is by no means guaranteed to be a reflection of the proportions of formal meetings in group decision-making in general. However, the formal procedures (agenda, chairperson, gaveling, etc.) seem to be wide spread, and there seems to be a certain tendency for groups to “fall back” on formal concepts and procedures when discussions become difficult, at least when the groups are fairly large. One example of this is the Strategy meeting discussed on p. 196 ff. The meeting is informal – there is no agenda, proper chairperson, gavel, or structured turn-taking – yet the participants sometimes use words and behavior from formal discussions.

The reason for this bias is probably a combination of the existence of formal, general procedures and the absence of informal, general procedures. Different groups develop their own patterns for how to make decisions; general, informal procedures for group decisions do not arise easily (or so it seems). At the same time, formal procedures (and words and phrases associated with these) are widely known. It is easy for participants to adopt procedures from formal decision-making in informal situations since there are no competing procedures that fit the level of formality better.

It is unclear what consequences this bias for formality has. One possible negative consequence is that it causes groups to use formal procedures where it is not necessary, and serves to make the decision-making more cumbersome. This is pure speculation, however.

#### 7.2.4 What is current research on group decision-making like?

This dissertation not only contains new studies, but also a survey of the existing research on group decision-making. The survey revealed that this research is divided into several academic disciplines, which have little contact with each other. Social psychology and communication research do have some connections to each other, but argumentation analysis is relatively isolated (although attempts have been made to bring these fields together).

The research is also largely normative in the sense that the basic goal of the research is to find out how to make good decisions, or how to avoid making bad ones. This applies to social psychology and communication research, as well as to argumentation analysis. This is not strange, since normative conclusions are often desirable and are an important motive for doing research. But, understanding how group decision-making actually works has value in itself, and is a necessary basis for drawing proper normative conclusions. Simply describing the mechanisms that control group interaction in general and group decision-making in particular, without dismissing some phenomena as bad or irrational is therefore an important over-all objective for this scientific field.

Since naturalistic data usually is so complex that they necessitate descriptive studies, the naturalistic paradigm that has become popular during the last decade or so will probably lead to a more descriptive attitude in group decision-making research. Experimental methods are good, since they allow researchers to control important parameters, but like other methods, these have limitations. In this case, the primary limitations concern validity – What have ad hoc groups performing invented tasks got in common with bona fide groups performing real world tasks?

Researchers from linguistics doing research on spoken interaction have been aware for many years of the limitations of experimental methods when studying natural, human interaction. Methods have been developed for dealing with these problems, and it is my belief that those researchers studying group decision-making (and of interaction in small groups in general) could benefit greatly from bringing linguistic methods and theories into their respective fields.

Another characteristic of current research on group decision-making is that it seems to be dominated by US American researchers and studies, which naturally results in US centricism. I do not claim to have investigated group decision-making research in all countries of the world, since I read only English and the main Scandinavian languages fluently. Theoretically, there could be considerable research going on in France, Italy and Japan without my knowing anything about it. However, the Anglophonic literature I have found on group decision-making refers very rarely to any research outside the USA (the exception being psychosocial research on small groups, in which a number of German researchers are active), and so it is more likely that the US American researchers are simply quite alone in this field.

### 7.3 Practical consequences (normative conclusions)

Although this dissertation is oriented towards describing the language of group decision-making, it is generally desirable that such a description be suitable to put to practical use. One way of doing this is to draw normative conclusions from the results, which is what I shall do in this section.

#### **Efficient arguing**

Traditional research on arguing has focused on the epistemological soundness of argumentation, and has been construed as a kind of competition where one side wins and the other side loses. However, when arguing occurs as a part of decision-making in groups that try to solve problems, it is often reasonable to assume that the participants share the same goal, and that they conceive of each other as co-players rather than as opponents. Arguing that is oriented towards confrontation may lead to social-emotional tension, a breakdown of cooperation and ultimately create a dysfunctional group (see also Bales' concept of social-emotional demands vs. task demands, p. 10). Good arguing will include not only epistemologically sound argumentation, but also procedures for putting forward arguments in a manner that does not threaten anybody's prestige, but rather promotes solution-oriented discussions.

Researchers working on computer support for group decision-making (GDSS, Group Decision Support Systems) have addressed these issues to some extent. One common feature of these systems is the ability to input proposals and votes anonymously (Olson and Courtney Jr 1998:49 ff). This has been shown to increase idea generation (Connolly et al. 1990).

Another interesting phenomenon is the Japanese method for making group decisions, usually referred to as *nemawashi* (Watabe et al. 1992). This method is used in many Japanese organizations, and it has five steps:

1. *Information collection (joho shyushyu)*, where a coordinator collects information and preferences from the relevant people.
2. *Data analysis and plan generation (ritsuan)*, where the coordinator analyzes the information he has gathered and creates a number of possible solutions.
3. *Plan selection (sentaku)*, where the coordinator chooses, possibly with the help of external experts, one of the created solutions as the proposal.
4. *Negotiation and persuasion (nemawashi)*, where the coordinator presents his proposal informally to the other participants, and negotiates with them. If the coordinator fails to reach consensus around the proposal, he creates a new proposal and tries again.
5. *Document circulation (ringi)*, where the coordinator sets up a formal document with all details of the proposal that received support during *sentaku*. This document is circulated among the participants, from low levels to top

levels. Each participant signs the document, indicating accept or reject. If the document does not receive enough accepts, the plan is abandoned.

With *nemawashi*, the risk of social tension due to opposing positions is minimized, since the participants in the negotiations do not even meet until consensus has been reached. There may be other problems with this method (it is slow, a skilled coordinator can gain a lot of power, all participants do not hear all arguments for and against, etc.), but it constitutes an interesting alternative regarding how social-emotional tension can be managed in arguing.

### **Documenting decisions**

Institutional decisions (and sometimes interpersonal ones) are usually documented somehow, typically in meeting minutes. This is done to provide answers to several questions – What was said last time? Who decided this, and when? Exactly what was decided? etc. For a person who has participated in a recent meeting, much of the background information for the decision may seem obvious; for that person, only a short note is necessary to explain the decision. However, for a person who reads the documentation afterwards, perhaps several months or years later, and who has not participated in the meeting, such a short description of a decision may be most unsatisfactory. In other words, it may be difficult to document a decision so well that the documentation serves all the different purposes that it is meant to serve. One strategy for this could be to set up a checklist for how decisions should be documented, and to base that checklist on the semantic roles identified in chapter 3. The following is sketch of such a check list:

- *Decider*  
Who made the decision (which members were present)?
- *Input*  
What material constituted the input for the decision? Which were the alternatives? This should include a description of the background for the decision.
- *Content*  
What was decided?
- *Motive*  
Why was the chosen alternative picked?
- *Circumstances*  
Which were the conditions at the time, and what was the situation like?  
Where and when was the decision made?
- *Implementation*  
How should the decision be implemented, and by whom?

- *Communication*  
How should the decision be communicated to affected parties, and by whom?

In many cases, some of these items will be trivial (e.g. implementation and communication), and some may be controversial (e.g. motive and input). Still, understanding of the decisions will most likely improve if these items are not left completely undocumented

If decisions are followed up, other semantic roles can be described as well:

- *Implementation*  
How was the decision implemented, and by whom?
- *Communication*  
How was the decision communicated, and by whom?
- *Consequences*  
Which were the consequences of the decision?
- *Attitudes*  
What did people think about the decision, and how were the expressions of attitude handled?
- *Change and cancellation*  
Was the decision changed or cancelled, and if so, how?

Naturally, not all difficulties connected to the documentation of decisions are handled with this kind of check list. For example, it will probably take some practice to find out what to write as input and content. However, it could be a simple start; for example used as guidelines for people unused to writing minutes.

### **As formal as necessary**

The degree of formality in the studied recordings varies a lot. Sometimes meetings seem to be too informal to be efficient (e.g. the Strategy meeting, p. 196 ff.), and sometimes the high level of formality seems to be more of a nuisance (perhaps the City District Committee, p. 193 ff.). Too much formality may cause decision-making to be cumbersome, difficult to understand and participate in. Too little formality may cause confusion about what has been decided, who has made the decisions, and who is responsible for implementing them.

Consequently, there is an ideal level of formality for group decision-making, and it is reasonable to believe that this ideal is different for different groups. A reasonable strategy for a group is then simply to pick such formal procedures as they find necessary for the group to function well. In a small group where people know each other fairly well and conflicts are rare, the main difficulty may be clarity of the decisions. In that case it could be sufficient to go through the decisions at the end of the meeting, making sure that there are no misunderstandings. In

another group there may be occasional power struggles between different fractions, in which case voting procedures may be crucial.

### **Recognition of differences in status**

The definition of decision-making used in this dissertation (see p. 105) can, if used without caution, lead to the idea that the two sets of agents (A, the ones who decide, and B, the ones who perform) always are well-defined and uncomplicated. This is not the case. It may be unclear who is responsible for implementing a decision, and there may be ambiguity about which people are really part of the deciding group. Further, membership in these sets is not always as simple as member or not member; the degree of membership may vary. In Bäckmåla Municipality Council (p. 186 ff.), for example, there are obvious differences in status between the members, and, clearly, it is more important that the high-status members agree about some issue than that the low-status members do. Similarly, it is likely that the responsibility for the decisions rests more heavily on the high-status members than on the low-status members. If the difference in status between members is considerable, and if the institutional structure does not reflect this in any way, then the result may be that the member or members who actually make the decisions do not have to take responsibility for bad consequences of those decisions. In the worst-case scenario, people can use such situations to hide from demands of sharing their power by disguising individual decisions as group decisions.

Accordingly, it is important that the institutional structure reflects the status structure of a group. For this reason, different mechanisms may be needed either to decrease the importance of status during group decision-making, or to assign institutional responsibility (and power) to the members who actually make the decisions. Examples of mechanisms that would fill the second purpose could be making a distinction between voting and non-voting members, or separating counseling groups (where a single person listens to what the group has to say, and then makes the decision on his own) from deciding groups (where each member is responsible for each decision). Examples of mechanisms for decreasing the importance of status could be use of anonymous voting for all decisions, or to make proposals anonymous when they are presented.

### **Increased awareness of decision patterns**

Since different groups develop different patterns for how decisions are made, it is difficult to give general advice for how groups can work better. However, in many groups, there is a clear, general goal, and members can be expected to be genuinely interested in making the group work as well as possible in relation to this goal. In such groups, the members can be expected to want to improve the behavior of the group; it is possible to give general advice for how this could be done. The members of a group are most likely not aware of the patterns that they have developed, and because of this, it may be difficult to reflect on and improve the way the group functions. One way of stimulating such awareness and



reflection could be to use video recordings in combination with self-confrontations; meetings are video recorded and then shown to the members, separately and/or in groups. The members can then discuss issues like ‘what counts as a decision?’, ‘who makes the proposals?’, ‘what are we spending time on?’, etc. Such discussions are likely to raise awareness of decision patterns, and to give opportunity for finding ways of improving group performance.

### **Decreasing language dependency**

Since the language in group decision-making is often difficult, it may be difficult to set up structures where people with different levels of linguistic skill have the same degree of influence. If such equal influence is desired, special methods may be necessary to decrease the dependency on advanced language in decision-making. One way of doing this could be to give all group members time to get acquainted with the issues that are to be dealt with, perhaps by sending out information in advance, or by informing attendees about an issue at one meeting and deciding about it at the next. Another thing that could facilitate participation is to make the alternatives and arguments for and against these clearer and easier to grasp by displaying them on white boards or overhead projectors, similar to storyboarding.

## **7.4 Further Research**

In the previous sections of this chapter I have hinted at what kind of further research could be done in connection to this dissertation. In this section I shall develop these hints, and introduce other possible areas for continued research.

### **Non-vocal communication in group decision-making**

The recordings used in this dissertation have either had no video support at all, or a somewhat distant, overview video image with comparably few detail images. This has made it impossible to study non-vocal communication in any systematic way. Nevertheless, it is reasonable to believe that non-vocal communication plays an important role in several of the phenomena that have been dealt with here, such as probing and hinting (p. 206 ff.), interpretation of silence (p. 204 ff.) and status (p. 210).

A study of how gestures and body communication are used in group decision-making would require several cameras for each recording in order to capture all participants. Considerable resources would be necessary for the recording as well as for transcription and analysis, but it would also be an exciting contribution to the field.

### **Cultural variation**

As mentioned above, the scope of this study is limited to Swedish culture. An obvious continuation of this study would be to compare this material with recordings from other cultures. Theoretically, all the results from this study could

be particular for Swedish culture, although some are more likely to be so than others. Is the endeavor toward consensus (p. 209, 290-1) particular for Swedish culture or is it universal? What about avoidance of giving orders to subordinates (p. 210 ff.)?

A study that compared group decision-making in different cultures would require recordings from different cultures, and the activity type in all these recordings would have to be approximately the same. Further, the analysis of the recordings would also require a working knowledge of the languages and cultures in question. These requirements would most likely turn into a need to make the research project a joint project with researchers from all (both) the investigated cultures.

### **Gender variation**

Many people that I have come in contact with during my work with this dissertation have asked if I see any gender differences. However, the empirical material I have does not allow any generalizations in this regard, since the group decision-making corpus is too small, too varied in activity type, and not varied enough as regards participant gender configuration. However, a corpus systematically collected with the aim of studying gender differences in group decision-making is far from impossible, and a possible future research project.

### **Quantitative studies on communicative acts**

Communicative acts have been paid considerable attention in this dissertation. In previous research on group decision-making, quantitative studies on communicative acts have been frequent (see p. 18, 21). For quantitative studies, these would have to be developed further so they allow reliable coding in order to be useful for studying the types of communicative acts that have been developed here (see section 4.3.6 and 5.3). This development would include precise operationalization of the acts, and schemes would probably need to be set up for what kind of training the coders would need, as well as for testing inter-coder reliability.

### **Formal procedures**

In general, formal procedures have been left out of this dissertation, but it is clear that, in many groups, formal procedures play an important role. However, exactly which formal procedures are used and how these are applied varies a lot. In a US American context, *Robert's Rules of Order* is a well-known set of formal procedures, but a glance at <http://www.rulesonline.com> [2006-05-18], for example, reveals that this collection is far too large and complex for most groups. In Sweden, there is no corresponding well-known and widely spread set of formal procedures, but different organizations have their own sets (although there is usually a common core of roughly the same procedures). In some feminist and non-violence groups, alternative procedures have been developed in order to

overcome some perceived weaknesses in the traditional formal meetings (Herngren 1999:182 ff).

Collecting and comparing formal procedures from different cultures and organizations could be a first step in understanding more about them. In a second step, formal meetings could be studied to find out how formal procedures are used. Some research questions could be:

- Which formal procedures do people actually use?
- Why do groups use a particular set of formal procedures?
- How well does a particular formal procedure satisfy the purpose for which it was chosen?
- Assuming that there are different sets of formal procedures that are suitable for different kinds of groups, which are these sets of procedures and groups?

### **Strength of arguments**

The importance of argument weight has been mentioned above (p. 151, 287). A natural, interesting continuation of the argument study in chapter 4 would be finding ways to analyze the relative importance of arguments. The theoretical field often referred to as ‘judgment and decision-making’, deals with studying methods and theories for selecting among several competing alternatives. These theories are an interesting starting point for an examination of argument weight; see for example (Gigerenzer 2004) and several other articles in the same volume. This field is primarily interested in mathematical models for selecting the best alternative among a number of options; the values, injuries and probabilities of these options must be quantified. However, the precise location of the difficulty is in quantifying the values, injuries or probabilities of the alternatives, which makes mathematical models like these useless even though the questions are important and interesting. Thus, there is a need to find out how rating and comparison are actually done by people in natural group decision situations. In addition, methods need to be developed that help people rate and compare conflicting arguments in a rational way. An outline of one possible such method is presented below. Note, this is not a serious attempt setting up such a method, merely a rough example of how an analysis of argument weight might be done:

- Categorize arguments according to the feature they attack/support (aesthetics, functionality or ethics).
- Relate the arguments to the overall purpose of the action. For example, aesthetic arguments may be more important when the decision concerns which evening gown to buy, than when deciding the kind of foundation for building a house.
- Categorize arguments according to their degree of impact. For example, a couple is discussing which TV to buy, and one kind of TV has the disad-

vantage of being very heavy. Now, if the couple does not intend to move the TV around, this argument does not have a very high impact, since it will only be a problem on the few occasions they have to move the TV. If, on the other hand, the couple intends to move the TV between the living room, the kitchen and the bedroom quite often, the weight of the TV will have a great impact.

- Categorize arguments according to the probability that each argument will apply. In the TV example above, the probability that the argument about the TV weight will apply is 100%, since the weight of the TV is known before hand. In comparison, another argument against the TV may be that it may break down, but the probability for this is, say 10%. Thus, “break down” is less likely to apply than “weight”.
- The combination of impact and probability (often called *risk*), will say something about the weight of the argument. The higher the degree of impact, and the higher the probability of the argument, the higher the weight of the argument is.

### **Better analysis of arguing**

The model for analyzing arguing presented in chapter 4 is, in my opinion, a good start, but more work needs to be done to make it really useful. The way I see it, argumentation analysis can be done for two main reasons – either to find out how people ought to reason (or ought to have reasoned) about some question, and which decision is the right one; or to find out how people have reasoned (do reason) about some question, and how they reached (reach) a decision. Neither of these two objectives is satisfied in the presented model, so the model should be extended.

The first deficiency in the model is that the analytical overview lacks some perspicuity: it presents many arguments, but fails to point out which ones are important. This is related to the issue of argument weight discussed above; both in the normative case (some arguments could be discarded as less relevant or bad) and in the descriptive case (some arguments are given little weight by the participants).

A second problem with the analytical overview is that the temporal (sequential) ordering of arguments is lost in the analytical overview; this order may be important for understanding what it is that makes people choose one option or another.

The third thing that would improve the argumentation model here is something that takes argumentation analysis closer to decision theory. When finding out how people ought to reason about something, analyses should not only be concerned with which of the present arguments are good and bad, but also with which other arguments *should* have been given. A good model for argumentation

should include methods for comparing two alternatives and generating arguments for why one is better than the other one.

