The use of teams to improve the quality of intelligence analysis

Lise Charlotte Ekroll Ingalls
Summary

This work sets out to explore a new contribution to alleviate the distortive impact that inherent intellectual shortcomings may have on intelligence analysis. This is highly relevant in efforts to improve intelligence, as failures in analysis are closely linked to intelligence failures. Previous work to address this issue has covered a wide range of approaches, to include the development of the use of alternative competing hypotheses. Business management has established that the use of teams is suitable to improve performance at critical delivery points, but a more in-depth discussion on the team factor in intelligence analysis seems not to have been carried out. Thus an exploration of this factor is well worth trying.

The work used both a theoretical and an empirical perspective in exploring the relevance of the use of teams in analysis. The aim of the work was see if adequate substantiation could be made in order to claim that the use of teams in intelligence analysis could improve the quality of analysis, i.e. enabling the production of predictions which are more accurate than they would be without the use of teams. The theoretical perspective drew on literature from both management and intelligence. The primary data was collected by conducting individual interviews with personnel from the tactical level of an intelligence organisation in the Norwegian Armed Forces who were either all-source intelligence analysts or were working in positions closely associated with such analysis in the same intelligence unit. Following analysis it was determined that the use of teams in intelligence analysis could improve the quality of analysis, and herein lies the main contribution of this work. As this conclusion is primarily valid for intelligence analysis at the tactical level, further study on the use of teams at the strategic level of intelligence is recommended.
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Lise Charlotte E. Ingalls
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Chapter 1

Introduction

1.1 Background

"All men by nature desire to know.” are the opening words of Aristotle’s *Metaphysics*. A quest for knowledge is also at the core of intelligence, though in a somewhat different form, as intelligence’s aim is to know about events that are yet to happen - to foretell. As Michael Herman puts it “Intelligence’s greatest value is as a guide to the future.” (Herman 2002:11). In Western democracies this important and challenging task is undertaken as an advisory activity in servitude to the government, or the constitution, be that directly to high-level political decision makers or more indirectly in a military context. In either case, it is far from an understatement to claim that undertaking to be a guide to the future is both complex and challenging.

Failures of intelligence to foretell, and thus the failure to serve as a guide to the future, have led to many thoughts on how to improve its prediction capabilities. The search for explanations of why intelligence fails has identified a number of possible answers, to include discourse failure\(^1\) and the politicization of intelligence\(^2\). However, it is widely recognized that intelligence failures are most likely the consequences of intellectual shortcomings in individuals.

In addition to the inherent challenge which lies in those shortcomings, the challenges in analysis are augmented further as analysts face a more complex geopolitical environment and the multifaceted complex conflicts, also known as *new wars*\(^3\). It is fair to claim that changes in the geopolitical environment as well as new wars have resulted in greater demands on UN members as well as NATO member states to provide military contributions to operations abroad. Such contributions may include on site intelligence analysis, and analysis thus faces yet another potential challenge - that of having to be carried out in a setting which in many cases is considerably more taxing and demanding that the normal daily working environment at home.

In part due to the strong association with secrecy, a sense of specialness can be said to permeate intelligence and thus possibly render it resistant to influence from other fields of study. However, even seasoned intelligence professionals and scholars have acknowledged that intelligence can benefit from insight gained in other fields of study.\(^4\) Michael Herman has indicated an underlying question in the literature of how far intelligence can learn from business management, and following this he asked

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1 See for example Neuman & Smith (2005).
3 See for example Olsen (2007).
4 See for example Phythian (2008:62).
“Does intelligence resemble the rest of the world or is it unique?” (Herman 1996:284). One may be tempted to answer Herman’s question with yes - intelligence is unique, and yes - in some areas it does resemble the rest of the world. In the latter case it could be interesting to further explore if there are methods or approaches to improving performance ‘in the rest of the world’ which can be applied into the former - the unique world of intelligence - and serve to improve it. Business management has identified the use of teams as one way of enhancing performance, and the relevance of a team approach to intelligence analysis is what will be explored in this thesis.

1.2 Research question and brief outline

This thesis will partially address Herman’s above question from a novel angle by aiming to answer the following research question:

Is there something to learn from the use of teams in business management which can be used to improve the quality of intelligence analysis?

By improved quality of intelligence analysis is meant the enhancement of the ability of analysts to make predictions which are more accurate, i.e. more successful in accurately describing the intentions of the opponents than what would have been the case without the use of teams. The work will be carried out according to the main structure outlined below:

- This first chapter will further include a clarification on selected terminology, as well as a brief presentation of intelligence failure and the role of analysis.
- The second chapter contains reflections on methodological challenges with emphasis on the collection of primary data.
- The third chapter initially deals with the link between intelligence analysis and intellectual shortcomings, before proceeding to explore how something can be learned from the use of teams in business management from a theoretical perspective. The chapter also includes a more detailed description of teams.
- In the fourth chapter the findings resulting from analysis of the collected empirical data is presented, and this empirical perspective completes the framework prior to the discussion in the final chapter.
- The fifth chapter contains a discussion on the use of teams in intelligence analysis, before proceeding to final remarks and a conclusion pertaining to the research question.