### **Causes for decision patterns**

As mentioned above, different groups develop different patterns for how to make decisions. A natural attendant question, then, is what it is that causes these patterns? Some examples of factors that may influence the development of group-specific patterns are listed here:

- *Leadership*  
Are there certain patterns that develop in connection with a strong/dominant leader, and other patterns that develop in connection with a weak/unobtrusive leader? Leadership research has received attention from social-psychologists (see p. 7); interactional patterns associated with leadership could be investigated in the light of this research.
- *Formality*  
Which patterns are consequences of formality? Of course, there are patterns that are formal per se, but there may also be other patterns that arise as a consequence of formality.
- *Implementer*  
Are there different patterns for decision episodes when people propose that somebody else should do something, compared to episodes when people propose that they should be allowed to do something themselves?
- *Fear of conflicts*  
How do groups with participants who are afraid of conflicts compare with groups with participants who enjoy arguing?

If the underlying causes of decision patterns can be discovered, then these patterns can be used to “diagnose” decision-making groups. Let’s say a group displays a certain pattern P, and that it can be shown that P usually is a consequence of fear of criticism. Then, even if the participants are reluctant to admit that they are afraid of criticism, or simply fail to see that they are, actions can be taken to try to reduce fear of criticism and possibly improve group performance.

### **Ordering vs. volunteering**

As discussed on p. 210 ff., the managers in the recordings studied were reluctant to order the employees to do things, but preferred that employees took on tasks voluntarily (although the managers could exert strong pressure on the employees, reducing the amount of voluntariness). The precise reasons for this still need to be investigated, as well as the consequences of this behavior. Why is it done? Is it good or bad? Is there a need to make the motivation for the chosen management style explicit?

This issue is also likely to be culturally dependent; comparisons between cultures as regards ordering vs. volunteering would also be interesting. If it turned out

that some cultures are more oriented toward ordering while some are more oriented toward volunteering, then it would also be interesting to investigate what happens in decision groups that include people from both ordering-oriented cultures and from volunteering-oriented cultures.

### Undecided action

After I spent some time investigating group decision-making, I started suspecting that the basic research question ‘how do groups make decisions?’ was badly phrased. Decisions are only interesting as methods for selecting actions, and there may be other ways to make these selections. People can perform tasks in a coordinated fashion without any decision having been made about it. Such coordination is perhaps more interesting than when decisions are made and groups act according to these. So, the more interesting question is perhaps, ‘what makes groups act as they do?’ There are great methodological difficulties concerning how this should be studied, but it is possible. A start could be to outline some possible mechanisms for “undecided action”:

- It is well-known that decision-making bodies can be manipulated in different ways, such as controlling which topics are decided on, when decisions are made, which alternatives are presented, etc.. Even if there were no person manipulating a group, there are obviously many situations that *could* have been decided on, but were not. What or who controls which issues are put before a deciding body? What or who controls how issues are presented, and when?
- In some situations an organization has not made any decision on a particular issue, and a person acting on behalf of the organization has to choose an action in the issue. Let’s say a company has invited a customer from over-seas, and when the customer arrives, the receiving secretary discovers that no hotel has been reserved, although it is clearly needed. There are many hotels to choose from, with varying standards and prices. There is also the option to ignore the problem and let the customer deal with it himself. Whatever the secretary chooses to do, some kind of action will be performed by the company (where ignoring the problem is counted as an action). However, it will be “undecided” in the sense that it has not been decided on by the relevant people in the organization (assuming that the secretary is not the one who decides such things normally). One possible basis for how the secretary acts is an estimation of what decision *would* have been made, which means that he will try to figure out what some important people would prefer, and then act according to that guess. The question is then what or who creates expectations on what decisions will, or would be, made?
- Habits and traditions are of course important factors for the behavior of any human agent, individual or group. Some of these habits and traditions may be quite exposed and conscious, making them similar to decisions.

Other habits may be more difficult to notice, and when asked about them, people may not acknowledge that they exist at all. Following habits and traditions is a common, generally accepted reason for action, which means that in many organizations it is safe to “do as we usually do” in situations where there are no clear instructions on what to do (cf. item ii). However, in order to use that strategy it is necessary to categorize the current situation according to previous types of situations, and sometimes to generalize previous situations in order to form categories. This is not a completely objective process. What aspects of a situation do people consider when comparing it to other situations in order to find out if it is of the same type? How many instances of a perceived situation type are necessary to be able to claim that it is the “usual” way to act?

- In formal settings, like the one in the City District Committee (p. 193 ff.), the institutional decisions made may be seen very much as being a formality, while the “real” decisions are made elsewhere. In the particular case of City District Committees these “real” decisions are probably made in party meetings that precede the committee meeting, and are thus quite well-defined. However, in other situations there may be a general opinion that an agreement has already been made (among the important people), and that the institutional decision is a formality. What creates such an opinion? What makes people expect that a certain decision will be made? An interesting example of this occurred in a choir I had personal experience with. The choir had been rehearsing on Sunday evenings, but a survey made one December revealed that many people wanted to move the rehearsals to Mondays, which would include changing the location for rehearsals. It turned out that there were about as many Sunday supporters as Monday supporters. The chairperson of the choir then proposed that the choir should move the rehearsals to the new location starting in January, and then make a decision about rehearsal day in September. Further, people were instructed to keep Mondays free from other activities the following autumn. The argument given for this proposal was that a change of rehearsal day should be *possible* also in practice in September, if the choir should decide to change day. This proposal was accepted by the choir (during a somewhat chaotic meeting). For other reasons, the entire change of location and day was cancelled, but had it not been, it is likely that so many steps had been taken towards changing the rehearsal day by September that most people would have expected the change of day to be decided. The choir would have started to act as if a change of rehearsal day had been decided, which could have created the conception that a decision about change of day had already been made, and the institutional decision could then have been perceived as a formality.

## 7.5 Final words

In this dissertation I hope to have shown how linguistic methods can be used to study group decision-making. Recording bona fide groups and studying the recordings carefully is a powerful method. If large collections of such recordings could be created, I believe that the understanding of group decision-making could be increased greatly.



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## Appendix 1 – Brief guide to the Göteborg Transcription Standard (GTS)

### Introduction

GTS, formerly known as MSO, consists of two parts: one language independent part (GTS-G) and one language specific part, which in this work has been Modified Standard Orthography version 6 (MSO6). GTS is described in detail in (Nivre et al. 2004) and MSO6 in (Nivre 1999), and only a brief introduction is given here, in order to make the excerpts used in this dissertation legible. In this guide GTS and MSO6 have not been separated, but are explained as one.

### Utterances and comments

Utterance lines start with \$ and a speaker initial, followed by a colon. An utterance continues until the speaker does not speak and another participant speaks, that is, long silences or topic changes do not interrupt an utterance.

Comment lines start with @, and (almost) always applies to the preceding utterance.

Example:

\$A: you do not know her < do you >  
@ < gesture: turning towards B >

As shown in the example, angle brackets < > surround the comment, both the comment line and the relevant part of the utterance.

If necessary, comments are numbered:

\$A: well <1 | >1 you do not know her <2 do you >2  
@ <1 cough >1  
@ <2 gesture: turning towards B >2

### Spelling

The basic idea of how to spell words in GTS is to use standard orthography when there is no variation in the pronunciation of the word, and to adjust the spelling no more than necessary when variation in pronunciation is to be described. For example, the name of Sweden is spelled *Sverige* in written language, but pronounced [sverje], and there is no common variation of that pronunciation. In GTS this is thus written *Sverige*. In contrast, the first person pronoun *jag* ('I') is often pronounced [ja:], but sometimes also [ja:g]. In GTS proper this word is written *jag* when pronounced [ja:g] and *ja{g}* when pronounced [ja:]. In this dissertation, however, the curly brackets and what is inside them have been removed, rendering what is known as IDT (non-disambiguated spoken language), i.e. the word is written 'as pronounced': *ja*. Here are some examples:

Pronunciation	Transcription	Standard orthography	English translation
[de]	de	det	it, that
[ha]	ha	har	has, have
[natvi:s]	natvis	naturligtvis	of course
[e:]	e	är	am, is, are
[væ̀rklɪɛn]	verklɪɛn	verkligen	really
[nɔ:t]	nåt	något	something

Some exceptions to this principle have been allowed in order to improve readability: if leaving out 'optional' letters is likely to cause considerable confusion for the reader, the spelling has been modified to more accurately describe pronunciation. E.g. when *lastbil* ('lorry') is pronounced without the t – [las:bi:l] – it is written *lassbil* rather than *lasbil*.

### Overlaps

When two or more participants speak at the same time, it is called an overlap. Hard brackets [ ] are used to indicate overlapped speech, and numbers indicate which parts overlap:

\$A: hi Bert [1 good to see ]1 you sit down sit down this is Cindy [2 you have not ]2 met have you

\$B: [1 hi Albert ]1

\$B: [2 how do you do ]2

\$C: [2 hieraya ]2

Here A starts speaking, and when he says 'good to see', B simultaneously says 'hi Albert'. A then continues to speak, and when he says 'you have not', B and C simultaneously say 'how do you do' and 'hierya', respectively.

### Special characters in the utterance line

#### CAPITALS

In GTS proper, capital letters are used only for contrastive stress. In this dissertation, however, it is also used to for the first letter of names, as in standard orthography, and in the first person singular pronoun I.

#### Example

\$A: I am on TUESDAYS yes but not on FRIDAYS / John is captain on  
fridays

+

Words interrupted by the speaker are marked with plus +.

Example:

\$A: sit down sit down this is Cel+ Cecilia

:

When sounds are lengthened by the speaker, the colon : is used.

Example:

\$A: sit down this is Cecilia: Johnson

/

Short pause is marked with a single slash /, intermediate pause is marked by double slash //, and long pause is marked with tripple slash ///.

Example:

\$A: sit down / this is // Cecilia

|

Silences that are not pauses are marked with a vertical bar |. The length of the silence may be indicated, typically in seconds.

Example:

\$A: well lets see what we can do < |37 >  
@ < event: A reads the paper >

()

Round brackets indicate that the transcriber is uncertain of what is said.

Example

\$A: please come in < | > (have a seat please)  
@ < event: A looks down in his papers, B enters the room, then A looks up and sees B standing >

(…)

Ellipsis in round brackets indicates that the transcriber has not been able to make out what is said.

Example:

\$A: please come in < | > (...)  
@ < event: A looks down in his papers, B enters the room, then A looks up and sees B standing >

—

Dashes are used when standard orthography so requires, for example in double names (e.g. Sten-Åke), and for enclitics like -n ('him, it') and -na ('her'):

\$A: ja tycker du ska ge -na en blomma

\$A: *I think you should give her a flower*

### Common, non-obvious comments

#### *Ingressive*

When a participant breathes in and speaks at the same time, this is commented as ingressive. This is also used for the bilabial, rounded ingressive, associated with Northern Swedish dialects, and with no letters to indicate pronunciation.

Example:

\$A: you going to Lundström tomorrow

\$B: < >

@ < ingressive >

#### *Letters and abbreviations*

When abbreviations that should be pronounced letter by letter are mentioned, this must be commented

Example:

\$A: what do you think the < un > are going to do about it

@ < abbreviation >

When speakers mention letter names, and it is not an abbreviation, the letter comment must be used.

Example:

\$A: then we proceed to item < f > three

@ < letter >

## Appendix 2 – Frequencies for some word forms in spoken and written Swedish and English

In this appendix frequencies for the most relevant forms of *besluta*, *bestäm* and *decide* are presented. The sources are the corpora used in chapter 3: GSLC, GP-HD, BNC Written, and BNC Spoken.

If all word forms containing the root *beslut-* or *bestäm-* should be included, the Swedish frequency list would be several thousand rows long, due to all compounds. Even with the exception of clear-cut compounds, the list would be very long; for those reasons only immediate noun and verb forms were included.

Since the morphology between Swedish and English differ somewhat, the words in the table are not translated, but only given a morphological characterisation. For verbs, the active is default. For nouns, nominative case is default.

### Swedish – beslut

Written				Spoken			
Word	Explanation	Freq.	PPM	Word	Explanation	Freq.	PPM
<i>beslut</i>	noun indef.	82 806	244.70	<i>beslut</i>	noun indef.	104	75.50
<i>beslutet</i>	i) noun sing def. ii) verb past prtc. sing. neut. ('resolved')	33 731	99.68	<i>besluta</i>	i) verb inf. ii) verb imp.	21	15.25
<i>beslutat</i>	i) verb sup. ii) verb past prtc. sing. neuter	19 269	56.94	<i>beslutet</i>	i) noun sing def. ii) verb past prtc. sing. neut. ('resolved')	21	15.25
<i>beslutade</i>	i) verb past ii) verb past prtc. pl. iii) verb past prtc. sing. def.	16 530	48.85	<i>besluten</i>	i) noun pl. def. ii) verb past prtc. sing. uter ('resolved')	16	11.62
<i>beslöt</i>	verb past	15 384	45.46	<i>beslutar</i>	verb pres.	11	7.99
<i>besluta</i>	i) verb inf. ii) verb imp.	6 182	18.27	<i>beslutat</i>	i) verb perf. ii) noun sing. past prtc.	11	7.99
<i>beslutar</i>	verb pres.	5 729	16.93	<i>beslöt</i>	verb past	11	7.99



<i>besluten</i>	i) noun pl. def. ii) verb past prtc. sing. uter ('resolved')	5 701	16.85	<i>beslutade</i>	i) verb past ii) verb past prtc. pl. iii) verb past prtc. sing. def.	4	2.90
<i>beslutande</i>	i) verb pres. prtc. ii) noun (deriv. of verb) sing. indef.	1 451	4.29	<i>beslutande</i>	verb pres. prtc.	3	2.18
<i>beslutades</i>	i) verb past pass. ii) verb past prtc. pl. gen iii) verb past prtc. sing. def. gen	1 342	3.97	<i>beslöts</i>	verb past pass.	3	2.18
<i>beslutas</i>	i) verb pres. pass. ii) verb inf. pass.	1 033	3.05	<i>beslutas</i>	i) verb pres. pass. ii) verb inf. pass.	2	1.45
<i>beslöts</i>	verb past pass.	964	2.85	<i>besluts</i>	noun indef. gen.	2	1.45
<i>beslutats</i>	verb sup. pass.	737	2.18	<i>beslutad</i>	verb past prtc. sing. uter	1	0.73
<i>beslutad</i>	verb past prtc. sing. uter	293	0.87	<i>beslutades</i>	i) verb past pass. ii) verb past prtc. pl. gen iii) verb past prtc. sing. def. gen	1	0.73
<i>beslutna</i>	i) verb past prtc. sing. def. ('resolved') ii) verb past prtc. pl. ('resolved')	276	0.82	<i>beslutena</i>	noun pl. def.	1	0.73

<i>beslutets</i>	noun sing. def. gen.	61	0.18				
<i>besluts</i>	noun indef. gen.	47	0.14				
<i>beslutens</i>	noun pl. def. gen.	34	0.10				
<i>beslutit</i>	verb sup.	13	0.04				
<i>beslutandet</i>	noun (deriv. of pres. prtc) sing. def.	6	0.02				
<i>beslöto</i>	verb past pl. (arch.)	6	0.02				
<i>beslute</i>	verb pres. subjunctive <sup>1</sup>	3	0.01				
<i>beslutning</i>	noun (deriv. of verb) sing. indef.	3	0.01				
<i>beslutandes</i>	verb pres. prtc.	2	0.01				
<i>beslutningen</i>	noun (deriv. of verb) sing. def.	2	0.01				
<i>beslutandets</i>	noun (deriv. of pres. prtc) sing. def. gen.	1	0.00				
<i>beslutena</i>	noun pl. def.	1	0.00				
<i>beslutits</i>	verb sup. pass.	1	0.00				
<i>besluter</i>	verb pres <sup>2</sup>	1	0.00				

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1. This is a very uncommon form, and it is likely to be a misprint of some more common form.

## Swedish – bestämma

Written				Spoken			
Word	Expl.	Freq.	PPM	Word	Explanation	Freq.	PPM
<i>bestämt</i>	i) verb sup. ii) verb past prtc. sing. neut.	28 172	83.25	<i>bestämma</i>	verb inf.	104	75.50
<i>bestämma</i>	verb inf.	13 677	40.42	<i>bestämt</i>	i) verb sup. ii) verb past prtc. sing. neut.	86	62.44
<i>bestämde</i>	i) verb past ii) adj. sing. uter def. masc.(‘firm’)	12 202	36.06	<i>bestämmer</i>	verb pres.	64	46.46
<i>bestämmer</i>	verb pres.	12 106	35.77	<i>bestäm- melser</i>	noun (deriv. of verb) pl. indef. (‘regulations’)	19	13.79
<i>bestämd</i>	i) verb past prtc. sing. uter. indef. ii) adj. sing. uter indef. (‘firm’)	2 962	8.75	<i>bestämde</i>	i) verb past ii) adj. sing. uter def. masc. (‘firm’)	18	13.07
<i>bestäm- melser</i>	noun (deriv. of verb) pl. indef. (‘regulations’)	2 789	8.24	<i>bestämda</i>	i) verb past prtc. pl. ii) adj. pl. positive (‘firm’) iii) adj. sing. def. positive (‘the firm (ones)’)	16	11.62

<i>bestämnda</i>	i) verb past prtc. pl. ii) adj. pl. positive (‘firm’) iii) adj. sing. def. positive (‘the firm (ones)’)	2 710	8.01	<i>bestämd</i>	i) verb past prtc. sing. uter. indef. ii) adj. sing. uter indef. (‘firm’)	13	9.44
<i>bestäm- melserna</i>	noun (deriv. of verb) pl. def. (‘the regulations’)	1 739	5.14	<i>bestäms</i>	verb pres. pass.	10	7.26
<i>bestäms</i>	verb pres. pass.	1 712	5.06	<i>bestäm- melsen</i>	noun (deriv. of verb) sing. def. (‘the regulation’)	4	2.90
<i>bestämdes</i>	i) verb past pass. ii) adj. sing. uter def. masc. gen. (‘firm’)	1 009	2.98	<i>bestäm- melserna</i>	noun (deriv. of verb) pl. def. (‘the regulations’)	3	2.18
<i>bestämmas</i>	verb inf. pass.	501	1.48	<i>bestämmas</i>	verb inf. pass.	2	1.45
<i>bestämts</i>	verb sup. pass.	452	1.34	<i>bestäm- melse</i>	noun (deriv. of verb) sing. indef. (‘regulation’)	2	1.45
<i>bestäm- melse</i>	noun (deriv. of verb) sing. indef. (‘regulation’)	434	1.28	<i>bestäm- ningar</i>	noun (deriv. of verb) pl. indef.	2	1.45
<i>bestäm- melsen</i>	noun (deriv. of verb) sing. def. (‘the regulation’)	309	0.91	<i>bestämdare</i>	adj. comparative (‘firmer’)	1	0.73
<i>bestämd- aste</i>	adj. superlative (‘firmest’)	177	0.52	<i>bestäm- melsera</i>	i) regional form of <i>bestämmelserna</i> ii) misspelled <i>bestämmelserna</i>	1	0.73

<i>bestämmande</i>	i) verb pres. prtc. ii) noun (deriv. of verb) sing. indef.	169	0.50	<i>bestämts</i>	verb sup. pass.	1	0.73
<i>bestämning</i>	noun (deriv. of verb) sing. indef.	98	0.29				
<i>bestämningar</i>	noun (deriv. of verb) pl. indef.	55	0.16				
<i>bestäm</i>	verb imp.	38	0.11				
<i>bestämningen</i>	noun (deriv. of verb) sing. def.	26	0.08				
<i>bestämmandet</i>	noun (deriv. of verb) sing. def.	22	0.07				
<i>bestämdare</i>	adj. comparative ('firmer')	14	0.04				
<i>bestämningarna</i>	noun (deriv. of verb) pl. def.	9	0.03				
<i>bestämmelsernas</i>	noun (deriv. of verb) pl. def. gen. ('the regulations' )	8	0.02				
<i>bestämmes</i>	verb pres. pass.	8	0.02				
<i>bestämdt</i>	i) verb sup. ii) verb past prtc. sing. neut.	5	0.01				
<i>bestämmelsens</i>	noun (deriv. of verb) sing. def. gen. ('the regulation's' )	2	0.01				
<i>bestämdast</i>	adj. superlative ('firmest')	1	0.00				
<i>bestämme</i>	verb subjunctive <sup>1</sup>	1	0.00				

1. This is a very uncommon form, and it is likely to be misprints of some more

<i>bestämm</i> <i>a</i>	misspelled <i>bestämma</i>	1	0.00				
<i>bestämder</i>	adj. sing. uter.	1	0.00				

**English – decide**

Written			Spoken		
Word	Freq.	PPM	Word	Freq.	PPM
<i>decision</i>	15 512	171.88	<i>decision</i>	1 007	96.38
<i>decided</i>	14 208	157.43	<i>decided</i>	913	87.39
<i>decisions</i>	6 886	76.30	<i>decide</i>	705	67.48
<i>decide</i>	5 815	64.43	<i>decisions</i>	382	36.56
<i>deciding</i>	1 842	20.41	<i>deciding</i>	69	6.60
<i>decides</i>	818	9.06	<i>decides</i>	61	5.84

## Appendix 3 – Entries in Bring (1930) where beslut, besluta and bestämma occur

These are the entries in the Swedish thesaurus (Bring 1930) that contain any of the words *beslut*, *besluta* or *bestämma*. Only the entry words have been translated.