The remaining sections in this chapter will present clarification on relevant terminology before proceeding to briefly present intelligence failure and the role of analysis.
1.2 Briefly on intelligence

Intelligence is a ubiquitous and important phenomenon, and this section will briefly present some key characteristics of intelligence in order to provide an initial overall frame before proceeding. The main activity of intelligence is information gathering and exploitation (Herman 1996:56). What sets intelligence apart from other information is both the special means which it can utilize to gain the desired information, and the study of particular subjects, most often foreign and military ones. In order to protect sources and methods, intelligence is also often shrouded in secrecy. The main reason for this is the vulnerability to countermeasures, which again reflects the reciprocity of intelligence. In its glossary of terms and definitions the North Atlantic Treaty Organisation describes intelligence as:

The product resulting from the processing of information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations. The term is also applied to the activity which results in the product and to the organizations engaged in such activity. (NATO 2009:136).

The above description provides reasonably good guidance as to what intelligence is about, and it is very clear on the role of *information*, the *subjects* of intelligence and how intelligence can be viewed as a *product*, but it is less precise in communicating certain other key characteristics of intelligence, as for example the *secrecy* and *collection* aspects. Another example of a definition of intelligence is the following from Peter Gill who proposed that intelligence is:

[M]ainly secret activities – targeting, collection, analysis, dissemination and action – intended to enhance security and/or maintain power relative to competitors by forewarning of threats and opportunities. (Gill 2009:214)

The purpose of including Gill’s definition here is merely to illustrate that there is more than one way to view or describe intelligence, but Gill’s inclusion of *action* in the suggested definition deserves further comment, which can be found in the next section.

1.3 The essence of intelligence - an advisory role

The essence of Western intelligence is to provide information and forecasts on which others take action, not taking action itself (Herman 1996:56). Even though there is some division among scholars as to whether the concept of intelligence should include taking action (Gill 2009:215) the work in this thesis rests on Herman’s (2006) view on the issue. Although covert action has confused public attitudes, there are general assumptions that intelligence’s proper role is advisory and not executive, and this is an important distinction between the liberal ‘Western’ concept and the role of intelligence in for example the former Soviet Union and other authoritarian regimes (Herman 2002:17-18). Although Herman mainly refers to intelligence at the strategic national level, the same principle applies to the role of intelligence in a Western military setting, i.e. that of intelligence as having an advisory and not an executive role, and the work in this thesis rests on the aforementioned view.
1.2 Strategic versus tactical intelligence

In intelligence terms, there is a distinction between strategic versus tactical intelligence resources. Institutionally the former is the national and central departments and agencies, whereas the latter is an intelligence term for everything below the national, strategic level of control, under the control of military commands (Herman 1996:36). For example, the ‘theatre resources’ available to General Schwarzkopf in the Gulf War were ‘tactical’ in this sense, even though they served both the operational and strategic levels of command (Herman 1996:36).

The classification of intelligence resources in intelligence terms differs from the military classification which corresponds with the different levels of command. For example the current NATO Glossary of Terms and Definitions (2009) contains descriptions of strategic, operational and tactical intelligence, directed towards describing at which level the product of intelligence is intended to serve. Strategic intelligence is “Intelligence required for the formulation of policy, military planning and the provision of indications and warning, at the national and/or international levels.” (NATO 2009: 215). Operational intelligence is “Intelligence required for the planning and conduct of campaigns at the operational level.” (NATO 2009: 173), and tactical intelligence is “Intelligence required for the planning and execution of operations at the tactical level. (NATO 2009: 220).

This thesis will use the distinction between strategic and tactical intelligence with reference to both resources and product. Strategic intelligence is a national resource under central control, and produces for use at all levels according to needs and sources (Herman 1996: 123). Tactical intelligence is ‘local’, under sub-strategic control and is used at operational and tactical commands (Herman 1996:123).

1.4 The intelligence cycle, analysis and intelligence product

The production of intelligence is often viewed as taking place within a cycle, and a dominant view is that of an intelligence cycle wherein the process is driven by user requirements and priorities, leading to an adjustment of collection to meet requirements, followed by collection and analysis, before disseminating the product (Herman 1996:284). This lends itself well to the metaphor of intelligence as an orderly process originating in users’ needs, but the cycle is in fact a military creation (Herman 1996:286). A four stage intelligence cycle is also found in current NATO official texts, where the process is described as a cycle consisting of the four phases direction, collection, processing and dissemination (NATO 2009: 136) and where analysis is described as:

In intelligence usage, a step in the processing phase of the intelligence cycle in which information is subjected to review in order to identify significant facts for subsequent interpretation. (NATO 2009:57)

In this work, when using the word analysis, what is referred to is known as all-source intelligence analysis, which is not limited to the strategic level but also can take place at the tactical level. Even
though the scope and amount of information available for analysts may differ between the two levels, the point is that all-source analysis draws on available information to produce ‘finished intelligence’. The essence of all-source analysis is “the special responsibility for authoritative intelligence judgements.” (Herman 1999:109), and a key element in such analysis is the ability to see things through the target’s eyes (Herman 1999: 109).

Finished intelligence come in different shapes and sizes, but are often known as estimates or assessment, terms which are often used in connection with the strategic level and long term intelligence. In this work the word predictions will be used, as it reflects both the tactical level from which the empirical findings originate as well as the foretelling aspect of the product.

Now it is time to move closer to the core of this thesis, and so the attention will shift towards intelligence failure and the role of analysis.

1.5 Intelligence failure

In Sherman Kent’s words “Intelligence is bound to make mistakes.” (Kent 1949:194) and other scholars have pointed out that “The possible failure of intelligence to assess a situation correctly is a danger coeval with intelligence itself.” (Shulsky and Schmitt 2002:62). When intelligence makes mistakes, it fails to be a valuable guide to the future and thus diminishes in value to its users.

The best known variety of intelligence failure is warning failure, in particular against surprise attack in peacetime and as war initiation (Herman 1996:221). Another situation, closely related to warning failure is when a nation expects an attack but due to “a serious misestimation of where or how it will occur, responds disadvantageously.” (Shulsky and Schmitt 2002:62). Intelligence failure also includes longer running misjudgements, such as the mistakes of the US intelligence community in assessing the Soviet intentions and military capabilities during the Cold War (Herman 1996:222). The failure of intelligence to forecast political coups and regime changes is another damaging surprise a nation may suffer, and this can be a “serious blow to a nation’s foreign policy interest.” (Shulsky and Schmitt 2002:62). In the words of Shulsky and Schmitt

An intelligence failure is essentially a misunderstanding of the situation that leads to government (or its military forces) to take actions that are inappropriate and counterproductive to its own interests. (Shulsky and Schmitt 2002:63)

The above quote points to the importance of understanding a situation correctly and failure to do so can occur at both the strategic and the tactical level of intelligence. The need to reduce the likelihood of such failure is therefore an important part of greater efforts to ensure optimum policy and military responses.

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1.6 Causes of failure and the role of analysis

In the search for determining causes of failure scholars have identified several possible answers, and the main distinction is between causes which are primarily exogenous to the intelligence organization versus those which are primarily endogenous. Of the exogenous, one of the most notable ones are when the mistake rests with “the decision makers who consume the products of intelligence services.” (Betts 2009:87). Another exogenous cause is discourse failure which sees intelligence failure in connection with a broader atmosphere of complacency. However, academics that focus on the role of the intelligence community in intelligence failures, and not the role of the policymaking community, tend to believe that analysts are to blame for intelligence failures (Kuhns 2003:83). Although one does not precisely know the percentage of failures due to collection deficiencies versus analytical failure, Kuhns states that a number of important failures have been identified where the problem seems to be principally analytical (Kuhns 2003:84). This is supported by Bar Joseph, which in connection with the Yom Kippur case states that:

the evidence supports the dominant school in the study of surprise attacks, that the incorrect comprehension of the meaning of available information prior to attack, rather than the lack of such information, is the principal cause for such failure (Bar Joseph 2003:184).

The view that analysis is at core of intelligence failure is also supported by Shulsky and Schmitt:

Aside from instances in which relevant information cannot be obtained at all, intelligence failure refers to a disorder of the analytical process that causes data to be ignored or misinterpreted. (Shulsky and Schmitt 2002:64)

The above quotes substantiates that intelligence analysis is a relevant topic to explore within the area of intelligence failure. It should be noted that the quotes primarily revolve around strategic intelligence, but nevertheless they point out that the challenges in improving intelligence lies closer to analysis than to collection. The above thus indicate that efforts to improve intelligence analysis would be of value, at whatever level of intelligence. However, not all scholars agree with the interpretation of the relevance of improving analysis.

For example, Richard K. Betts claims that the belief that intelligence disasters can be avoided by perfecting norms and procedures in analysis is illusory and that such a belief could be dangerous if it leads to a belief that systemic reforms will increase the predictability of threats (Betts 2009:87). In his view, intelligence can be improved marginally, but not radically, by altering the analytical system. (Betts 2009:87). The aim of this thesis is not to argue for a radical change of the analytical system, nor to suggest new norms or procedures in analysis. The aim is to explore how reflections on the discipline of teams in a business management context can be of value in improving the quality of intelligence, to the benefit of the users. In an activity as significant and ubiquitous as intelligence even a marginal improvement should be welcomed.

6 See for example Neumann & Smith (2005)
Chapter 2

Methodological challenges

The purpose of this chapter is to present the main methodological considerations in the study. Section 2.1 contains a brief presentation of the overarching approach to the research, before in section 2.2 commenting on the two-tiered approach of using a theoretical and an empirical perspective. As the main methodological challenges in this study lie in the collection of the empirical data, significant emphasis is placed on providing a solid account of the various decisions involved in designing the method of collecting and analyses of the data, and this spans across sections 2.3 through 2.13. The final point in this chapter is the discussion on validity in section 2.14.

2.1 Exploratory research

Although it is recognized among some scholars that other fields of study can lend value to intelligence, the approach in this thesis is a novel one and the connections it seeks to explore are not widely addressed in neither in intelligence nor in business literature. This clearly points to the need for flexibility in the research process, and thus clearly indicates the appropriateness of an exploratory approach. A main benefit of this approach is also that it allows for an adjustment of the angle of the work, even after data has been collected.

2.2 A two-tiered approach

The research is carried out in two main steps. The first one has a theoretical approach and draws on both intelligence and business management literature. This consequently leads to some tentative conclusions, which rest solely on a theoretical foundation. Therefore the second main step is empirical, and draws on interviews with people who are thought to have knowledge of the challenges encountered in and inherent to intelligence analysis. The most significant methodological challenges in this work lie within the design and implementation of the collection of primary data, and this will therefore be the main focus of the ensuing deliberating on methodological challenges.