### Beslut

#### # 462 svar ('answer')

besked, upplysning, utläggning, utredning, tydning, uttydning, gissning, utgissning, tolk, tolkning, lösning, solution, redogörelse, berättelse, utlåtande, deklARATION, bekräftelse, accept, bejakning, bekännelse, utslag, dom, reskript, beslut, orakel;

#### # 480 omdöme ('judgment')

uppskattning, uppmätning, värdering, värdesättning, taxering, prövning, granskning, granskare, recension, recensent, censur, censurering, censurförordning, censurhinder, censurtvång, censor, dom, domare, domslut, utslag, skiljedom, skiljedomstol, skiljedomare, skiljeman, prisdömare, konstdomare, utlåtande, betänkande, avgörande, beslut, gottfinnande, besked, utgång, beräkning, avräkning, tilldelning, betyg, vitsord, videtur, testimonium, orlovssedel;

#### # 600 vilja ('will')

viljeakt, viljeansats, viljekraft, viljeliv, viljeriktning, viljeyttring, uppsåt, uppsåtlighet, berätt mod, avsikt, avsiktighet, avsiktssats, avsiktsbisats, avsiktskonjunktion, föresats, intension, beslut, beslutsamhet, önskan, önskemål, önskning, önskningsmål, åstundan, gottfinnande, förgottfinnande, befallning;

#### # 604 beslutsamhet ('resolution, determination')

klarsynthet, rådighet, omdöme, bestämdhet, beslut, parti, avgörande steg, slag i saken, målmedvetenhet, planmässighet, självförtroende, självförtröstan, självtillit, mod, förtvivlans mod, kurage, viljekraft, vilja, egenvilja, järnvilja, fasthet, kraft, kraftfullhet, karaktär, karaktärsfasthet, karaktärsstyrka, obeveklighet, okuvlighet, oböjlighet, orubblighet, energi, ståndaktighet, ihärdighet, uthållighet, envishet, styvsinhet, hårdnackenheter, morskheter, katighet, egensinne, egensinnighet, förstockelse, förhärdelse, skinn på näsan;

#### # 609 val ('choice')

valfrihet, urval, utkorelse, option, optionsrätt, utletning, eklekticism, eklektiker, utdrag, excerpt, axplockning, utplockning, kompilation, kompilator, kompilering, urklipp, valda stycken, utsynning, utsyningsman, alternativ, dilemma, avgörande, avgöranderätt, avgörande steg, slag i saken, parti, bestämmanderätt, förkärlek, preferens, företrädare, bifall, tycke, tycke och smak, tyckesak, smak, fråga, frågadómare, gottfinnande, förgottfinnande, skön, godtycke, godtycklighet, adoption, prövning, urskillning, urskillningsförmåga, omdöme, dom, rättsskipning, utslag,

beslut, beslutanderätt, beslutförhet, beslutmässighet, självrådighet, företrädesrätt, företrädesrättighet, envælde, bestämmelse, kreering, tillsättning, utnämning;

# 611 *förutbestämmelse* ('predestination')

förutseende, förtänksamhet, förberedelse, förberedelsetid, anordning, anordnare, inövning, instudering, plan, planläggning, beräkning, avsikt, uppsåt, intension, disposition, berätt mod, moget övervägande, förslag, preliminärer, preliminäravtal, preliminärfråga, preliminärundersökning, fundering, benägenhet, förslagenhet, klokhet, beslut, predestination, nådval, fatalism, fatalist, öde, ödets bok, spådom, orakel;

# 620 *syfte* ('purpose')

syftemål, plan, planmässighet, teleologi, mål, ändamål, ändamålsenlighet, mening, akt och mening, dessäng, uppsåt, uppsåtlighet, intention, beräkning, avsikt, avsiktighet, avsiktssats, avsiktsbisats, avsiktskonjunktion, berätt mod, vilja, vett och vilja, viljeriktning, mogen överläggning, föresats, beslut, diktan och traktan, månhet, bestämmelse, förutbestämmelse, fundering, företag, målmedvetenhet, strävan, strävande, biavsikt, tanke, baktanke, anslag, stämpling, lurpassning, spaning, spejare, aspirant, utkik, utsikt, vaksamhet, studium, åtrå, ambition, ambitionssak, streber, lycksökare, önskan, begär, begärelse, benägenhet, tendens;

# 626 *planmässighet* ('regularity, systemacity')

uppsåt, berätt mod, beslut, anstalt, föranstaltning, anordning, anordnare, mått och steg, förfarande, förfaringssätt, utväg, medel, arrangemang, arrangör, tågordning, processionsordning, dagordning, föredragningslista, memorandum, recept, matsedel, tillställning, tillställare;

# 696 *rådsförsamling* ('council')

sammanträde, sammankomst, session, seans, sittning, plenum, plenarförsamling, föredragande, föredragning, föredragningslista, stämmobeslut, säte och stämma, proposition, japroposition, kontraposition, nejproposition, remiss, remissdebatt, remisshandling, debatt, adressdebatt, revision, inspektion, konventikel, världsskautmöte, jamboree;

# 737 *myndighet* ('authority')

jurisdiktion, domare, domsrätt, beslut, beslutanderätt, resolution, avgörande, avgöranderätt, utslag, utslagsröst, lag, lagstiftare, lagstiftning, föreskrift;

# 741 *befallning* ('command')

bud, budord, påbud, maktspråk, diktamen, förständigande, åläggande, föreskrift, kommendering, kommando, kommandoord, kommandorop, order, dagorder, förhållningsorder, regel, förhållningsregel, tillsägelse, instruktion, reglemente, kungabrev, edikt, ukas, reskript, dekret, dekretal, dekretering, ferman, bulla, encyklika, kungörelse, förordnande, förordning, stadga, stadgande, bestämmelse, beslut, besked, resolution, depesch, budskap, utslag, dom, domslut, slutdom, lag,



lagbestämmelse, lagbok, lagbud, lagparagraf, lagrum, lagskipning, lagstadgande, lagstiftning, balk, lagbalk, byggningsbalk;

# 769 *avtal* ('contract, deal')

förbund, separatförbund, fördrag, traktat, traktatenlighet, traktatmässighet, allians, allianstraktat, entent, kartell, kartellbildning, liga, konkordat, fredsfördrag, fredsförening, fredsförslag, fredskongress, fredspreliminärer, fredsslut, fredstraktat, separatfred, biläggning, förlikning, uppgörelse, reglering, kompromiss, kompromissarie, underhandlare, underhandling, förhandling, negotiation, negociatör, negociering, klausul, bestämmelse, bifall, godkännande, avgörande, beslut, fastställelse, stadfästelse, ratifikation, underskrift, signatur, kontrasignation, besegling, sigill, signet, sanktion, pragmatisk sanktion, författning, konstitution, diplomat, diplomati;

# 969 *domstolsförhandling* ('court negotiation')

beslut, utlåtande, uppskov, åläggande, hämtning, hämtningspåföljd, hämtningeäventyr, vite, vitesföreläggande, vitesbrott, vitesförbud, inmaning i häkte, häktning, utslag, recit, decision, dom, dombrev, domslut, tredskodom, vad, appellationsdomstol, appellering, libell, replik, duplik, besvär, besvärshandling, besvärshänvisning, besvärsmål, besvärspunkt, besvärsskrift, besvärstid, besvärsväg, klander, klandertalan, klandertid;

## Besluta

# 462 *svar* ('answer')

förklara, redogöra, klargöra, åskådliggöra, meddela, deklarerar, upplysa, upptäcka, uppspåra, utfinna, utgrunda, utreda, tyda, uttyda, tolka, uttolka, gissa, utgissa, avslöja, dechiffra, lösa, lösa knuten, solvera, deducera, förvissa, övertyga, bevittna, avgöra, besluta, bringa till slut, tillfredsställa;

# 480 *omdöme* ('judgment')

döma, bedöma, frändöma, tilldöma, pröva, jugera, värdera, värdesätta, taxera, akta, mena, förmena, uppskatta, anse, tycka, tolka, kommentera, granska, kritisera, censurera, skärskåda, undersöka, examinera, avväga, överväga, taga i betraktande, väga för och emot, betänka, eftertänka, övertänka, beräkna, ordna, klassificera, överlägga, rådgöra, syna, avsyna, penetrera, mönstra, inspektera, revidera, inventera, konstatera, utröna, utreda, taga reda på, förvissa sig om, fundera, utfundera, deducera, sluta till, draga slutsats, upptäcka, uppfinna, anses för, gälla för, passera för, rannsaka, bestämma, avgöra, besluta, fränkänna, frikänna, tillerkänna, sakfälla;

# 600 *vilja* ('will')

vilja, hava i sinnet, sätta sig i sinnet, föresätta sig, åsyfta, åstunda, eftertrakta, önska, lysta, vånna, falka efter, falka efter på, begära, besluta, befalla, bestämma,

förordna, vidhålla, envisas, trilskas, behaga, tycka, finna för gott, tackas, värdigas, föreslå, hemställa, proponera, projektera, motionera, erbjuda, bifalla, samtycka, tillåta, bevilja;

# 604 *beslutsambet* ('resolution, determination')

besluta, bestäma, avgöra, decidera, taga sitt parti, sätta sig i sinnet, kasta tärningen, dra till, dra på, ingripa, göra kort process, taga tjuren vid hornen, fastslå, fastställa, besegla, bekräfta, hålla fast vid, vidbliva, framhärda, hålla stånd, härda ut, rida ut stormen, envisas, morska sig, förhärda, förstocka;

# 609 *val* ('choice')

välja, omvälja, invälja, utvälja, utkora, utleta, utmärka, utplocka, utse, utsyna, ut söka, utsöndra, excerpera, kompilera, kora, kooptera, sortera, sortera sig, rensa, gradera, skilja agnarna från vetet, föredraga, adoptera, knäsätta, upptaga, antaga, omfatta, fästa sig vid, taga parti för, taga sitt parti, avgöra, besluta, decidera, bestämma, instämna, kasta tärningen, gå över Rubikon, inlåta sig på, inlåta sig på med;

# 611 *förutbestämmelse* ('predestination')

förbereda, planera, planlägga, preparera, anordna, instudera, inöva, predestinera, prevenera, förutse, beräkna, överväga, övertänka, fundera, besluta, hava i sinnet, sätta sig i sinnet, veta vad man vill, ämna, ämna sig, ärna, ärna sig, tillämna, tillärna, åsyfta;

# 626 *planmässighet* ('regularity, systemacity')

planlägga, organisera, systematisera, schematisera, arrangera, ordna, anordna, gestalta, inrätta, anlägga, anstalta, föranstalta, tillställa, bringa till mognad, bana väg, preparera, förutse, förbereda, upptänka, uppgöra, utfundera, uttänka, beräkna, uträkna, överräkna, överslå, kalkylera, koncipiera, skissera, uppfinna, uppspinna, ruva på, tillämna, tillärna, projektera, proponera, föreslå, motionera, föresätta sig, besluta, förfara;

# 741 *befallning* ('command')

stadga, lagstifta, reglementera, bestämma, regelbinda, instruera, bemyndiga, inskärpa, mana, uppfordra, dirigera, intimera, signalera, anvisa, ordinera, berama, disponera, anordna, förfoga, resolvera, dekretera, besluta, kungöra, promulgera, sanktionera, kontramandera, avlysa, inhibera;

# 769 *avtal* ('contract, deal')

avtala, kontrahera, överenskomma, uppgöra, berama, ackordera, bortackordera, inackordera, utackordera, enas, slå till, gå in på, bifalla, godkänna, avsluta, engagera, reengagera, stipulera, tinga, betinga, borttinga, påtinga, upptinga, beställa, abonnera, subscribera, prenumerera, förskriva, underteckna, signera, kontrasignera, besegla, avgöra, bestämma, besluta, stadfästa, ratificera, reglera, likvidera, acceptera, reversera, förbinda sig, tillförbinda sig, endossera, handla, köpa, köpslaga, köpslå, inropa, sälja, försälja, leja, städja, städsla, hyra, förpakta, up-

plåta, arrendera, bortarrendera, utarrendera, befракta, negociera, förhandla, underhandla, vidtala, mäkla, medla, pruta, bilägga, förlikas, kompromissa;

# 963 *laglighet* ('*legality*')

lagfästa, lagföra, lagstifta, stadga, påbjuda, förordna, föreskriva, statuera, dekreta, kungöra, legalisera, formulera, sanktionera, kodifiera, oktrojera, gälla, preskribera, förbjuda, processa, besluta, döma, tillerkänna, ogilla, straffa;

## Bestämna

# 60 *reglering* ('*regulation*')

reglera, ordna, organisera, rangera, arrangera, anordna, disponera, planera, inreda, inrätta, stadga, förordna, bestämma, fastställa, fixera, berama, uppgöra, utsätta, utstaka, systematisera, forma, formera, gestalta, rätta, ställa till rätta, justera, rucka, placera, bänka, bänka sig, bänkas;

# 62 *förband* ('*in the lead*')

dirigera, förestå, leda, gå i täten, anför, anför dansen, gå i spetsen, angiva tonen, taga upp psalmen, öppna, öppna balen, bestämma, bestämma modet, bringa å bane, åvägbringa, överträffa;

# 79 *särskildhet* ('*separateness*')

specificera, detaljera, designera, determinera, utpeka, utmärka, karakterisera, bestämma, individualisera, realisera, nationalisera;

# 150 *varaktighet* ('*duration*')

stadga, fixera, avgöra, ordna, stadfästa, tillförsäkra, förvissa, bestämma, befästa, bekräfta, bestyrka, stifta, grunda, grundlägga, hjälpa på fötter, sätta på fötter, komma på fötter;

# 152 *bestämmelse* ('*regulation*')

bestämna, förutbestämna, predestinera, förestå, skola, stunda, tillstunda, stå för dörren, draga sig tillhoppa, ligga i luften, hota, hänga över huvudet, nalkas, stå i beredskap, tränga sig på, föreligga, förbereda, koka ihop, ämna, avgöra besegla;

# 153 *grund* ('*basis*')

förmå, förmå till, uppegga, uppliva, bestämma, avgöra, hava handen med i spelet, hava en finger med i spelet, tynga ned vågskålen, giva utslag på vågen;

# 175 *inflytande* ('*influence*')

inverka, influera, göra till saken, göra något, göra slag i saken, göra susen, gälla, göra sig gällande, betyda, tynga i vågskålen, lägga sitt ord i vågskålen, hava något att säga, hava ett ord med i laget, göra sin röst hörd, spela en roll, slå igenom, påverka, gripa, betaga, mäka, förmå, dominera, predominera, förhärskas, taga ledningen, taga med i räkningen, tagas med i räkningen, bestämma modet;

# 278 *riktning* ('direction')

syfta, tendera, planera, bestämma sig för, stiga, falla, sjunka, utstaka, rätta, ställa, inställa;

# 474 *visshet* ('certainty')

förvissa, försäkra, konstatera, ådagalägga, fastslå, fastställa, bevisa, överbevisa, icke lida tvivel, utreda, klargöra, åskådliggöra, övertyga, avgöra, decidera, stadga, förordna, lagstifta, bestämma, gälla, legitimera, auktorisera, garantera, gå i god för, ansvara för, attestera, bevittna, intyga, vidimera, tro, förtrösta;

# 480 *omdöme* ('judgment')

döma, bedöma, frändöma, tildöma, pröva, jugera, värdera, värdesätta, taxera, akta, mena, förmena, uppskatta, anse, tycka, tolka, kommentera, granska, kritisera, censurera, skärskåda, undersöka, examinera, avväga, överväga, taga i betraktande, väga för och emot, betänka, eftertänka, övertänka, beräkna, ordna, klassificera, överlägga, rådgöra, syna, avsyna, penetrera, mönstra, inspektera, revidera, inventera, konstatera, utröna, utreda, taga reda på, förvissa sig om, fundera, utfundera, deducera, sluta till, draga slutsats, upptäcka, uppfinna, anses för, gälla för, passera för, rannsaka, bestämma, avgöra, besluta, frånkänna, frikänna, tillerkänna, sakfälla;