2.3 Written versus verbal method of collection of data

The primary data I wanted to obtain was personal accounts, impressions and points of view of intelligence personnel in a military setting. As new wars have briefly been mentioned as one of the
elements of the greater context for intelligence analysis, the personnel would preferably also have first hand experience in performing intelligence analysis in such a challenging environment.

The information could be acquired by using either a written or a verbal method (Andersson 1995:23). The use of a written method would in this case entail a massive amount of work in preparing adequately detailed documentation to address the questions at hand, and it would also preclude a flexible and dynamic approach in the interaction with the subjects who were to provide the data. This pointed in the direction of using interviewing as a method, but when in search of specific information other methods than interviews can also be of use, for example participatory observation which in some cases may even provide more correct information of what actually takes place than interviews would (Andersson 1995:19). However, the value of this added value must be weighed against the time and cost required to conduct it (Andersson 1995:19-20). In this case the relevance of participatory observation may be questioned, but as it was clear from the onset that time restraints did not allow for the securing of adequate observational opportunities, this method was not an option to be considered.

I therefore decided to use interviews as the method for collecting data. This again requires some specific methodological considerations, one of which is to consider which type of interview will be the most suitable. There are several types of interviews, of which some main categories are telephone interviews, group interviews and individual interviews (Andersson 1995:23) and they will be discussed later, as the following section will deal with the selection of interviewees.

### 2.4 Selection of interviewees and ethical considerations

The selection of interviewees should ideally be part of a deliberate selection process. In this case preferred interviewees would be personnel currently or recently employed in intelligence analysis in a military context. Initially, rather than seeking to interview a selection of people with complementary roles in intelligence, the intention was to obtain interviews with several people with the same or very similar backgrounds as analysts. On the other hand, as long as the interviewees have relevant intelligence background, it can also be an advantage to interview personnel outside but close to analysis, as this may provide broader and complementary perspectives, and this is the approach I opted for.

The desired type of interviewees limited my ability to select them myself, mainly as there is often sensitivity issues involved when people from outside the intelligence community attempt to obtain contact with such personnel. Thus I was reliant upon assistance from an undisclosed point of contact in order to gain access to the desired type of interviewees. This does not mean that it was a sample of convenience, as the selection in part rested upon an initial sketch of this project as well as on the aforementioned considerations regarding the composition of the sample. In that sense the selection of interviewees was to a certain extent the result of a deliberate and specific selection process, even it could not be carried out directly by me.
The interviewees in this study are personnel from the tactical level of an intelligence organisation in the Norwegian Armed Forces, and they are either all-source intelligence analysts or are working in positions closely associated with such analysis in the same intelligence organisation. It was part of the arrangement that the interviewees would remain anonymous throughout the process, and as a result no personal data has been processed or collected in this work.

The information that I seek to obtain through the interviews are experiences, points of view and opinions of people who have first hand experience in working within intelligence analysis or closely associated work. This type of information can be collected and analysed even if personal data of the interviewees is not collected or included in the analysis. However, that is not the preferred approach as it reduces the ability to trace and verify findings. In this case, however, that weakness had to be accepted in order to secure access to relevant sources for the interviews.

2.5 Selection of type of interview

Now that the selection of interviewees has been explained, it is time to return to the selection of type of interview. If the interview is relatively limited and the questions are uncomplicated, a telephone interview is a possible solution (Andersson 1995:24). If the questions are designed to obtain simple facts, then making a call or sending an e-mail would be suitable (Repstad 2007:98). An advantage of conducting for example a telephone interviews is that it enables one to carry out a number of interviews with relatively little use of time, as it does not require the use of time to travel to and from interviewees, and it is also often a relatively low-cost method (Andersson 1995:24). However, this method not only entails that the interviews become impersonal, but also results in the loss of some of the advantages in personal interviews such as for example the opportunity to interpret the information conveyed through body language (Andersson 1995:24). As the questions in this case revolves around issues such as cognitive processes and human interaction, it is fair to assume that the questions will deal with aspects that are too complex to be properly addressed in a somewhat impersonal telephone interview or in an e-mail, and therefore these methods were rejected.

In this case, a group interview may at first glance appear to be an interesting option. Such a method not only carries with it the appeal of possible cost-efficiency and economy of effort, but it also allows the different members of the group to comment upon each other statements. At the same time it is important to be aware that a group interview also has some drawbacks. One such drawback is that groups are often dominated by one or a couple of persons, and another is that some people may be uncomfortable speaking in a group setting and consequently their potential contributions may go undisclosed (Andersson 1995:25). In addition, there is the risk that people respond differently in a group interview than they would in an individual one, as they are aware that the other members of the group expect a certain type of answers (Andersson 1995:25). A group interview is suitable in cases where the group is reasonably aligned and without significant internal conflict (Repstad 2007:100).
Nevertheless a group interview was not selected in this case, mainly because I believe that I would obtain more information from the interviewees in individual settings than in a group setting, as the possibility to dwell on the views and experiences of one interviewee is better exploited in an individual setting. In addition, if opting for a group interview, I would lose the possible cumulative effect that similar answers to the same questions by different people can have on the data. This deserves some comment in light of the possible effect the interviewees may have on each other, but this will be included in a later section.