# 600 *vilja* ('will')

vilja, hava i sinnet, sätta sig i sinnet, föresätta sig, åsyfta, åstunda, eftertrakta, önska, lysta, vanna, falka efter, falka efter på, begära, besluta, befalla, bestämma, förordna, vidhålla, envisas, trilskas, behaga, tycka, finna för gott, tackas, värdigas, föreslå, hemställa, proponera, projektera, motionera, erbjuda, bifalla, samtycka, tillåta, bevilja;

# 609 *val* ('choice')

valfrihet, urval, utkorelse, option, optionsrätt, utletning, eklekticism, eklektiker, utdrag, excerpt, axplockning, utplockning, kompilation, kompilator, kompilering, urklipp, valda stycken, utsyning, utsyningsman, alternativ, dilemma, avgörande, avgöranderätt, avgörande steg, slag i saken, parti, bestämmanderätt, förkärlek, preferens, företräde, bifall, tycke, tycke och smak, tyckesak, smak, fråga, frågadore, gottfinnande, förgottfinnande, skön, godtycke, godtycklighet, adoption, prövning, urskillning, urskillningsförmåga, omdöme, dom, rättsskipning, utslag, beslut, beslutanderätt, beslutförhet, beslutmässighet, självrådighet, företrädesrätt, företrädesrättighet, envælde, bestämmelse, kreering, tillsättning, utnämning;

# 609 *val* ('choice')

välja, omvälja, invälja, utvälja, utkora, utleta, utmärka, utplocka, utse, utsyna, utsöka, utsöndra, excerpera, kompilera, kora, koptera, sortera, sortera sig, rensa, gradera, skilja agnarna från vetet, föredraga, adoptera, knäsätta, upptaga, antaga, omfatta, fästa sig vid, taga parti för, taga sitt parti, avgöra, besluta, decidera, be-

stämman, instämman, kasta tärningen, gå över Rubikon, inlåta sig på, inlåta sig på med;

# 615 *drivfäder* ('*incentive, motive*')

animera, inspirera, stimulera, elektrisera, gjuta olja på elden, elda, sporra, uppegga, uppfordra, upphetsa, uppkalla, uppmana, uppmuntra, uppvigla, predisponera, anmana, anmoda, förmana, pådriva, påstöta, pressa, nödga, ansätta, intala, övertala, suggerera, beveka, bestämma, persvadera, engagera, förorda, anbefalla, rekommendera, tillråda, tillviska, sufflera, advocera, tubba, muta, besticka, sollicitera, anhålla, begära, tigga, bedja, fordra, pocka på, pocka sig till, propsa, propsa igenom, propsa på, propsa sig fram, propsa sig till, kälta, pina, gnata, tvinga, framtvinga, påtvinga, diktera, befalla, föreskriva, vägleda, tillhålla, förmå, giva efter, taga reson;

# 642 *viktighet* ('*importance*')

befogenhet, kompetens, avgöranderätt, beslutanderätt, bestämmanderätt, beslutförhet, beslutmässighet, röst, rösträtt, chef, chefsegenskap, chefsplats, chefskap, primas, primat, överhuvud, höghet, rang, fömämitet, grandezza, nobless, notabilitet, anseende, storhet, storhetstid, triumf, triumfator, triumftåg, solennitet, solennitetssal, högtid, högtidlighet, högtidsskara, högtidsstämning, utmärkthet, urval, oförgätlighet, märkvärdighet, primadonna, första fiol;

# 673 *beredelse* ('*preparation*')

bereda, förbereda, preparera, predisponera, förebygga, förekomma, forutse, antecipera, laga i ordning, laga sig i ordning, laga att, laga sig till, beställa, påtinga, uppthinga, tinga, betinga, berama, planera, skissera, uttänka, uppspinna, påtänka, ruva på, hopkoka, föreskriva, förordna, bestämma, disponera, testamentera, hava tid på sig;

# 729 *fullbordan* ('*completion*')

verkställa, förverkliga, verkliggöra, utföra, uträtta, utverka, effektuera, realisera, sätta i verket, bringa till stånd, bringa till mognad, tillskapa, utdana, anordna, reglera, bestämma, taga steget fullt ut, framhärda, hålla ut, göra kort process, lyckas, gå, nå målet, ernå, uppnå, uppfylla, uppfylla ett löfte;

# 741 *befallning* ('*command*')

stadga, lagstifta, reglementera, bestämma, regelbinda, instruera, bemyndiga, inskräpa, mana, uppfordra, dirigera, intimera, signalera, anvisa, ordinera, berama, disponera, anordna, förfoga, resolvera, dekretera, besluta, kungöra, promulgera, sanktionera, kontramandera, avlysa, inhibera;

# 769 *avtal* ('*contract, deal*')

avtala, kontrahera, överenskomma, uppgöra, berama, ackordera, bortackordera, inackordera, utackordera, enas, slå till, gå in på, bifalla, godkänna, avsluta, engagera, reengagera, stipulera, tinga, betinga, borttinga, påtinga, uppthinga, beställa, abonnera, subskribera, prenumerera, förskriva, underteckna, signera, kontrasign-

era, besegla, avgöra, bestämma, besluta, stadfästa, ratificera, reglera, likvidera, acceptera, reversera, förbinda sig, tillförbinda sig, endossera, handla, köpa, köpslaga, köpslå, inropa, sälja, försälja, leja, städja, städsla, hyra, förpakta, upplåta, arrendera, bortarrendera, utarrendera, befrakta, negociera, förhandla, underhandla, vidtala, mäkla, medla, pruta, bilägga, förlikas, kompromissa;

## Appendix 4 – Transcription of a conversation analysed for argumentation

The table below shows the transcription of the recording analyzed in chapter 4, along with the reconstruction of the utterances and the communicative act classifications. The numbers in the communicative acts column point to the corresponding box in the analytical overview (appendix 5). The numbers within brackets point to the box that corresponds to the current communicative act, and the numbers without brackets show which boxes the communicative act refers to.

Line	Transcription	Translation	Reconstruction	Comm. act
1	\$R: sen vete sjuvton om vi inte ska köpa en sån [1 där: va:n ]1 istället för [2 e+ en ]2 buss	\$R: <i>then God knows if we should not buy you know a van instead of a bus</i>	The family should buy a ‘van’ instead of a VW bus.	Claim (1)
4	\$L: [1 mamma:: ]1 / [2 för: ]2 / vem / hur ha [3 man ]3	\$L: <i>[1 mum ]1 / [2 because ]2 / who / how is [3 it ]3</i>	<not part of the car discussion>	
6	\$E: [3 en VA:N ]3	\$E: <i>[3 a VAN ]3</i>	Why should the family buy a ‘van’ instead of a VW bus?	Disagr. to 1 (2) Req. for reason for 1
7	\$A: dom drar lite bensin pappa de e ju re enda som e bra me rom	\$A: <i>they need very little petrol dad that is the only thing that is good about them</i>	1. ‘Vans’ have low fuel consumption 2. There are no other advantages of ‘vans’	A. Reason for 1 (1.1) B. Reason against 1 (2.1)
8	\$E: <   > @ < sigh >	\$E: <   > @ < sigh >	<unclear>	
10	\$R: [4 ja så ]4 de e inte så himla fali men dom e JÄ:KLI mycke [5 billiare (...)]5	\$R: <i>[4 well that ]4 it is not all that bad but they are DAMN [5 cheap (...)]5</i>	1. The fuel consumption for ‘vans’ is about the same as for other car types. 2. ‘Vans’ are cheaper.	A. Disagr. to 1.1 (3) B. Reason for 1 (1.2)
11	\$A: [4 <   > ]4 @ < chuckle>, < quiet >	\$A: <i>[4 &lt;   &gt; ]4 @ &lt; chuckle&gt;, &lt; quiet &gt;</i>	<unclear>	
13	\$E: [5 nä men då sitte ]5 Sten-Åke å säje a men den dra / ha+ den dra så lite bensin nä rom had vart å lå:ngkört nu så hade ren dratt en å två // aha sa ja de gö ju våran OCKSÅ som ja tycker dra så in i	\$E: <i>[5 not but then ]5 Sten-Åke is saying yes but it needs / ha+ it needs very little petrol when they had been long driving just now it had needed one point two // really said I that is what our needs TOO and I</i>	1. [An example of a ‘van’ that uses 0.12 litre/km.] 2. 0.12 litre/km is not little => 3. ‘Vans’ do not have low fuel consumption.	Reason for 1 (3.1)

	NO:RDENS me bensin å e i så dåligt skick / så ja vet int en å [6 TVÅ tyck inte ja e ]6 LITE	<i>think it needs a BLEEDING lot of petrol and it is in really bad shape / so I do not know one point [6 TWO I do not think that is ]6 LITTLE</i>		
14	\$R: [6 men allvalit TALAT ]6	<i>\$R: [6 but seriously SPEAKING ]6</i>	<incomplete>	
15	\$R: ja titta nu på	<i>\$R: well have a look at</i>	<incomplete>	
16	\$A: ja dom e billia reservdelar till e re väl	<i>\$A: yes they are cheap spare parts for isn't it</i>	Spare parts for 'vans' are cheap	Reason for 1.2 (1.2.1)
17	\$E: ja de [7 billia reservdelar hemst billiare ]7	<i>\$E: yes it [7 cheap spare parts very much cheaper ]7</i>	Yes, spare parts for 'vans' are cheap	Agr. with 1.2.1
18	\$R: [7 mycke ja de e mycke billiare ]7 å köpa också // man får en sån här: e	<i>\$R: [7 much yes it is much cheaper ]7 to buy as well // you can get that kind of er</i>	1. Yes, spare parts for 'vans' are cheap 2. 'Vans' are also cheaper to buy. 3. <incomplete, see 21>	A. Agr. with 1.2.1 B. Reason for 1.2 (1.2.2)
19	\$E: hur s+ tusan [8 ska ja kunna välja (då) ]8	<i>\$E: how the heck [8 am I going to choose now ]8</i>	It is difficult for Eva to make up her mind	'Interjection'
20	\$A: [8 då tycke ja de ska va en ]8 [9 mattsvart ]9 [10 dodge ]10	<i>\$A: [8 in that case I think it should be a ]8 [9 matt black ]9 [10 dodge ]10</i>	(Jokingly) If the family is to buy a 'van', it should be a black Dodge van.	Elab. of 1
21	\$R: [9 fö ]9 [10 femtitusen ]10 //	<i>\$R: [9 for ]9 [10 fifty thousand ]10 //</i>	The price of a 'van' is 50 000 SEK	Reason for 1.2, elab. 1.2.2
22	\$E: [10 asså e ]10	<i>\$E: [10 but like ]10</i>	<incomplete>	
23	\$R: fö femtitusen få man e ganska bra [12 sån ]12	<i>\$R: for fifty thousand you get a quite good [12 such ]12</i>	The price of a reasonably good 'van' is 50 000 SEK	Reason for 1.2, elab. of 1.2.2
24	\$E: [12 PROBLEMET ]12 e ju att ja ska köra ren de e JA som ska köra ren	<i>\$E: [12 THE PROBLEM ]12 is that I am going to drive it it is I who is going to drive it</i>	1. Eva will be the primary user of the car 2. The important problem is that Eva will be the primary user of the car. => 3. The opinion of the primary user of the car is important => 4. Eva does not like 'vans'.	Ass. of evaluation criterion



25	\$R: < ja men de e ändå lättare å köra > @ < quiet >	\$R: < yes but it is easier to drive anyway > @ < quiet >	1. 'Vans' are easy to drive. => 2. Eva has no reason to dislike 'vans'.	Reason against 2.6 (4)
27	\$E: ja de säger du också men nu e re så här att INGER hon ha ju inte haft nära svårigheter ALLS me såna fordon å hon ha kört va som helst // men HON tycker att den här e hon dra se allså för å köra rom	\$E: well so you say but this is the way it is that INGER has not had any difficulties at ALL with vehicles of this kind and she has driven anything // but SHE thinks that this is she is reluctant to drive them	1. Inger has driven all kinds of vehicles. 2. Inger avoids driving her 'van' => 3. 'Vans' are difficult to drive.	Disagr. with 4 (2.6) Reason for 2.6 (2.6.1a, 2.6.1b)
28	\$R: för att	\$R: because	Why does Inger avoid driving her 'van'?	Req. for reason for 2.6.1a
29	\$E: aa hon tycke väl dom e stora man bli så me åldern festå ru vi kvinnor me ansvar för fami:l; å allt möjligt	\$E: yes I guess she thinks thy are big age does that to us you know us women with responsibility for family and things like that	1. Inger thinks her 'van' is big. 2. Old women avoids driving big cars, partly because these women are responsible for family etc.	Reason for 2.6.1a (2.6.1.1a, 2.6.1.1b)
31	\$A: men du [13 pappa om vi ska köpa ]13 då ska vi kö+ ja tycke inte vi ska kö+ VAN då ska vi köpa / en svart dodge matt svart me: mattsvarta ruter [14 / å så ska ]14 re va såhär [15 lite rost ]15	\$A: but listen [13 dad if we are going to buy ]13 then we should bu+ I do not think we should bu+ VAN I think we should buy / a black Dodge matt black with matt black panes [14 / and it should ]14 be like a little [15 corrosion ]15	(Jokingly) If the family is to buy a 'van', it should be a black Dodge van etc.	Elab. on 1
33	\$E: [13 så bli vi så försiktiga ]13	\$E: [13 we become so cautious ]13	<continued from 29>	
34	\$E: [14 <   > ah ]14 @ < click >	\$E: [14 <   > ah ]14 @ < click >	Feedback to 31, smiling/snorting	Feedback
36	\$E: [15 å ett ru:nt ]15 bord inne va	\$E: [15 and a round ]15 table inside right	(Continued joke) Do you also want the hypothetical 'van' to have a round table inside?	Suggested elab. on 1
37	\$A: nå å så lite r:osti såhär å så // så e rikti [16 GANGSTERbil me söndri ]16 lj+ lju+ ljudämpare såhär < rrrranng > @ < onomatopoetic >	\$A: no and then a little corrosion like this and // a real [16 GANGSTER car with broken ]16 s+ si+ silencer like this < rrrranng > @ < onomatopoetic >	1. The hypothetical 'van' should not have a round table inside 2. The hypothetical 'van' should have some corrosion etc	A. Rejection of suggested elab. B. Elab. on 1

41	\$R: [16 (...)]16	\$R: [16 (...)]16		
42	\$E: e re nånting vi framföallt ska se till de e att vi får ordentliga SÄTEN me ordentliga säkerhetsbältar å [17 nackstöd annars e inte ja intresserad ]17	\$E: <i>one thing e really must make sure is that we get proper SEATS with proper seat belts and [17 neck restraints otherwise I am not interested ]17</i>	The car we buy must have proper seats and proper seat belts.	Ass. of evaluation criterion
43	\$A: [17 ja men ja gilla inte fö dom ]17 sätena i Sten-Åkes bil e såhär gun:gar såhär värsta [18 fjädringen ]18	\$A: <i>[17 yes but I d not like because those ]17 seats in Sten-Åke's case they like rock like this [18 major suspension ]18</i>	The seats in Sten-Åke's 'van' are uncomfortable.	Ass. of evaluation criterion?
44	\$E: [18 ja men ]18 e re de va inte nackstöd på rom helle va	\$E: <i>[18 yes but ]18 are there there were no headrests on those either right</i>	The seats in Sten-Åke's 'van' do not have headrests?	Request for specification
45	\$A: jo de e rom	\$A: <i>yes they are</i>	The seats in Sten-Åke's 'van' do have headrests.	Specification
46	\$E: va re de	\$E: <i>was there</i>	Do the seats in Sten-Åke's 'van' really have headrests?	Request for confirmation
47	\$A: ( ja dom fram e re de men inte bak )	\$A: <i>(yes in the front there are but not in the back)</i>	The front seats in Sten-Åke's 'van' have headrests, but the back seats do not.	Modification of specification on line 45.
48	\$E: ja fram nä men bak e re inte de // dom se oerhört kon+ de e rena de e ju VARDSRU:M man e ut å kör me // < [19 de dä me ]19 å > la:st jo men de e ju de @ < quick >	\$E: <i>yes in the front but in the back there is not // they look extremely str+ it is virtual they are like LIVING ROOMS that you drive around with // &lt; [19 and that thing with ]19 to &gt; load yes but it is it @ &lt; quick &gt;</i>	1. The front seats in Sten-Åke's 'van' have headrests, but the back seats do not. => 2. Sten-Åke's 'van' does not have proper seats. 3: 'Vans' are like living rooms 4. 'Vans' have good capacity for loading.	A. Reason for 2 (2.8) B. Reason for 1 (1.6)
50	\$A: [19 a ja ha ]19	\$A: <i>[19 yes yes ]19</i>		Feedback
51	\$A: jo de e ju de ///	\$A: <i>yes that is true</i>	'Vans' have good capacity for loading.	Agr. with 1.6
52	\$E: [20 ja vet int hur många ]20 // de e EN dä precis innanför dörren å så e de e* dubbelsäte breve va re väl [21 å så e re ]21	\$E: <i>[20 I do not know how many ]20 // there is ONE just inside the door and then there isa double seat beside wasn't it [21 and there there is ]21</i>	What is the distribution of seats like in Sten-Åke's 'van'?	Request for specification
54	\$A: [20 < la:s:ta o:m > ]20 @ < quiet >, < slow >	\$A: <i>[20 &lt; reload &gt; ]20 @ &lt; quiet &gt;, &lt; slow &gt;</i>	<unclear>	