The reason for choosing a verbal method over a written one is often that the interviewer wants to be in close contact with the interviewee and seeks to conduct the interview much like a conversation wherein adaptations can be made underway, to include the possibility to rephrase questions (Andersson 1995:24). I believe that these benefits are optimized in an individual interview, and thus this becomes the final point in the process leading to the decision to use individual interviews to collect information from primary sources.

2.6 The number of interviewees

Another pertinent question is how many interviewees are required in order for the obtained information to be reliable for the purpose of the study (Andersson 1995:21). As this thesis aims to explore aspects that may be relevant to intelligence analysis, and as the outlook is strongly associated with military matters, it was desirable to interview people who currently are or previously were engaged in such work in a military context. However both time restraints and the potential sensitivities involved in any intelligence matter made it clear that extensive interviews with a large number of interviewees was not a viable option.

This is not necessarily a negative thing, as there is no standard reply to how many interviews must be carried out in qualitative studies, and this must be determined in each specific case (Repstad 2007:84). Furthermore, a project usually benefits from conducting more thorough analyses of view interviews rather than superficially analysing many (Repstad 2007:84). In dialogue with my point of contact in the intelligence organization we agreed on a number of interviewees at their discretion, - preferably somewhere between five and ten, and in the end it turned out to be six.

2.7 Structure of interviews

Interviews may vary from being very rigidly controlled to being very loosely structured (Andersson 1995:25). The former entails that all questions, areas of questioning and their order are predetermined, and the interviewer merely has to read them out loud and note the answers (Andersson 1995:76). Such an interview could serve to ensure that all desired topics are covered, but on the other hand it seems rigid and not flexible enough to be able to pursue topics of interest which may emerge during the course of the interviews. A loosely structured interview may seem more appealing as it allows for an
adaptive and more spontaneous setting, but on the other hand the interviewer runs the risk that the desired topics or sub-topics are not being adequately addressed (Andersson 1995:77). If the interview is conducted by simply letting it run as a regular conversation, it is termed an unstructured interview, even though the interviewer most often has a clear perception of what he or she wants to get from the interview (Andersson 1995:77).

More common than this latter type of interview is the semi-structured interview, where the subject of the interview as well as the type of desired information has been decided in advance (Andersson 1995:77). However the exact questions and sequence of the different themes have not been decided, but depend upon the development of the conversation on a case by case basis (Andersson 1995:77). Such interviews are also termed qualitative interviews, they are well suited to collect information which is difficult to obtain through other means and the method allows for the emergence of new and unforeseen aspects during the course of the interview (Jacobsen 1993:19).

There needs to be an underlying system of what topics are to be addressed during the course of the interviews and such a purpose can be served by an interview guide. Such a guide often contains some main questions, some prepared sub-questions and maybe some alternative questions, but the guide does imply the pursuit of a slavish plan (Repstad 2007:78). It can be an advantage if the interview guide is built on cues and key words, free from questions formulated in detail, as this requires the interviewer to formulate the statements during the course of the interview which will then subsequently more resemble a normal conversation (Repstad 2007:78). A purpose of using a guide is to assist in ensuring that all interviewees meet relevant and comparable themes and ensure that the interviews are structured enough to be processed and compared to each other (Jacobsen 1993:19).

I have no formal training or experience in conducting interviews in a research setting. This may be a weakness as it may preclude me from being able to optimize the potential value of the interview, which again points in the direction of a more structured rather than a loosely structured or unstructured interview. Nevertheless a rigidly controlled interview would in my opinion not be best suited in this case, as it would preclude the ability to allow the interviewees to bring up and elaborate on aspects that are relevant but which have not been included in the prepared questions. Therefore I will use a semi-structured interview as it allows for the desired flexibility in the interview setting while at the same time making use of an interview guide to ensure that all the prior selected themes are addressed in each of the interviews.

### 2.8 Working with the interview guide

During the work on determining what the interview guide should look like, it became clear that there is no predetermined answer as to what exactly a semistructured interview guide should contain. Thus it necessary to tailor the interview guide to the specific interview situation. One possibility is to simply present a grand tour question supplemented with floating prompts (Leech 2002). Although this tempting option requires little advance preparation of questions and can potentially lead to a plethora
of information, such an approach would probably require a more experienced interviewer than me, and could also entail a less precise interview and considerable more work in sifting through the material post-interview. Even so, in my situation a grand tour question can be useful in the early phase of an interview, as the interviewee’s response to such a question can potentially yield valuable information on nuances in the topics that he or she is comfortable speaking about and is specifically interested in, which again can be of value to me as I decide how best to progress in each interview.

As the use of specific questions may be helpful for the inexperienced researcher (Lüders), such an approach seems suitable in my case. However, if followed too mechanically, an interview guide can interrupt the conversational flow of the interview and should therefore be kept as a background checklist (Lüders). In order to contribute to a calm interview setting, provide the best opportunity for the interviewee to contribute with reflections and associations, as well as addressing my need to be able to make adequate notes, I chose to construct an interview guide which emphasises the simplicity of few main questions combined with a longer list of possible follow-up questions which can also serve as a checklist if the desired topics have been addressed.