56	\$A: [21 de e trippelsäte ]21 längs bak å så två säten i < mitten > // @ < quiet >	\$A: [21 there is a tripple seat ]21 in the far back and two seats in the < middle > // @ < quiet >	Sten-Åke's 'van' has a trippel seat in the back and a double seat in the middle.	Specification
58	\$E: ja de va bara en i två i mitten ja fö de va en gång imellan //	\$E: yes there was just one in two in the middle yes because there was an aisle in between //	The reason there is only a double seat in the middle is that there is an aisle there as well.	Agr. with 56
59	\$A: < m > // @ < quiet >	\$A: < m > @ < quiet >	The reason there is only a double seat in the middle is that there is an aisle there as well.	Agr. with 56
61	\$E: a //	\$E: yes //	<unclear>	
62	\$A: <1 lamper å grejer >1 ///3.1 @ <1 quiet >1, <1 slow >1	\$A: <1 lights and stuff >1 ///3.1 @ <1 quiet >1, <1 slow >1	<unclear>	
65	\$E: ja: ///	\$E: yes ///	<unclear>	
66	\$L: mamma: // hur har man gjort en [22 (sån här) ]22	\$L: mum // how have they done this [22 kind of thing ]22	<not part of the car discussion>	
67	\$E: [22 fast de e ]22 ju en prisfråga	\$E: [22 but it IS ]22 a matter of cost	The cost of the car is important.	Ass. of evaluation criterion
68	\$L: mamma ha vi KÖPT [23 den ]23	\$L: mum have we BOUGHT [23 it ]23	<not part of the car discussion>	
69	\$E: [23 nä: ]23 [24 de e ANDERS ]24	\$E: [23 no ]23 [24 it is ANDERS ]24	<not part of the car discussion>	
70	\$R: [23 (...) ]23 [24 (fö) ]24 för alltså en femti sextitusen få man ju rätt så hyfsad (sån) ///	\$R: [23 (...) ]23 [24 (for) ]24 for like a fifty sixty thousand you get a pretty good (such) ///	The price of a reasonably good 'van' is 50 000 - 60 000 SEK	Elab. of 1.2.2
71	\$A: va kostar en: [25 / transi:t ]25	\$A: how much is a [25 / Transit ]25	How much does a Ford Transit cost?	Request for information
72	\$R: [25 å för en femti sextitusen ]25 får man en HELT utsleten (en sån där) jävla [26 folkvansbuss ]26	\$R: [25 and for a fifty sixty thousand ]25 you get a COMPLETELY worn out (that kind of) bloody [25 volkswagen bus ]25	A VW bus that costs 50 000 - 60 000 SEK is in bad condition.	Elab. of 1.2.2
74	\$E: [26 m:mh ]26 men va:rför e re så stor skillnad i pris då	\$E: [26 m:mh ]26 but why is the price difference so large	Why is the difference in price between 'vans' and VW buses so large?	Request for reason for 1.2.2
75	\$R: om ja ha föstått de rätt < alltså > @ < quiet >	\$R: if I have understood it right < so > @ < quiet >	<incomplete, continued in 78>	

77	\$E: ja:a ja e ja vill int alls säja emot dej faktist / j+ men frågan e om de e tillgång å efterfrågan som styr elle va e de	\$E: <i>yes I er I do not want to contradict you really / I+ but the question is if it is supply and demand that control or what is it</i>	1. Eva does not want to disagree with Roland 2. Is the price controlled by supply and demand or something else?	Elab. of line 77
78	\$R: de e helt enkelt de att dom drar två de+ två tre deciliter mer bensin ///	\$R: <i>it is as simple as this that ther need two de+ two three deciliter more petrol</i>	1. 'Vans' have higher fuel consumption than VW buses. 2. The reason to the difference in price is higher fuel consumption for 'vans'.	Reason for 1.2.2, reason for 2 (2.7) (2.7' inferred)
79	\$E: ja vi KÖR ju så lite så fö den [27 sakens skull så e re ju ingen ]27	\$E: <i>well we DRIVE so little that for that [27 sake it is no big ]27</i>	1. This family does not drive very much 2. The fuel consumption is not very important for families that do not drive very much	Reason against 2.7' (6), reason for 6 (6.1)
80	\$R: [27 (men a+) för dom som kör ]27 så lite så e de ju ännå som ///	\$R: <i>[27 (but o+) for those that drive ]27 so little it is kind of like ///</i>	1. The fuel consumption is not very important for families that do not drive very much => 2. This family does not drive very much	Agr. with 6, agr. with 6.1
81	\$E: men hu e rom krocktestade fö dom hära	\$E: <i>but how have they been crash tested these</i>	Are 'vans' crash safe?	Request for information
82	\$R: ja ja nä dom fy fanken	\$R: <i>yes yes no they Jesus wept</i>	'The crash safety for 'vans' is good.	Reason for 1 (1.3)
83	\$E: du: de ska du inte alls va säker på [28 fö dom hära / ]28 mera som liknar toyota asså dom här:a sexsitsiga <   > kombiliknande den fick ju dålit resultat dom NY:A amrikanska @ < ingressive >	\$E: <i>listen you should be so sure of that [28 because those / ]28 look more like Toyota you know those six seated yeah estate looking that one got bad results the NEW American</i>	1. What makes you so sure that the crash safety for 'vans' is good? 2. A similar type of new American cars are not crash safe. => 3. 'Vans' may not be crash safe either.	A. Request for reason for 1.3 B. Reason for 7 (7.1) C. Reason against 1.3 (7)
85	\$R: [28 nä nä nä nä nä: ]28	\$R: <i>no no no no no ]28</i>	The crash safety for 'vans' is good.	Reason for 1 (1.3)
86	\$R: ja: men dom här	\$R: <i>yes but these</i>	<incomplete>	

87	\$A: [29 ja men NYA ]29 amerikanska bilar e mycke lättare än: gamla	\$A: [29 yes but NEW ]29 American cars are much lighter than old ones	1. New American cars are much lighter than old ones. => 2. The 'van' type they are discussing is old	Reason against 7.1 (9)
88	\$E: [29 i krocket ]29	\$E: [29 in the crash ]29	<incomplete>	
89	\$R: en sån < [30 här va:n den väger två ]30 ton > kö du på en sån dä nissan micra vetdu du märke inte att du [32 ha kört på (nån) ]32 @ < slow >	\$R: a van < like that it weighs two ton > if you run into that kind of Nissan Micra you know you do not even notice that you [32 have hit (something) ]32 @ < slow >	1. 'Vans' weigh two tonnes. 2. It is very safe for the driver of a 'van' to crash with a Nissan Micra. => 3. Heavy cars are crash safe.	Reason for 1.3 (1.3.1a & 1.3.1b)
91	\$A: [30 du vet den dä den väge TVÅ: TO:N]30	\$A: [30 you know that thing it weighs TWO TON ]30	1. 'Vans' weigh two tonnes. => 2. Heavy cars are crash safe.	Reason for 1.3 (1.3.1a & 1.3.1b)
92	\$E: [32 ja men om man ]32 kö på en lassbil då å den [33 liksom ]33	\$E: [32 yes but if you run into a lorry then and it [33 like ]33	Is it very safe for the driver of a 'van' to crash with a truck too?	Reason against 1.3.1b (8), (8.1)
93	\$R: [33 kö du: ]33 ö: ja: < nä [34 men (du ha ju) (... ) > ]34 @ < slow >	\$R: [33 if you run ]33 er yes < no [34 but (you have) (... ) > ]34 @ < slow >	No, it is not very safe for the driver of a 'van' to crash with a lorry.	Agr. with 8.1
95	\$A: [34 ja man lär ju märka de (i alla) sådär ]34	\$A: [34 well you will notice it (at least) like ]34	No, it is not very safe for the driver of a 'van' to crash with a truck.	Agr. with 8.1
96	\$E: ja men [35 VA:RFÖR väger dom ]35 två ton e r för att hela ramverket e jättekraftit	\$E: yes but [35 WHY do they weigh ]35 two ton is it because the entire framework is very thick	1. Why do 'vans' weigh two tonnes? 2. Do 'vans' weigh much because of very thick framework?	Request for reason for 1.3.1a
97	\$A: [35 (nä dom dom vä+) (... ) ]35	\$A: [35 (no they they we+) (... ) ]35	<incomplete>	
98	\$R: dom e rätt så kraftia ja	\$R: they are quite thick yes	Yes, the framework of 'vans' are quite thick	Reason for 1.3.1a (1.3.1a.1/1.3.2)
99	\$A: men de e som p+ byggt på jeepen	\$A: but it is like o+ built on the jeep	<unclear>	
100	\$E: de e ju inte [37 ALLS så att de ]37 som väger två ton måste vara	\$E: that is not the way [37 it is at ALL that ]37 what weighs two ton must	1. Crash safety does not only depend on the weight of the car.	A. Reason against 1.3.1b

	krocksäker de beror alleles på hur de e gjort [39 / hur bjälkar å balkar ]39 [40 å allting sitter ]40	<i>be crash safe that depends completely on how it is made [39 / how the balks and girders ]29 [40 and everything is made ]40</i>	2. Crash safety also depends on the construction, what the framework is like.	B. Elab. on 8
101	\$A: [37 mamma / mamma ]37	<i>\$A: [37 mum / mum ]37</i>	<not part of the car discussion>	
102	\$R: [38 jo: men de ]38 [39 e (...) ]39 [40 de ju ]40	<i>\$R: [38 yes but it ]38 [39 is (...) ]39 [40 it is ]40</i>	<incomplete>	
103	\$A: [38 ma+ ]38	<i>\$A: [38 &lt; mu+ &gt; ]38</i>	<not part of the car discussion>	
105	\$A: [40 mamma / mamma ko+ ]40 [41 kolla (...) å så känne ru på jeepen där ]41 de e så hä tjock RA:M i: -n vetdu	<i>\$A: [40 mum / mum loo+ ]40 [41 look (...) and feel at the jeep ]41 the FRAMEWORK is this thick you know [...]</i>	1. You can easily see that the jeep has very thick framework. => 2. 'Vans' have heavy framework.	Reason for 1.3.2 (1.3.2.1 & 1.3.2.1')
107	\$R: [41 (...) ]41	<i>\$R: [41 (...) ]41</i>	<unclear>	
108	\$E: ja de jeepen de [42 Anders men ja e inte så säke på att dom hä va:narna e såna // de vill ja no ]42 se: [44 e fakta på innan ]44	<i>\$E: yes that is the jeep [42 Anders but I am not so sure that these vans are like that // I think I want to ]42 see [44 facts on that before ]44</i>	1. The framework of the jeep has nothing to do with the framework of 'vans'. 2. Eva wants to have good evidence for the crash safety of 'vans'.	A. Disagr. with ~1.3.2.1' (9) B. Deferal to other arbiter.
109	\$A: [42 jaa // men // men om man säje sähä:r ö // jo men: ]42	<i>\$A: [42 yes // but // but let's say liek this er // yes but ]42</i>	<incomplete>	
110	\$R: [44 jo nä men allvalit ]44 talat så dom dom e dom e dom e tämlien så krocksäkra de de de eftersom [45 dom har ]45 [46 (...) har ]46	<i>\$R: [44 yes no but seriously ]44 speaking they they are they are they are rather crash safe it it it since [45 they have ]45 [46 (...) have ]46</i>	The crash safety for 'vans' is good.	Reason for 1 (1.3)
111	\$E: [45 ja de e ju ]45 [46 ba å titta på Trygg Hansas ]46 statistik /// kan ju int va så svårt dom ha ju statistik på de // de finns ju minibussar [50 (dä såna små) ]50	<i>\$E: [45 well we can ]45 [46 just have a look at Trygg Hansa's ]46 statistics /// couldn't be too difficult they do have statistics for that // there are mini buses (you know such small ones)</i>	We can find out whether 'vans' are crash safe or not by looking at the statistics of Trygg-Hansa.	Deferal to other arbiter.
112	\$A: [46 me du få ju ha bra säkehets+ ]46	<i>\$A: [46 but you must have good safety+ ]46</i>	<incomplete>	
113	\$R: [50 me+ men fö do+ ]50 de ha visa sej att de hä me [51 krocksäkerheten de	<i>\$R: [50 bu+ but for tho+ ]50 it turns out that this thing with [51 crash safety the absolutely /</i>	The most important factor for the crash safety is the weight of the car.	Elab. of 1.3.1b

	absolut / absolut ]51 [52 viktiaste me krockssäkerheten // ]52 så e de faktist de e TYNGDEN alltså den e nästan den absolut avgörande // TYNGDEN på bilen ha MYCKET stor [53 betydelse fö ]53 krockssäkerheten	<i>absolutely ]51 [52 most important about crash safety // ]52 that is actually the WEIGHT that is almost the single determining // the WEIGHT of the car is VERY [53 important for ]53 the crash safety</i>		
114	\$L: [51 < mamma // e den hä målad > ]51 @ < slow >, < quiet >	<i>\$L: [51 &lt; mum / is this one painted &gt; ]51 @ &lt; slow &gt;, &lt; quiet &gt;</i>	<not part of the car discussion>	
116	\$E: [52 nä: den e tryckt plast ]52	<i>\$E: [52 no it is printed plastic ]52</i>	<not part of the car discussion>	
117	\$E: [53 a: mä:h ]53	<i>\$E: [53 cmon ]53</i>	<incomplete>	
118	\$E: de måste väl va hur den trycks ihop som e [54 avgörande ]54	<i>\$E: but it has to be how it is compressed that is [54 determining ]54</i>	The most important factor for the crash safety is how the car compresses on impact.	Disagr. with ~1.3.1b (8)
119	\$R: [54 ne:j ]54 TYNGDEN	<i>\$R: [54 no ]54 the WEIGHT</i>	No, the most important factor for the crash safety is the weight of the car.	Elab. of 1.3.1b
120	\$E: om den e jätteTUNG //	<i>\$E: if it is really HEAVY</i>	<incomplete, continued in 122>	
121	\$R: ja:a	<i>\$R: yes</i>		Feedback.
122	\$E: // å [55 liksom VEK i frampartiet då e re ju ingen glädje me de ]55	<i>\$E: // and [55 kind of YIELDING in the front then there is not much use with it ]55</i>	A car that is weakly constructed is not crash safe even if it is heavy.	Elab. of 8
123	\$R: [55 men den e tung jo: // nä: (de) tyngden nä tyngden har ]55 nä tyngden har otrolit vi sä+ om de krockar en bil // en bil // e den mest SÄKRASTE bil som väge tusen kilo krockar me en bil som väge tvåtusen kilo // så: den då bilen som ha två som [56 väge tvåtusen ]56 kilo den ha FYRA gånger så stor krockkraft [57 (... ) (de e (... ) ]57	<i>\$R: [55 but it is heavy yes // no (it) the weight is ]55 incredibly let's sa+ if there is a crash with a car // a car er the most SAFE car weighing a thousand kilos crashes with a car weighing two thousand kilos // then that car that has two that [56 weighs two thousand ]56 kilos it has got FOUR times the crash force [57 (... ) (it is (... ) ]57</i>	Yes, the most important factor for the crash safety is the weight of the car, because the collision force of a heavier car is much higher.	Reason for 1.3.1b (1.3.1b.1)
125	\$E: [56 jo: jo ]56	<i>\$E: [56 yes yes ]56</i>		Feedback

126	\$E: [57 ja men om du nu krocka me en annan ]57 tvåtusenkilos bil då [58 va kosta FÖRSÄKRINGEN få man fråga de ]58	\$E: [57 yes but if you happen to crash with another ]57 two thousand kilo car [58 how much is the INSURANCE can I ask that ]58	1. If a heavy car crashes with another heavy car, is it still safe? 2. How much does it cost to insure a 'van'?	A. Request for elab. of 1.3.1b B. Request for elab. of 1.2
127	\$A: [58 eller en: < tjuge:tusen > (...) ]58 kilos bil //	\$A: [58 or a twenty thousand (...) ]58 kilo car //	What if a heavy car crashes with an even heavier car?	Request for elab. of 1.3.1b
129	\$R: ja ja de e ju så de e ju de [59 (...) ]59	\$R: yes yes that is the way it is it [59 (...) ]59	<incomplete>	
130	\$E: [59 hallå va kosta ]59 försäkringarna då	\$E: [59 hello and how much is ]59 the insurance	How much does it cost to insure a 'van'?	Request for elab. of 1.2
131	\$R: // < de vet ja (inte) > @ < quiet >	\$R: // < I do not know that > @ < quiet >	Roland does not know how much it costs to insure a 'van'.	Rejection/ dismissal of request on line 130
133	\$A: men PAPPA //	\$A: but DAD //	<incomplete>	
134	\$E: de måss man ju FÖRST å frä+ s:katt å försäkring måss man ju ta reda på måss ju ta reda på / om dom hä femtitusen plöslits äts upp för att man har / flera tusen mer varje år i i i: //	\$E: we have to know that FIRST and fore+ tax and insurance you have to find that out / if these fifty thousand suddenly is consumed because you it is / several thousand more each year in in in //	If the insurance is expensive for 'vans' the difference in price between 'vans' and VW buses may be cancelled out.	Motivation for request on line 130
135	\$R: ja de e ju bara ringa te: e te Björn elle Sten-Åke elle nån dom ha ju en [60 sån (där) ]60	\$R: well it's just to ring to er to Björn or Sten-Åke or somebody they have got [60 one of (those) ]60	We can ask one of our friends who has a 'van' how much it costs to insure it.	Sugg. of how to find information
136	\$E: [60 ja men man ]60 ska int ringa ti < entusiasterna Roland > ///2.5 då e de bättre rö+ jöra me sitt försäkringsbolag va re kostar å försäkra en sån ti xempel [61 då va ]61 @ < quiet >	\$E: [60 but one ]60 can't ring the < enthusiasts Roland > ///2.5 it is better to check with the insurance company how much it costs to insure for example such a car [61 like ]61 @ < quiet >	1. It is not good to ask enthusiasts about the cost of the insurance. => 2. The friends who have 'vans' are enthusiasts. 3. One must ask insurance companies about how much it costs to insure a 'van'.	1. Non-acceptance of sugg. 2. Sugg. of how to find information
138	\$R: [61 ja men ]61 de e ju ba ringa å fråga va de kosta vi vet ju va de e va de kosta å < försäkra våran > /// @ < quiet >	\$R: [61 yes but ]61 it is just to ring and ask how much it is we know what it is er how much it is to < insure ours > /// @ < quiet >	It is easy to call insurance companies and find out how much it costs to insure a 'van', since we already know what it costs to insure the current car.	Acceptance of sugg.



140	\$E: < joo > /// ja ja vill no provköra ren om ett antal mil innan ja // dessutom e rom ju automatväxlade å de gilla ju [62 inte ja ]62 @ < quiet >	\$E: < yes > /// well think I would like to test drive it a number of kilometers before I // besides they have automatic gear boxes and I do [62 not like that ]62 @ < quiet >	1. Eva wants to test drive the 'van' before she concedes to buying it. 2. 'Vans' have automatic gearbox. 3. Eva does not like automatics.	A. Deferral to other arbiter B. Reason for 2 (2.5 $\alpha$ )
142	\$A: [62 de behöve ]62 rom ju inte va va	\$A: [62 they do not ]62 have to have that	'Vans' are not necessarily automatics.	Disagr. with 2.5 $\alpha$ (10)
143	\$E: ja de e svårt å få tag på [63 rom utan automatväxlar ]63	\$E: well it is difficult to find one without automatic gear box ]63	'Vans' are usually automatics.	Modification of 2.5 $\alpha$ (2.5 $\beta$ )
144	\$R: [63 (...) (dom va) ]63	\$R: [63 (...) (they be) ]63		
145	\$E: å SEN dom hä < göjvena > vet du / ja satt ju å prata me rom me Lena va på e macdonaldskalaset så va ju både // <   > öö: de va ju en hel DRÖS me bekanta men de va ju då Sven å å // Andrea dom ha ju en precis likadan som // Inger å: Sten-I+ Åke // @ < incomprehensible > @ < click >	\$E: and THEN those < göjvena > you know / I was talking to them to Lena right at the MacDonald's party there were both // <   > er there were a whole BUNCH of acquaintances but Sven and and // Andrea they have got one exactly like the one // Inger and Sten-I+ Åke @ < incomprehensible > @ < click >	[Start of the retelling of an episode.] <Unclear.>	
148	\$R: va då fö Andrea	\$A: which Andrea	Which person named Andrea is E talking about?	Request for clarification
149	\$E: /// Andrea Franke och / Sven: va han han nu kan heta i efternamn faktis+ de [64 vet ]64	\$E: /// Andrea Franke and Sven whatever his surname could be actual+ I [64 know ]64	By 'Andrea', E means Andrea Franke.	Clarification
151	\$R: [64 ha ]64 dom också en va:n	\$R: [64 have ]64 they also got a van	Do Andrea and Sven also have a 'van'?	Request for clarification
152	\$E: m:mh < /// > @ < uncertain belonging of pause >	\$E: m:mh < /// > @ < uncertain belonging of pause >	Yes, Andrea and Sven have a 'van' too.	Clarification
154	\$R: ja de e: de: verklien många som har -t	\$R: yes there sure is a lot of people who have got one	Many people have 'vans'.	Comment, reason for 1? (1.4)
156	\$E: ja	\$E: yes		Feedback
157	\$R: men de inte men de de e inte [65 utan anledning (...) ]65	\$R: but is not but it it is not [65 without cause (...) ]65	<incomplete>	

158	\$E: [65 du vet då byter dom ]65 ut lite såhä små rattar < vetdu > @ < quiet >	\$E: [65 you know they change ]65 like this small steering wheels < you know > @ < quiet >	? 'Vans' have small steering wheels.	Reason against 1 (2.2) (2.2')
160	\$R: < jo jo > @ < quiet >	\$R: yes yes @ < quiet >	? Yes, 'vans' have small steering wheels.	Agr. with 2.2
162	\$E: < som vi ha > ja tycke ju de: e skitmaxat å sitta me den stora ratten så vetdu man känn se som man kör en buss @ < quiet >	\$E: < like we have > you know that I think it is dead cool to sit ther with that large wheel you know you feel like you are driving a bus @ < quiet >	Eva likes to drive cars with large steering wheels.	Elab. of 2.2'
164	\$A: <   > @ < sigh >	\$A: <   > @ < sigh >	Unclear.	
166	\$E: de hä lilla löjliga vetdu [66 som man liksom ]66	\$E: this ridiculous small you know [66 that you kind of ]66	Eva does not like small steering wheels	Elab. of 2.2'
167	\$A: [66 nä: om ]66 de [67 ska va en stor bil ska de va stor ratt ]67	\$A: [66 no if ]66 it [67 should be a large car then there should be a large steering wheel ]67	Large cars should have large steering wheels	Elab. of 2.2'
168	\$E: [67 man ska ju kunna lägga armarna på: ]67	\$E: [67 you should be able to put your arms on ]67	Eva wants to be able to put her arms on the steering wheel	Elab. of 2.2'
169	\$R: men de e att de e helservo < vetdu / därför så e: de > @ < quiet >, < slow >	\$R: but it is that it is power steering < you know / that is why it > @ < quiet >, < slow >	'Vans' have small steering wheels because they have power steering.	Reason against 2.2' (11) (1.5a, 2.4b)
171	\$E: jo jo jo men servon ha ja inget emot verklien inte de e ju de ju [68 verklien nåt att ha ]68	\$E: yes yes yes but I do not mind the power steering not at all that is that is [68 definitely a good thing to have ]68	Eva likes power steering	Reason for 1 (1.5b)
172	\$A: [68 men bussar dom vride ]68 faan FEMTON varv fö å få helt utslag // de [69 se man (nä) (...)]69	\$A: [68 but buses turn ]68 bloody FIFTEEN revs to get full response // you [69 see that (no) (...)]69	With a bus (VW bus?) one has to turn the steering wheel 15 times to turn the wheels fully.	<Unclear>
174	\$E: [69 å så börja vi ]69 diskutera de hära me liksom hu körning på vintervägar å då visa re sej ju att / a: de e ju int så jättepraktist me ren hära servon då va < /// > ja men //	\$E: [69 and then we started talking about this thing like how driving on winter roads and then it turns out that / well that it is not really all that handy with this power steering after all right < /// > yes but //	Power steering is not good on winter roads.	Reason against 1 (2.4a) (2.4.1a)

	@ < uncertain belonging of pause >	@ < uncertain belonging of pause >		
176	\$R: hur då	\$R: <i>in what way</i>	Why is power steering not good on winter roads?	Request for reason for 2.4.1a
177	\$E: // ja därför att de e e ja inte servon utan e: <   > / automatväxlingen de e ju faktis så att en vanlig växellåda E mycke SÄKRARE [70 på ett sätt < därför att du ]70 [71 ha ]71 > @ < click > @ < quick >	\$E: // <i>well because it is er well not the power steering but er &lt;   &gt; / the automatic gear it is a fact that an ordinary gear box IS much SAFER [70 in a way &lt; because you ]70 [71 have ]71 &gt;</i> @ < click > @ < quick >	1. An automatic gearbox is not good on winter roads 2. Manual gearbox is more safe	Modification of 2.4.1a (2.5') (2.5'.1) (2.5'.1.1)
180	\$A: [70 jo men de gå ju ]70 [71 å1 ]71	\$A: <i>[70 yes but you ]70 [71 can ]71</i>	<incomplete>	
181	\$R: [71 nä ]71 ja nä ja kan inte hålla me om de alltså	\$R: <i>[71 no ]71 I no I must disagree with you about that you know</i>	Manual gearbox is not safer	Reason against 2.5'.1.1 (11)
182	\$E: ja me nä HAN börja säga såna saker han som verklien är entusiast för dom hä bilarna	\$E: <i>yes but when HE starts saying such things he begin a true enthusiast for these cars</i>	1. Sven? says that manual gearbox is safer 2. Sven? is enthusiastic about 'vans'	Reason for 2.5'.1.1 (2.5'.1.1.1a-c)
183	\$R: ja men JA ha ju kört e e ja jeepen då [72 jämför ja me ]72	\$R: <i>yes but I have driven er er well the jeep then [72 I compare with ]72</i>	Roland has experience with automatic gearbox from driving the jeep.	Reason for 11.1 (11.1.1a-c')
184	\$E: [72 men den e ]72 FYRhjulsdriven	\$E: <i>[72 but that one has ]72 FOUR wheel drive</i>	1. The jeep has four wheel drive => 2. The four wheel drive makes the comparison invalid.	Reason for 19' (19')(19.1a-b)
185	\$R: ja men om ja e om ja ja / jämför jeepen som tvåhjuldriven då va // så automatlåda e HELT överlägset alltså [73 / de samma de samma som < Mattbron > asså ]73 de e samma som Matbron man / man GASEN har du fullständi du ha ju slirkoppling va /// asså gasen fungerar som en slirkoppling va /// å de betyder de att / om du // du / om du ba lär de å	\$R: <i>yes but if I er if I I / compare the jeep as two wheel driver right // then automatic is COMPLETELY superior you know [73 / it is the same the same as the &lt; Matbro &gt; you / you the ACCELERATOR is completely you have slipping coupling right /// you know the accelerator works as a slipping clutch right /// and that means that / if you // you / if you just</i>	1. The jeep as two wheel drive has superior precision 2. The precision is there because of the automatic gearbox 3. One has to learn how to maneuver a car with automatic gearbox, using the slipping clutch.	A. Reason against 19.1a (13) B. Elab. of 11.1.1a-c')

	använda gaspedalen så // så e den så otr+ du kan alltså du kan // du kan VERKLIGEN alltså // @ < comment: tractor brand >	<i>learn to use the accelerator then // then it is incr+ you can you know you can / you can REALLY you know // @ &lt; comment: tractor brand &gt;</i>		
186	\$A: [73 ja me sen kan man ju växla me vanli me den också ]73	<i>\$A: [73 yes but you can shift gears the ordinary way too ]73</i>	With an automatic gearbox, one can choose to gear manually.	Reason against 2.5'.1.1 (13)
187	\$E: då mås man [75 börja köra bil på nytt (verklien) ]75	<i>\$E: in that case you have to start driving afresh (really) ]75</i>	With an automatic one has to learn how to drive again.	Reason for 2.5' (2.5'.2)
188	\$R: [75 fin // du kan verklien ]75 finköra // de e ju [77 samma me < Mattbron > ]77 [78 // jo ]78 @ < slow >	<i>\$R: [75 you can drive really ]75 accurately // it is the [77 same with the &lt; Matbro &gt; ]77 [78 // yes ]78 @ &lt; slow &gt;</i>	<continued 185>	
190	\$A: [77 bra nä vi ska ]77 [78 övningsköra ]78	<i>\$A: [77 good when we are going to]77 [78 practice driving ]78</i>	<unclear>	
191	\$E: < [78 men de kan man]78 väl göra jättebra på [80 rom här också jo::o: då ]80 > @ < comment: aggressively >	<i>\$E: &lt; [78 but you can ]78 do that perfectly well with [80 these too yes you can ]80 &gt; @ &lt; comment: aggressively &gt;</i>	1. It is possible to have the same level of precision with a manual gearbox 2. With a manual gearbox the clutch gives you the high precision.	Reason against 11.1 (12) (12.1)
193	\$R: [80 nä: nä de går inte ]80 nä fö du har [82 (...) nä:e ]82 näe nä de gå [84 (...) du kan aldrig ]84	<i>\$R: [80 no no it is not possible ]80 no because you have [82 (...) no ]82 no no it is not [84 (...) you can never ]84</i>	1. Manual gear box does not give the same level of precision as an automatic gearbox. 2. The clutch does not give the same precision.	Reason against 12 (11.1) (14)
194	\$E: [82 du använder kopplingen samtidigt ]82	<i>\$E: [82 you use the clutch at the same time ]82</i>	<continued from 191>	
195	\$E: [84 nähä men de kan då ]84 JA:G < // > @ < uncertain belonging of pause >	<i>\$E: [84 is that so but I for one ]84 can do that &lt; // &gt; @ &lt; uncertain belonging of pause &gt;</i>	Eva can get the same precision with the help of the clutch with a manual gearbox as with an automatic gearbox.	Reason for 12.1 (12.1.1)

197	\$R: ja ja: kan det inte å ja e betydligt duktigare förare än va du e	\$R: <i>well I can't do that and I'm a considerably better driver than you are</i>	1. Roland cannot get the same level of precision with the clutch. 2. Roland is a better driver than Eva.	Reason for 14 (14.1a) (14.1b $\alpha$ )
198	\$E: ja de vet ja ju inte ja kan ju va lyhörd på andra saker	\$E: <i>well I don't know about that I may be more keen in other things</i>	Eva might be a better driver in other respects.	Reason against 14.1b $\alpha$ (15) (15.1)
199	\$R: ja men men men < styv i > @ < quiet >	\$R: <i>yes but but but &lt; skilled at &gt; @ &lt; quiet &gt;</i>	1. Eva might be a better driver in other respects. 2. <incomplete>	Agr. with 15.1
201	\$E: vill ja (väl) ]85 påstå ]85	\$E: <i>that much I want ]85 to say ]85</i>	Eva might be a better driver in other respects.	Reason for 15 (15.1)
202	\$R: ]85 så sätt ]85 ja va duktigare så: så sett rent e // ]86 / (fö) rent tekniskt // nå men nu ha du jovisst ]86 men du vet att /// nå men // de e ju så att // e+ en automatväxel där du ha ju / (a') // ha ju en SLIRkoppling som Matbron alltså ja kan ju alltså köra in i en grushög va // å precis kan änna som / bara // me / me gaspedalen kan ja precis reglera ]88 kraften då ]88 < // > @ < uncertain belonging of pause >	\$R: <i>]85 that way ]85 I be better in in that way strictly er // ]86 / (for) strictly technically // not but you have sure ]86 but you know that // no but // the matter of fact is that // a+ an automatic gear where you have / (a') // have a slipping coupling like the Matbro you know I can you know drive into a pile of gravel right // and exactly can like / just // with / with the accelerator I can exactly adjust ]88 the power ]88 &lt; // &gt; @ &lt; uncertain belonging of pause &gt;</i>	1. Technically Roland is a better driver. 2. With automatic gearbox and slipping clutch Roland can control the power of the car with high precision.	A. Modification of 14.1b $\alpha$ (14.1b $\beta$ ) B. Elab. of 11.1
204	\$E: ]86 ja använder ju KOPPLINGEN väldigt mycket alltså ]86	\$E: <i>]86 I use the CLUTCH quite a lot you know ]86</i>	Eva uses the clutch a lot	Unclear
205	\$E: ]88 ja ja ]88	\$E: <i>]88 yes yes ]88</i>		Feedback
206	\$R: å de: kan man bara göra me automatväxel // de finns INGEN ]89 annan som kan göra de ]89	\$R: <i>and that can only be done with an automatic gear // there is NO ]89 other that can do that ]89</i>	It is not possible to control the power of the car that precisely with a manual gearbox and clutch.	Elab. of 11.1
207	\$E: ]89 fast de e ju inte riktigt ]89 DE utan de e ju å få ner varvtal å å liksom	\$E: <i>]89 but that is not really ]89 the POINT but it is about getting down the</i>	It is also about decreasing the rpm.	Reason for 2.5'.1.1 (2.5'.1.1.2)

	allting nä [90 ru kommer in i (...) ]90	<i>number of revolutions and and like everything when [90 you get into (...) ]90</i>		
208	\$R: [90 jo men de du få ju de ]90 få [91 ju (...) ]91 [92 lås ]92	<i>\$R: [90 yes but that you get that ]90 get [91 (...) ]91 [92 lock ]92</i>	It is possible to decrease the rpm. <incomplete>	
209	\$A: [90 ja men du / PAPPA ]90	<i>\$A: [90 yes but you / DAD ]90</i>	<incomplete>	
210	\$A: [91 kan man in+ e ]91 [92 sitte re inte en ]92	<i>\$A: [91 is not it poss+ is ]91 [92 is not there a ]92</i>	<incomplete>	
211	\$E: [92 ja inte nä ru får en ]92 SLADD på den < // > @ < unceratin belonging of pause >	<i>\$E: [92 well not when the car starts SKIDDING &lt; // &gt; @ &lt; unceratin belonging of pause &gt;</i>	<unclear>	
213	\$A: kan man [95 man kan vä ställa in ]95 automatväxlar på en å två växlar ofta	<i>\$A: you could [95 you could set ]95 automatic gear boxes to one and two gears often</i>	With an automatic gearbox, one can choose to gear manually.	Reason against 2.5'.1.1 (13)
214	\$R: [95 gå ju ba å frikoppla ]95	<i>\$R: [95 it is just to declutch ]95</i>	<unclear>	
215	\$R: [96 jaa de {t} kan du kan ]96 [97 du kan ställa ]97 in du kan ställa in på tvåan // så får du du kan sega vetdu så du kan du kan [98 allså ]98	<i>\$R: [96 yes you can do that ]96 [97 you can set ]97 you can set it to gear two // and then you you can trudge you know so you can you can [98 you know ]98</i>	Yes, with an automatic gearbox, one can choose to gear manually.	Agr. with 13
216	\$E: [96 ja de går å dra ner: ]96	<i>\$E: [96 yes you can pull it down ]96</i>	<unclear>	
217	\$A: [97 (jeepen) i alla fall ]97	<i>\$A: [97 (the jeep) anyway ]97</i>	<unclear>	
218	\$E: [98 jo man ]98 kan ju ändra de i farten [99 dessutom ]99	<i>\$E: [98 yes you ]98 can change that while driving [99 even ]99</i>	1. Yes, with an automatic gearbox, one can choose to gear manually. 2. It is even possible to choose gears while driving.	A. Agr. with 13 B. Elab. of 13
219	\$R: [99 ja / jaa ]99 / jaa så	<i>\$R: [99 well / yes ]99 / well that</i>	[Feedback: partial disagreement]	Partial disagr. with 13
220	\$E: ti en viss gräns [100 tydlien ]100	<i>\$E: to a certain degree [100 obviously ]100</i>	It is possible to choose gears while driving to a limited extent.	Interpretation, suggestion?