As the interviews were carried out in Norwegian, the interview guide was written in Norwegian, see annex 1. This allowed for an easy flow of questions and answers during the interviews. In order to facilitate readability of the interview guide for the English language reader, I have translated it into English, see Annex 2. The translation was target language oriented and intended to enable English language readers to get an impression of the approach of the guide, more than aiming to be an exact English language replica of the Norwegian version.

### 2.9 Recording the data

When interviewing, the use of tape recorders is the method of choice by many researchers and the method has many advantages, but one disadvantage is that some respondents seem to be almost allergic to them (Repstad 2007:84-85). Another option is to take hand written notes, and the use of such a method can have an impact on the tempo on the interview, the interviewee is likely to be more attentive to wording and be more reflective, and the concentration of the participants improves (Häger 2001:139). This does not mean that using hand written notes are without challenges. It may necessitate that the interviewer will have to briefly pause the process to take down a quote, and there must be time available shortly after the interview to complete the notes with more comprehensive text while the interview remains fresh in one’s mind (Häger 2001:140).

However, it is not only a matter of my preference and methodological suitability, the preferences of the interviewees must also be taken into consideration. In this case the question was quickly resolved when it became clear that the interviewees preferred that the information be recorded by hand written notes rather than by the use of a tape recorder.
Rather than traditional note-taking, I will rely on the use of mind-maps\(^7\) during the interviews. This will allow for great flexibility both with regard to looping back and allowing cross referencing merely by the use of an arrow. This is a method which I have used extensively both during studies and in work settings, and in it allows me to process large amounts of information in a quick and efficient manner, and it does not preclude me from noting exact quotes or pertinent points as part of the recording process. In order to reap the full benefits of the notes I will endeavour to make a more comprehensive full text version of the notes as soon as possible following each of the interviews.

The interviews were carried out in Norwegian, and the mind-map notes were also made in Norwegian. In the transcription process the data was translated into English in order to render it usable for this work. I recognize that this is a possible source of error, but not so significant that it has a decisive negative impact on the value of the data.

2.10 Effect of interviewer and interviewees

An interview is an interaction between at least two people wherein both interviewer and interviewee react on and affect each other (Starrin and Renck 1996:58). This entails that both the interviewer and the interviewee in different ways will have an impact on the interview and the information derived from it. In this section I will briefly highlight some aspects of such influences, but it should be noted that this is merely a reflection on awareness of such aspects and is not intended to be an exhaustive account of all such effects.

As part of the efforts to secure access to relevant interviewees, I provided my point of contact with an early sketch of the approach to the work. This was a necessary and decisive point in securing access to the interviewees, yet I recognize that already at this point the influence of the interviewer on the outcome of the interviews was at work.

The people I interviewed worked in a military intelligence setting. I do not have experience from working in an intelligence organization, and my academic knowledge of the topic of intelligence is from the intelligence studies course at the Norwegian Defence University College in the fall of 2008. On one hand this may be viewed as a weakness as I have limited insight into the finer inner workings of intelligence and intelligence analysis. On the other hand it can be viewed as an asset as I will most likely approach the situation without deeply entrenched preconceptions.

The interviewees can also have an impact on the interview process. One example of this is the possible mutual influencing of the interviewees on each other prior to or during the interview process. The people I interviewed were intelligence personnel in the same military unit. They probably work in close proximity to each other, and there is the possibility that they had, even unintentionally, influenced each others responses as a result of having talked to each other about the upcoming sessions, and if known - the topic at hand. In this case, primarily for practical reasons the interviews were carried out within a relatively limited timeframe, i.e. in the course of one afternoon and the

\(^7\) See for example Buzan (2004).
following day. A side effect of this is that it reduced the likelihood of extensive mutual interviewee influencing, as for example compared to a situation where the interviews were scattered across a two or three week period.

Illustrated by the above it must be kept in mind that the information gained from the interviews is the result of interactive processes between people who are being influenced by a number of contextual factors. Thus the information obtained cannot avoid being of a subjective nature. That does not render the information useless, but one must keep in mind that absolute truth is unlikely to be derived from qualitative interviews.

2.11 Summing up the method of collecting data

The method which was used to collect information from primary sources in this thesis was qualitative semi-structured individual interviews of six persons currently working in intelligence analysis or closely related activities in a military setting at the tactical level. An interview guide was used to assist in ensuring that the interviewees meet relevant and comparable themes and in order to allow for processing and comparison of results. During the interviews the information was recorded by using hand written mind map notes, which was transcribed as soon as possible following each interview.

Although I am aware that the information obtained was of a subjective nature, through analysis it is intended to serve to enhance the basis for deciding whether there are adequate grounds for believing that reflections on the discipline of teams in a business management context can improve the quality of intelligence analysis.

2.12 Post-interview reflections

The interviews were conducted in a location which was familiar to the interviewees and in which outside disturbances were very limited. After the interviews were completed it was clear to me that the interview guide had room for improvement. I had used what could be termed an indirect approach in designing the guide, in the sense that the guide did not contain direct questions on teams, but rather questions on a number of closely associated topics enabling the use of a broader angle than if I had only used specific questions on teams. Even so, the atmosphere during the interviews, along with the possibility of adjusting the angle of the questions and asking supplemental ad-hoc questions, yielded ample relevant data. The challenge was to sort through the material and be able to distil the most relevant information for this work.