221	\$R: [100 nä ja få ]100 säja de att e ja kan // de // de de finns bara EN nackdel me automatlåder / idag /// å de e de att dom dra LITE mer bensin men de e LITE mer bensin för dom drar mer bensin [101 (...)] (överhuvudtaget) ]101	\$R: [100 no I must ]100 say that er I can // there's / there's there's only ONE disadvantage with automatics / today /// and that's that they cause SLIGHTLY higher fuel consumption but that is SLIGHTLY higher fuel consumption because they do have higher fuel consumption [101 (...)] (at all) ]101	1. Automatics have somewhat higher fuel consumption than manuals. 2. There are no other disadvantages with automatics.	Reason for 16 (2.5'.3) (16.1)
223	\$E: [101 ja men de här e inte rom ]101 nyaste vet du	\$E: [101 yes but this is not the ]101 newest ones you know	1. We are not discussing the most modern version of automatics. => 2. Older automatics may have considerably higher fuel consumption than manuals.	Reason against 2.5'.3 (17) (17.1)
224	\$R: < a > men dom dra mer alltså en automatlåda drar mer bensin de e inge snack [102 om de ]102 de e enda nackdelen // annars e de ta me tusan @ < ingressive >	\$E: < yes > but they need more petrol you know an automatic need more petrol it is no question [102 about that ]102 that is the only drawback // otherwise I'll be damned that	1. Automatics have somewhat higher fuel consumption than manuals. 2. There are no other disadvantages with automatics.	Reason for 16 (2.5'.3) (16.1)
226	\$E: [102 nä nä ]102	\$E: [102 no no ]102	Automatics have somewhat higher fuel consumption than manuals.	Agr. with 2.5'.3
227	\$E: a men de [103 ju ingen födel ]103 heller	\$E: yes but it is [103 no advantage ]103 either	A small disadvantage is also a disadvantage.	Reason for 2.5' (2.5'.3)
228	\$R: [103 å sen så kan du ]103 // sen kan du inte sen så kan du inte < dra [104 igång bilen ]104 de kanske e en nackdel också > men annars e de men annars så e [105 så e de (...)] men annars+ ]105 [106 men annars ]106 < [1001 men annars så e de ]1001 [107 men annars men me: me: men ]107 > me+ men annars så e de alltså bara	\$R: [103 and then it is not ]103 // it is not possible to < pop the clutch to start [104 the car ]104 it is perhaps another drawback > but apart from that there [105 there is (...)] but apart+ ]105 [106 but apart ]106 < [1001 but apart from that there is ]1001 [107 but apart but bu+ but+ but ]107 > bu+ but apart from that there are only advantages	Another disadvantage with automatics is that they cannot be started by popping the clutch.	Reason for 2.5' (2.5.4)

	fördelar ja ka+ jag kan änna som inte @ < quiet > @ < loud >	<i>that I ca+ I can kind of not</i> @ < quiet > @ < loud >		
231	\$E: [104 hrrrm: hrm: ]104	\$E: [104 abem abem ]104	<unclear>	
232	\$A: [105 de (kunde ru gott) ]105 [106 säja om dodge också ]106 [1001 <   > (så här) < krssshh > ]1001 @ < laughter > @ < onomatopoetic >	\$A: [105 you (could well) ]105 [106 say that about the Dodge too ]106 [1001 <   > (like this) < krssshh > ]1001 @ < laughter > @ < onomatopoetic >	That disadvantage could be said about the Dodge too.	<Unclear>
235	\$E: [105 kunde du (...) ]105	\$E: [105 you could (...) ]105	<unclear>	
236	\$E: [106 <   > de ]106 [107 kanske kvittar me en sån storlek ändå ]107 @ < chuckle >	\$E: [106 <   > it ]106 [107 does not matter perhaps with such a size anyway ]107 @ < chuckle >	<unclear>	
238	\$A: kan man inte lägga in en växel på jeepen ettan såhär å så [108 (...) näe ]108	\$A: <i>could not you put the jeep into first gear like this and then [108 (...) no ]108</i>	Is it possible to force the automatic gearbox of the jeep to set the first gear like this?	Request for specification
239	\$E: [108 jo men du kan dra ne re ]108 de går å liksom v+ växla ner på de sättet fast liksom [109 i farten ]109	\$E: [108 yes but you can pull it down ]108 you can like g+ gear down in that way but kind of [109 while driving ]109	1. Yes, it is possible to force set the jeep to first gear like that. 2. It is possible to gear down while driving.	Specification (13)
240	\$A: [109 men du pappa ]109 fö de gå ju å lägga i ettan vanli växel < på jeepen > < /// > @ < quiet > @ < uncertain belonging of pause >	\$A: [109 but listen dad ]109 because you can set it in first gear < the jeep > < /// >	It is possible to force set the jeep to first gear.	Reason for 18 (18.1a)
243	\$R: a men de < oväsentligt vicket de e > @ < quiet >	\$R: <i>yes but it is &lt; irrelevant which it is &gt;</i> @ < quiet >	1. Yes, it is possible to force set the jeep to first gear. 2. That does not matter.	Agr. with 18.1a Disagr. with relevance of 18.1a
245	\$A: jo men då måste de gå å1 DRA igång den då	\$A: <i>yes but in that case it must be possible to POP THE CLUTCH to start it</i>	Yes it matters, because if one can force set the jeep to first gear it ought to be possible to pop the clutch to start the car.	Reason against 2.5'.4 (18) (18.1b)



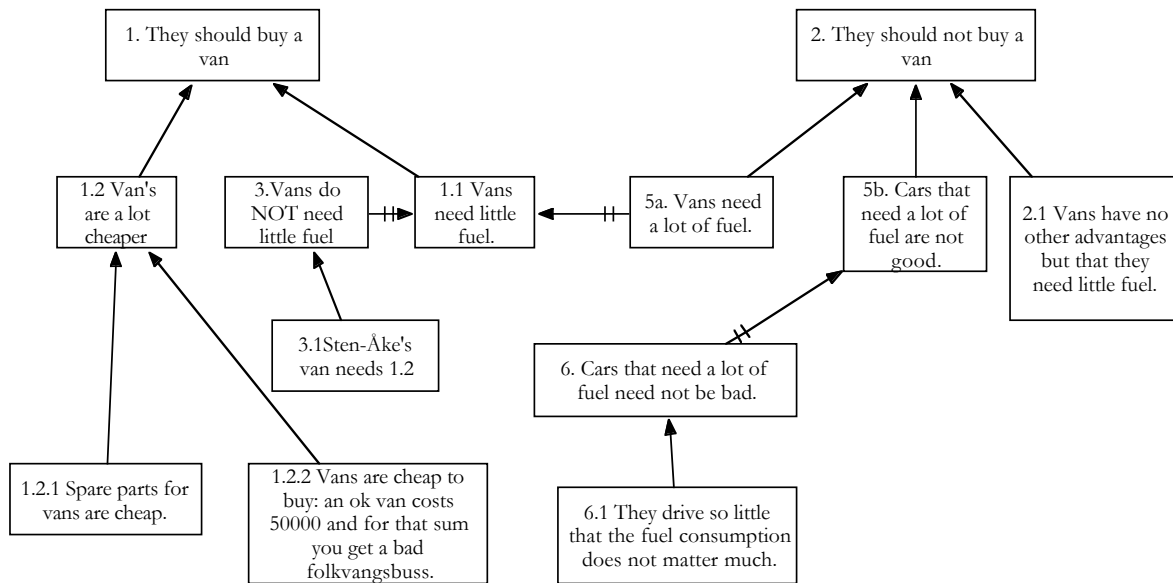
246	@ comment: E har lämnat rummet. Det nästa som hör är hennes röst när hon talar med flickorna. R redodgör långsamt och tyst för det han vet om oljekopplingar.	<i>@ comment: E has left the room. The next thing that is heard is her voice when she speaks with the girls. R gives a slow and quiet account of what he knows about oil couplings</i>		
247	§ End	§ End		

## Appendix 5 – Analytical overview of the argumentation in a conversation

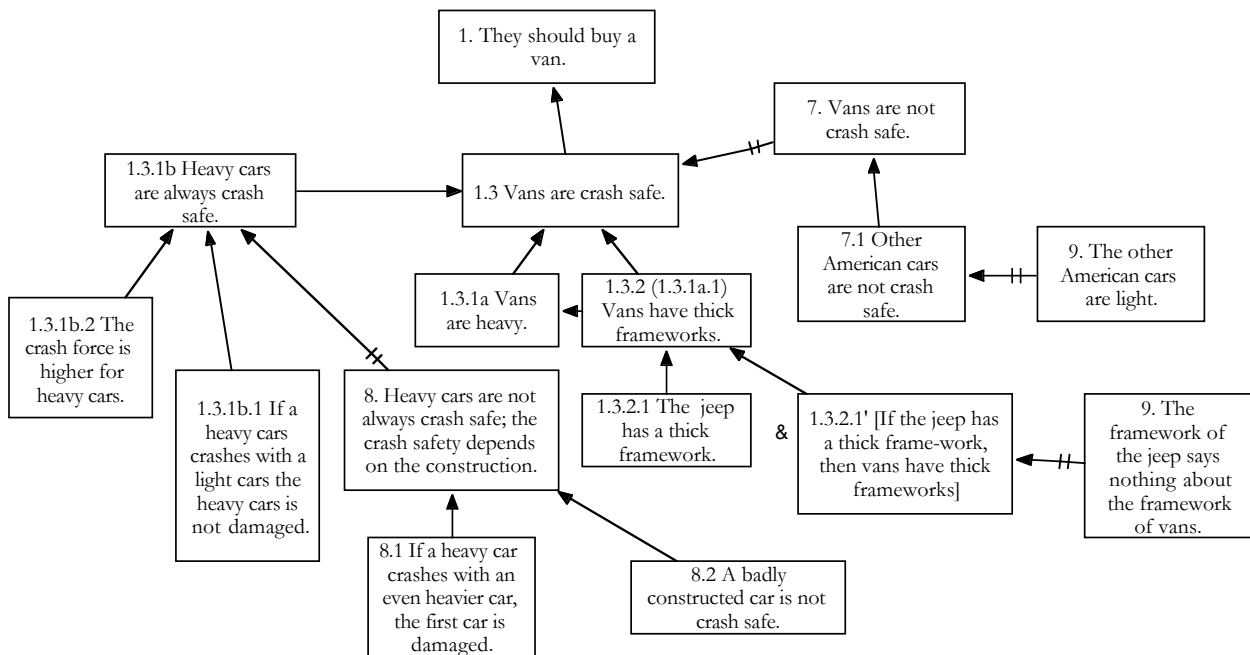
The complete analytical overview is too large a diagram to fit onto an A4 page, and so it is split up in arguments about different topics. Thick border lines denote arguments for which there is sub argumentation in another figure.

The crossed arrows  $\dashv\vdash$  connect conflicting propositions.

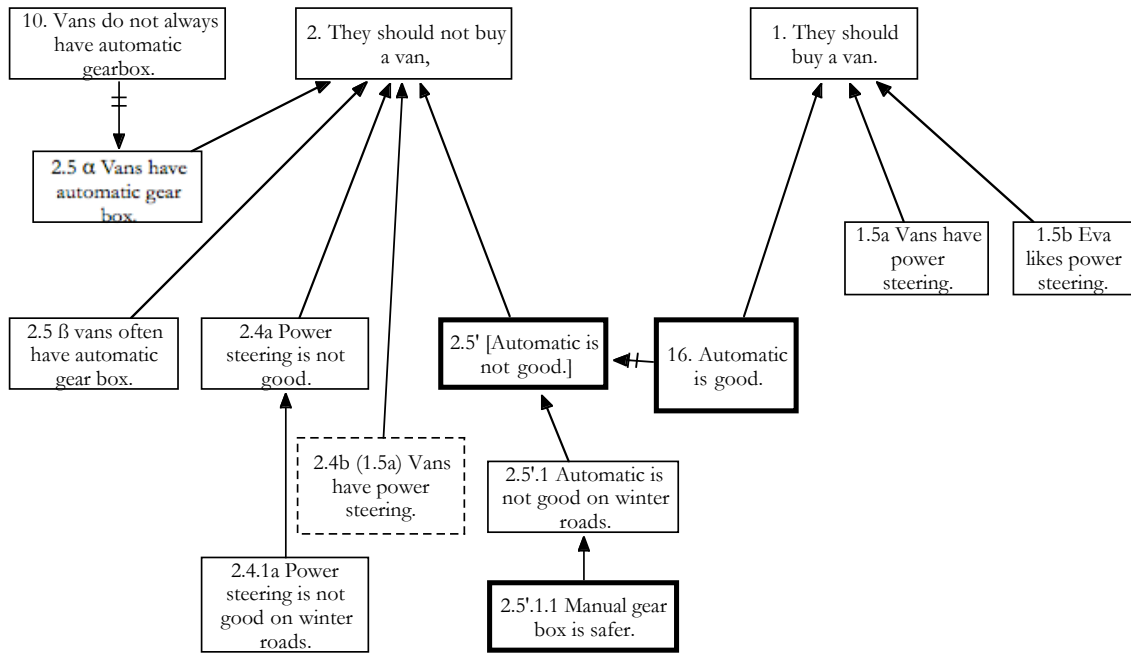
### Economy



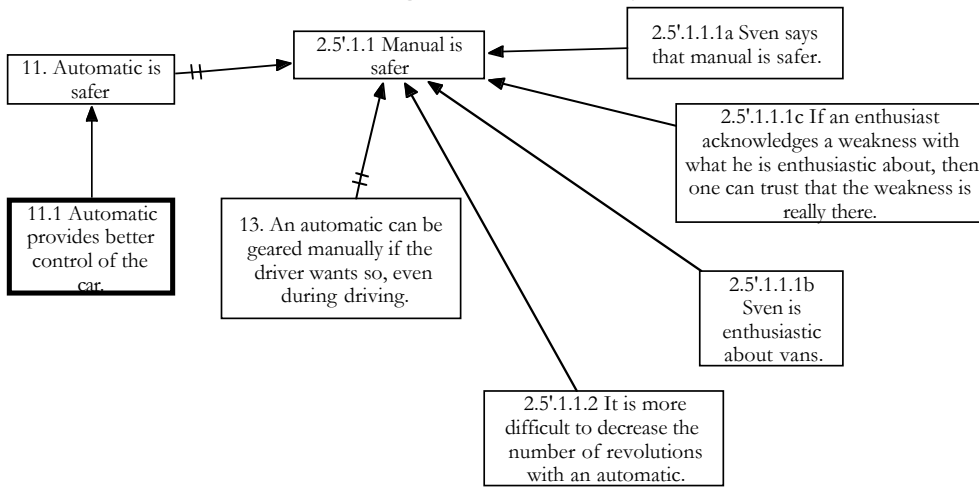
### Crash Safety



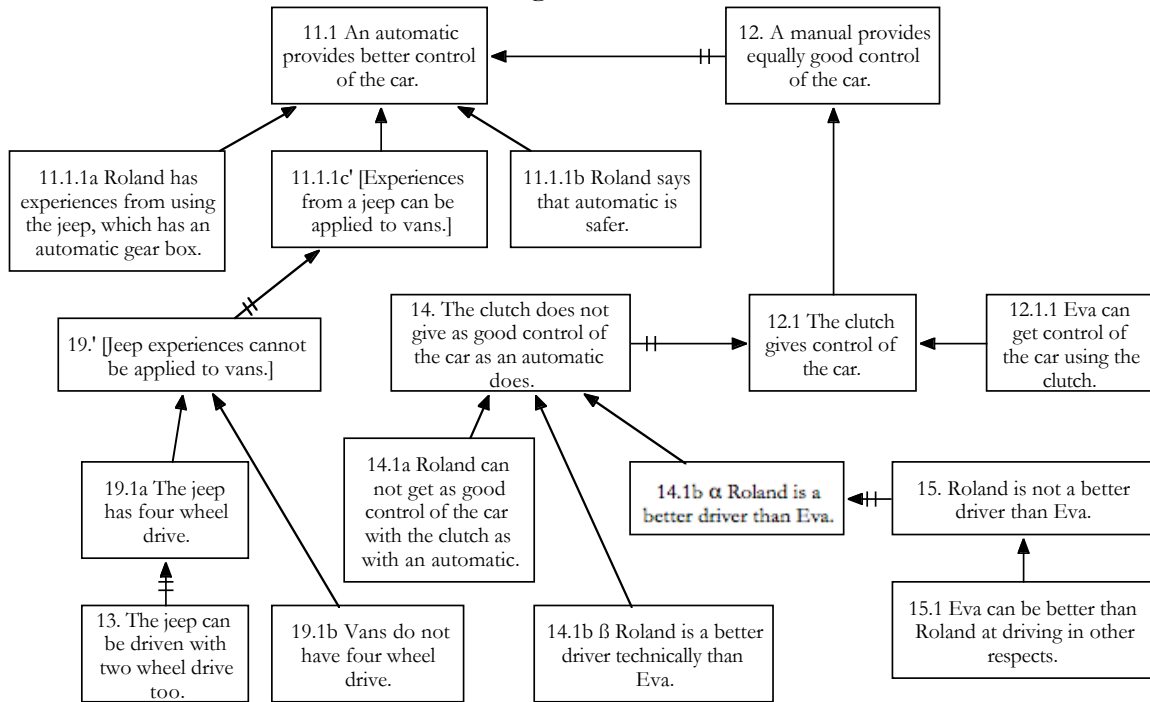
### Automatic gear box & power steering, overview



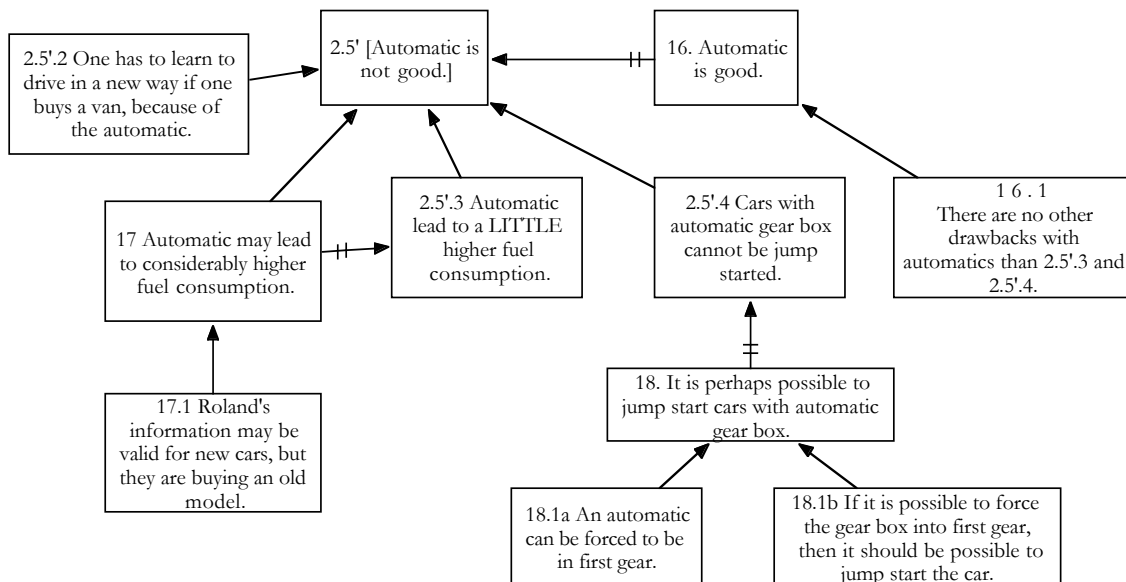
### Automatic gear box, safety



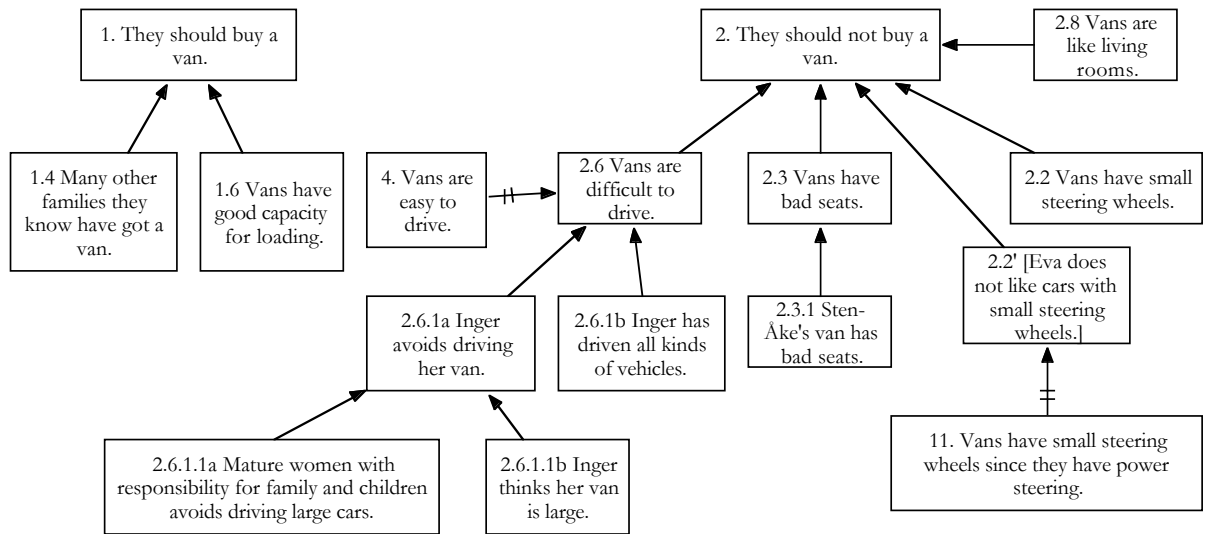
### Automatic gear box, control



### Automatic gear box, other (i.e. not safety or control)



## Miscellaneous



## Appendix 6 – Example of voting

The following extract is taken from the City District Committee meeting (A322501), starting at line 59. It shows how voting is performed.