The use of personal interviews and a semistructured approach allowed for the pursuit of emerging topics during the interviews, something which proved very useful as this was a directly contributing factor in obtaining specific data on the use of a team approach to intelligence analysis at the tactical level. In retrospect much could have been gained from also including some specific
questions on teams in the interview guide, but the interview setting and the semi-structured approach allowed for an ad-hoc correction of this flaw.

2.13 Analysing the collected data

After having transcribed the answers to the questions, I read through the material before I grouped the answers from all the interviewees together according to which main or sub-question the respective answer belonged to. I then repeatedly read through the grouped collections of answers, before taking note of the commonalities within the grouping of answers being examined. After having completed this task, I went through the material again looking for perspectives which were only mentioned by a single interviewee, in order to be able to consider whether that reply seemed to be of a significance which entailed that it should be included in the data subjected to further analysis.

There were notable differences in how the interviewees responded to the questions. For example, some provided broad answers and some used narratives or examples more than others. Therefore I also went through the material in order ensure that the answers were grouped correctly according to topic and not only by question. This way I could avoid interesting information from falling through the cracks simply as a result of not primarily belonging in the context of a specific question.

The approach carries with it the risk that some relevant findings or important point may be may be excluded from the analysis. However, as a semi-structured interview was used to collect the information, an all-encompassing inclusion of the collected primary data would be too exhaustive for the scope of this study. I have made every effort to sift out the main commonalities as well as finer individual points which best fit the perspective in this thesis. In addition, as access to such a selection of interviewees is far from a daily occurrence, I also recorded findings which were interesting even if they are not directly of relevance to the central question of this work. Such findings may at some point be the object of attention for further exploration. Therefore it may prove valuable to have them on record, but any use of them would require the permission of the unit which provided access to the interviewees.

2.14 Validity

The validity of the research depends on the soundness of the findings. The degree to which the research has succeeded in measuring what it set out to measure, i.e. if the findings can be said to be correct, describes the internal validity of the research (Jacobsen 2005:213-214). Challenges to internal validity are often associated with obtaining the right sources and their ability or will to reveal correct information (Jacobsen 2005:212-215).

The two-tiered approach to the research serves to enhance the validity of the findings. The first step explores the question from a theoretical angle based on available literature, and provides substantiation for the tentative findings on a theoretical foundation. These findings have been further
substantiated by the empirical findings resulting from the analysis of the collected data, and the collection method of these data was subjected to careful consideration as presented in the above sections in this chapter.

The interviewees in this work were all working in intelligence analysis or other closely related functions in an intelligence organization at the tactical level of the Norwegian Armed Forces. Although there were only six interviewees, they are knowledgeable about the task and challenges encountered in such analysis. Furthermore, it also turned out that they had first-hand experience from working in or closely with integrated intelligence analysis teams at the tactical level, deployed in operations abroad. Thus the interviewees possessed very relevant knowledge and insight about issues connected to the question that this work sets out to answer, and shared this insight during the interviews.

When dealing with the topic of intelligence, the motivations for providing information can be varied and one must always be vary to the possibility of some form of deception, also when carrying out interviews with intelligence personnel. However, in this case an assumption of possible deception would entail that I did not trust the interviewees to adhere to known ethical and professional standards, and if so I should not be relying on them as sources. The value of the information collected for the purpose of this thesis by method of interviews therefore rests on the assumption that the interviewees responded in good faith.

Based on the two-tiered theoretical and empirical approach, the high relevance of the interviewees vis-à-vis the topic of the study, the reliance on the information in the interviews being provided in good faith, as well as the careful design of the collection method of the primary data, the internal validity is considered to be strong.

The degree to which the findings can be generalized to a wider context describes the external validity of the findings (Jacobsen 2005:213-214). However, “the value of qualitative research lies in the particular description and themes developed in context of a specific site” (Creswell 2009:193). Generalization is then to a greater extent a result of qualitative researchers having studied additional cases and generalizing these findings to the new cases (Creswell 2009:193). In light of this the external validity of the findings in this work will be considered.

The findings in this study rest on the aforementioned two-tiered approach, and much of the external validity depends on a wider representativeness of the sources which provided the primary data. It has already been determined that the representativeness of the interviewees is viewed as being high, and the approach to the collection of data has been described in great detail.

The question of the representativeness of the unit as grounds for making greater generalizations is however another matter. The unit is relatively small, flexible and adaptable, it enjoys a considerable amount of autonomy in deciding how to approach the work, and so far the team approach has primarily been exploited in operations abroad in a complex conflict setting. These aspects have been important factors in allowing the unit to explore the suitability of a team approach to analysis, but a pertinent
question is if these are also prerequisites for being able to exploit the benefits of teams in intelligence analysis.

The external validity with regard to generalising the findings to be applicable also for other all-source intelligence analysis at the tactical level while deployed abroad in operations is leaning towards being strong. With regard to generalizing at the strategic level, the external validity is more uncertain. As all-source analysis at both the tactical and the strategic level is about using collected information and subsequently process it into finished intelligence, it is not immediately apparent why a team approach to analysis cannot be suitable also at the strategic level. However, to reach such a conclusion on the material in this thesis would be presumptuous due to the characteristics of the unit which provided the sources for the primary data.

Based on the above the external validity is considered to be good for the tactical level of intelligence, but more uncertain for the strategic level of intelligence. Further study on the relevance of the use of teams in intelligence analysis in a wider context would have to be carried out before a claim of wider generalization can be made.
Chapter 3

What can be learned from the use of teams in business management?