*The meeting is discussing an issue where there are now two proposals. The chairperson, K, first attempts acclamation, but the opposition requests voting in utterance 4.*

1	<p>\$K: om ja uppfattat nämnden rätt // så finns de två förslag de e tjänstutlåtandet // samt att tillstyrka bägge motionerna / och övesända ärendet till kommunstyrelsen // [29 e de rätt ]29 / [30 båda ]30 // å // att övesända ärendet till till stödjer ni // (av) // e de rätt uppfattat &lt;1   &gt;1 ställe sej nämnden bakom tjänsteutlåtandet &lt;2   &gt;2 ställe sej bakom de av &lt;3 FP &gt;3 me stöd av &lt;4 KD &gt;4 å &lt;5 M &gt;5 lagda förslaget &lt;6 // &gt;6 ja finner en majoritet fö tjänsteutlåtandet          @ &lt;1 event: a few participants says yes &gt;1          @ &lt;2 event: several participants says something, probably yes &gt;2          @ &lt;3 abbreviation &gt;3          @ &lt;4 abbreviation &gt;4          @ &lt;5 abbreviation &gt;5          @ &lt;6 event: several participants says something, probably yes, and probably it is not the same ones as in comment 2 &gt;6</p>	<p><i>\$K: if I have understood the committee right // then there are two proposals that is the official report // and to approve both motions / and pass the issue to the city council // [29 is that correct ]29 / [30 both ]30 // and // to pass the issue to to do you support // (by) // have I got that right &lt;1   &gt;1 does the committee approve the official report &lt;2   &gt;2 does the committee approve the proposal made by &lt;3 FP &gt;3 and supported by &lt;4 KD &gt;4 and &lt;5 M &gt;5 &lt;6 // &gt;6 I find that there is a majority for the official report          @ &lt;1 event: a few participants says yes &gt;1          @ &lt;2 event: several participants says something, probably yes &gt;2          @ &lt;3 abbreviation &gt;3          @ &lt;4 abbreviation &gt;4          @ &lt;5 abbreviation &gt;5          @ &lt;6 event: several participants says something, probably yes, and probably it is not the same ones as in comment 2 &gt;6</i></p>
2	\$X: [29 (...) ]29	<i>\$X: [29 (...) ]29</i>
3	\$X: [30 (...) ]30	<i>\$X: [30 (...) ]30</i>
4	\$X: votering	<i>\$X: vote</i>
5	<p>\$K: omröstning är begärd å ska genomföras // då ta vi ja // fö tjänsteutlåtandet // och nej // fö de av &lt;1 FP &gt;1 lagda förslaget kan vi göra [31 så ]31 &lt;2   &gt;2          @ &lt;1 abbreviation &gt;1          @ &lt;2 event: a few participants says yes &gt;2</p>	<p><i>\$K: vote has been called and will be performed // then we will have yes for the official report // and no // for the proposal made by &lt;1 FP &gt;1 can we do it that way &lt;2   &gt;2          @ &lt;1 abbreviation &gt;1          @ &lt;2 event: a few participants says yes &gt;2</i></p>
6	\$X: e //	<i>\$X: er</i>
7	<p>\$C: e &lt;   &gt; // e tjänstgörande ersättare e Qajsa-Stina Qvillgren // Daniella Dorreni          @ &lt; event: C looks at K, who after a while looks back, nods, and possibly says something to C &gt;</p>	<p><i>\$C: er &lt;   &gt; // er Qajsa-Stina Qvillgren is substitute on duty // Daniella Dorreni          @ &lt; event: C looks at K, who after a while looks back, nods, and possibly says something to C &gt;</i></p>

8	\$K: ja	<i>\$K: yes</i>
9	\$C: Erik Erikson	<i>\$C: Erik Erikson</i>
10	\$E: nej	<i>\$E: no</i>
11	\$C: Fredrika Fredström	<i>\$C: Fredrika Fredström</i>
12	\$F: ja:	<i>\$F: yes</i>
13	\$C: Gustav Gladberg	<i>\$C: Gustav Gladberg</i>
14	\$G: nej	<i>\$G: no</i>
15	\$C: Hans Haraldsson	<i>\$C: Hans Haraldsson</i>
16	\$H: ja	<i>\$H: yes</i>
17	\$C: Ingrid Iman	<i>\$C: Ingrid Iman</i>
18	\$I: ja	<i>\$I: yes</i>
19	\$C: Johan Johansson	<i>\$C: Johan Johansson</i>
20	\$J: nej	<i>\$J: no</i>
21	\$C: Linnea Lin	<i>\$C: Linnea Lin</i>
22	\$L: ja	<i>\$L: yes</i>
23	\$C: Nina Nidstad	<i>\$C: Nina Nidstad</i>
24	\$N: nej	<i>\$N: no</i>
25	\$C: Oda Olevia	<i>\$C: Oda Olevia</i>
26	\$O: ja:	<i>\$O: yes</i>
27	\$C: Qajsa-Stina Qvillgren	<i>\$C: Qajsa-Stina Qvillgren</i>
28	\$Q: nej	<i>\$Q: no</i>
29	\$C: då e de sex ja- // å fem nej- röster	<i>\$C: then there are six votes for // and five against</i>
30	\$K: då ble de bifall ti tjänsteutlåtandet	<i>\$K: so the official report was approved</i>

## Appendix 7 – Rules of order

This appendix contains two examples of rules of order in Swedish associations.

Rules of order for LinTek, the student union of the Institute of Technology at Linköping University.

### Reglemente för fullmäktiges mötesordning

Yrkanden skall framställas skriftligt.

Talare, föredragande undantagen, rekommenderas att inte överskrida fem minuter i första anförandet och tre minuter i senare anföranden.

Talmannen äger medge den som blivit apostroferad i visst anförande replik om högst en minut.

Replik skall begäras i omedelbar anslutning till det aktuella anförandet.

Ordningsfråga bryter debatt i sakfråga och skall avgöras innan annan fråga tas upp till behandling.

Vid beslut om streck i debatten skall talmannen lämna tillfälle åt dem som så önskar att framlägga yrkanden, uppläsa dessa samt bereda dem som så önskar tillfälle att begära ordet. Därefter anmäles streck i debatten. Sedan detta skett kan nya yrkanden icke framställas och nya talare inte erhålla ordet i den aktuella frågan. Replik kan beviljas sedan streck i debatten anmälts.

Endast förslag vartill bifall yrkats under debatten upptas till beslut.

Bordläggning skall i förekommande fall vid beslut först upptas till behandling.

### Rules for meetings of the council

*Motions should be submitted in writing.*

*Speakers, the presenter excepted, are recommended not to exceed five minutes in their first note and three minutes in their subsequent notes.*

*The chairperson is to allow the one who has been apostrophized in a certain issue a rejoinder of at most one minute.*

*Rejoinders must be requested in connection with the address in question.*

*Points of order break any debate on factual matters and must be resolved before any other issues are brought up for discussion.*

*When deciding to close the debate the chairperson must allow members to submit motions, to read these and to furnish members with an opportunity to request the right to speak. After this, closing of the debate is announced. Once this has been done, new motions cannot be submitted and new speakers cannot be given the floor on the issue in question. Rejoinder can be allowed after a closing of the debate has been announced.*

*Proposals will be decided on only if a member has spoken in support of the proposal during the debate.*

*Tabling, should it occur, shall before decision be brought up for discussion.*



Reservation mot beslut i fullmäktige skall anmälas i omedelbar anslutning till behandling av det aktuella ärendet. Formulering av reservation skall vara fullmäktiges sekreterare tillhanda senast en läsdag efter sammanträdet. Det åligger talman och vice talman att före övergången till nästa ärende kungöra namn på samtliga reservanter samt så snart skriftlig reservation inkommit, lydelsen av densamma.

Ledamot har rätt att i förekommande fall anteckna avvikande mening i protokollet.

Fråga som inte upptas i stadgan eller i detta reglemente regleras av talmannen i enlighet med sedvanlig förhandlingspraxis.

KS ska inför varje FUM-sammanträde följa upp tagna beslut i dokumentet beslutsuppföljning.

*Reservations against decisions in the council shall be declared in connection with the discussion of the issue. A phrasing of the reservation shall be given to the secretary of the council at the most one study day after the meeting. Before moving to the next issue, the chairperson and the vice chairperson are responsible for announcing the names of all dissentients. The phrasing of the written reservation shall be announced as soon as it has been submitted*

*Should the occasion arise, members are entitled to have deviating opinions noted in the protocol.*

*Questions that are not covered by the statutes nor by these rules shall be regulated by the chairperson in accordance with common practice of negotiation.*

*KS must before each FUM meeting follow up made decision in the document decision follow-up.*

(LinTek 2006)

Rules of order for annual assembly of Ordfront, a Swedish book association.

### **Yttranden**

Alla yttranden görs från talarstolen.

Ordet begärs genom att lämna en lapp med namn till mötespresidiet.

Replik kan begäras muntligen.

### **Förslag/yrkanden**

Föreningsstyrelsens förslag utgör huvudförslag.

Alla yrkanden lämnas skriftligt till mötespresidiet.

### **Beslut**

Beslut fattas med enkel majoritet med acklamation, dvs genom att de röstberättigade ropar ja på de frågor som ställs (bifall eller avslag).

Mötesordföranden gör sin bedömning av vilket yrkande som fått flest röster och meddelar vilket beslut han anser att stämman fattat och bekräftar detta genom klubbslag.

Den som anser att mötesordförandens tolkning är felaktig begär muntlig votering innan klubban faller. Då genomförs försöksvotering vid vilken stämmodeltagarna genom att hålla uppe sina röstkort ger sin röst tillkänna.

Om någon därefter anser att mötesordförandens tolkning av stämmans mening är felaktig ska rösträkning begäras innan klubban faller. Rösträknarna räknar röstkorten och lämnar sitt resultat till mötesordföranden som med klubbslag bekräftar resultatet.

Stämman kan efter förslag besluta att beslut ska fattas med slutna sedlar.

### **Addresses**

*All addresses are made from the platform.*

*The floor is requested by giving a piece of paper with the name written on it to the presidency.*

*Rejoinders can be requested orally.*

### **Proposals/Motions**

*The proposal of the board is the main proposal.*

*All motions should be submitted in writing to the presidency.*

### **Decisions**

*Decisions are made with ordinary majority by acclamation, i.e. by the voting members calling yes to the questions that has been made (approval or rejection). The chairperson of the meeting makes a judgment of which motion has received most votes and announces which decision he thinks the assembly has made and confirms this by a strike of his gavel.*

*A member who thinks the judgment of the meeting chairperson is wrong, requests oral voting before the strike of the gavel. In that case, a trial vote is made at which the assembly participants show their vote by holding up their voting cards.*

*If anyone after this considers the judgment of the assembly's opinion made by the meeting chairperson to be wrong, counting of votes should be requested before the strike of the gavel. The vote counters count the vote cards and give their result to the meeting chairperson who by a strike of the gavel confirms the result.*

*The assembly can after a proposal has been made decide that decisions should be made with secret ballots.*

Observera att beslut om ändring av föreningens stadgar krävs 2/3 majoritet av de avlagda rösterna.

### **Val**

Om votering begärs vid personval ska omröstning ske med slutna sedlar. Varje valsedel ska uppta högst det antal namn som det antal mandat som valet avser. Om så inte är fallet är valsedeln ogiltig.

### **Tidsbegränsning**

Debattinlägg får vara högst 5 minuter och därutöver kan två repliker beviljas om 2 minuter vardera. Stämman kan besluta om ytterligare tidsbegränsning.

*Note that decisions on changes of the association statutes require 2/3 majority of the given votes.*

### **Election**

*If voting is requested at an election, voting shall be made with secret ballots. Each ballot shall contain at the most the number of names that the number of seats that the election concerns. If this is not the case the ballot is invalid.*

### **Time restrictions**

*Contributions to the debate can be at most 5 minutes long and after that, two rejoinders of 2 minutes each can be granted. The assembly can decide on further time restrictions.*

(Ordfront 2006)

## Appendix 8 – Brief description of the Swedish language

Not all readers can be expected to be familiar with the Swedish language, and in order to help those readers understand the details of the Swedish excerpts in this dissertation, a brief presentation of Swedish will be provided here. The presentation will focus on the similarities and differences between English and Swedish.

### General comparison to English

Swedish and English are closely related, both belonging to the Teutonic branch of the Indo-European tree of languages. What is more, the developments of the structures of the two languages during the last millennia have often been quite similar, and so word order and grammatical categories match to a larger extent than expected when only considering the genetic relations. Quite often a word-for-word translation of a Swedish phrase turns into quite idiomatic English, as in the following example:

Jag	önskar	du	hade	kommit	hit	tidigare
<i>I</i>	<i>wish</i>	<i>you</i>	<i>had</i>	<i>come</i>	<i>here</i>	<i>earlier</i>
'I wish you (would) have come here earlier'						

There are some differences, however, mainly in the verbs and in the nouns.

### Verbs

Swedish verbs do not agree with the subject in number or person:

Jag	bor	i	Sverige	Vi	bor	i	Sverige	Han	bor	i	Sverige
<i>I</i>	<i>live</i>	<i>in</i>	<i>Sweden</i>	<i>We</i>	<i>live</i>	<i>in</i>	<i>Sweden</i>	<i>He</i>	<i>live</i>	<i>in</i>	<i>Sweden</i>
'I live in Sweden'			'We live in Sweden'			'He lives in Sweden'					

As the example shows, the word *bor* is not inflected to agree with the subject, as in English.

Further, Swedish does not have a *do*-construction, but uses reversed word order for questions and a simple adverb for negation:

Du	bor	i	Sverige	Bor	du	i	Sverige?	Du	bor	inte	i	Sverige
<i>You</i>	<i>live</i>	<i>in</i>	<i>Sweden</i>	<i>Live</i>	<i>you</i>	<i>in</i>	<i>Sweden?</i>	<i>You</i>	<i>live</i>	<i>not</i>	<i>in</i>	<i>Sweden</i>
'You live in Sweden'			'Do you live in Sweden?'			'You do not live in Sweden.'						

The word-for-word translations are, as seen, quite intelligible, although they have an archaic ring.

The verb tense systems in Swedish and English are quite similar, with one exception: Swedish does not use the progressive form (*gerund*) the way English does:

Jag spelar ofta tennis.
<i>I play often tennis.</i>
'I often play tennis.'
Jag spelar tennis nu.
<i>I play tennis now.</i>
'I am playing tennis now.'
Att spela tennis är viktigt för mig
<i>To play tennis is important for me</i>
'Playing tennis is important to me.'

People interested in the details of these differences could read (Tonne 2001); Norwegian and Swedish are very similar in this regard.

A last thing to say about the Swedish verbs is that there is a special verb form for forming perfect and pluperfect (the supine), which is separate from the verb form used for forming the past participle (although overlaps are common between the past participle for singular neuter and the supine):

Jag har spelat tennis.
<i>I have played tennis.</i>
'I have played tennis.'
Matchen är spelad. (uter)
<i>The match is played.</i>
'The match is played.'
Kortet är spelat. (neuter)
<i>The card is played.</i>
'The card is played.'
Jag har sprungit.
<i>I have run.</i>
'I have run.'

Loppet	är	sprunget. (neuter)
<i>The race</i>	<i>is</i>	<i>run.</i>
'The race is run.'		

## Nouns

Modern Swedish has two genders for nouns, neuter and uter. The definite form is expressed most often with suffixes, not articles. Two of the more common suffixes are demonstrated below:

Uter	Neuter
stol stolen	bord bordet
<i>chair the chair</i>	<i>table the table</i>

Further, several different suffixes are used to express plural, but not a single one of these is like the English *s*. Some of the more common plural endings are demonstrated below:

stol stolar	bord bord	matta mattor	telefon telefoner
<i>chair chairs</i>	<i>table tables</i>	<i>carpet carpets</i>	<i>telephone telephones</i>

The combination of plural and definite forms gets rather complex. Some of the more common ones are demonstrated below:

stol stolarna	bord borden	matta mattorna	telefon telefonerna
<i>chair the chairs</i>	<i>table the tables</i>	<i>carpet the carpets</i>	<i>telephone the telephones</i>

The patterns for forming plural and definite forms are derived entirely from the three gender system of old Norse, and corresponding forms of the demonstrative pronoun *inn*, which developed into definite suffixes. For the modern language user, the distribution of inflectional patterns seems rather arbitrary.

## Written vs. spoken language

On the word level, the main difference between spoken and written Swedish is that there may be several spoken words corresponding to a single written word. To put it more colloquially, there is more than one way to pronounce many of the written words. From a written language perspective, the differences mostly consist of contractions:

Written	Spoken	Written English
jag	[jɑ:g] or [ja:]	<i>I</i>
det	[de:t] or [de:]	<i>it</i>

roligt	[ru:ligt] or [ru:lit]	<i>funny</i>
är	[æ:r] or [e:]	<i>am/is/are</i>

In the excerpts in this dissertation, the short forms are very common.