This chapter employs a theoretical perspective to the research question: Is there something to learn from the use of teams in business management which can be used to improve the quality of intelligence analysis? In section 3.1 the connection between intelligence analysis and a form of intellectual breakdown is outlined, as this is a core issue which should be addressed when attempting to improve intelligence analysis. In section 3.2 the attention shifts to the approaches that have been used to address the inherent intellectual or cognitive weakness in analysis, to include reflections on to what degree the use of teams have been considered as a remedy. Section 3.3 contains an introduction to business management and the use of teams, and in 3.4 the discipline of teams is outlined in greater detail. This sets the stage for the argument in section 3.5 that a team approach to analysis can be a useful. The final section in the chapter contains a summary of the main points and a tentative conclusion.

3.1 Intelligence analysis and intellectual breakdown

The literature conveys two general conclusions with regard to intelligence failure, first that the weak link is in analysis rather than collection, and second that the weakness in analysis has a recurrent quality which is linked to a form of intellectual breakdown (Herman 1996: 227-228). The object of attention here is the latter, which has to do with how people absorb and process information:

People interpret data through images, historical analogies, personal experiences and other hypotheses. There is a cognitive rigidity about the way they fit information into these patterns. They see what they expect to see; they come to conclusions too early and stick to them for too long. (Herman 1996:228)

The emphasis on intellectual explanations to intelligence failure is reflected in the focus on individual calibre in intelligence analysis (Herman 1996:228). Others have concluded that the decisive factor in the future, as it has been in the past, is the quality of analysts, and that the selection and training of the right recruits can be a partial remedy (Herman 1996:228). Suggestions have also been made to loosen analytical shackles, but in spite of a number of prescriptions on how to avoid failure, the main conclusions remain that the shortcomings are intellectual, and that the root causes are weaknesses in human perception and cognition (Herman 1996:230). As described by Richards Heuer:

Of the diverse problems that impede accurate intelligence analysis, those inherent in human mental processes are surely among the most important and most difficult to deal
with. Intelligence analysis is fundamentally a mental process, but understanding this process is hindered by the lack of conscious awareness of the workings of our own minds. (Heuer 1999:1)

In recognition of the inherent weaknesses in human cognition, proposals for improvement have the same focus: how to make individuals better analysts, by devising methods to counteract the distortive impact of intellectual shortcomings on analysis.

3.2 Has the use of teams been considered a remedy?

One example of a method designed to counteract such distortive impact on analysis is the concept of Alternative Competing Hypotheses (ACH). Another tool is the use of competing teams in analysis, and the use of devil’s advocate as a way of challenging analysis:

A common, almost reflective response to charges of “mindset” and “groupthink” is to establish separate, offline components specifically charged with thinking “out of the box”, or “red-team alternative analysis.” These are well-intentioned and potentially valuable measures. But an evaluation needs to be made as to whether their effectiveness is at risk of being undermined by a fundamental cognitive bias of its own. (MacEachin 2005:130)

The bias that MacEachin refers to in the above quote is how products which are the result of assignments to produce “out of the box ideas” are often viewed with a predisposition to see it as a result of a work designed to “come up with crazy ideas that have little to do with the real world”, and are consequently often put on the back burner by the receiver (MacEachin 2005: 129). In cases where alternative analysis has been embedded in line analysis and production, the impacts of such efforts have been enhanced (MacEachin 2005:129). Bowman H. Miller argues that intelligence demands a commitment to lifelong learning and continued education, and that all-source intelligence can be improved by filling the knowledge gap:

Knowing one’s adversaries or workings smoothly with one’s friends without sufficient knowledge of their cultures, histories, politics, economics, resources, and language is next to impossible. (Miller 2008: 343)

Thus it is necessary to recruit analysts from a diverse background with regard to fields of study. But as stated by Miller, once recruited it is necessary to ensure that adequate time and resources are devoted to expanding and using the expertise of the analysts (Miller 2008: 339).

Only occasionally are there allusions in the literature to the potential role of teamwork in improving intelligence. One example of this is from Michael Herman who highlights that there is a demonstrated value of “small groups without much hierarchy” (Herman 1996:237), and also that “small size and flat structures put a special premium on talent and expertise.” (Herman 1996:237).

See for example Heuer (1999).
Herman here clearly indicates that high-quality analysis does not depend on large numbers of staff, but more on a small number of the right people being able to work in an environment without the restraints of hierarchy. However, Herman’s mention of groups in this context is not the same as a team approach. He merely points to certain dynamics which are favourable for intelligence assessment, but does not refine this point further. So although one might at first glance one might get the impression that he is speaking about teams, he merely tangents on this very relevant discipline.

Another example of alluding to the value of teams in intelligence is from Miller (2008), who argues that more team-based analysis is needed, as “no single analyst can be expected to be sufficiently knowledgeable in a broad array of different disciplines.” (Miller 2008:345). Miller’s focus here is primarily on the need to create a setting which is conducive to exploiting the complementary areas of knowledge of the analysts. He fails to be more specific on what he means with ‘team-based’, and thus renders the reader unable to discern if he is actually speaking of teams or if he is in fact merely speaking of groups.

So far, however, no in-depth discussion on the team factor seems to have been carried out, but a more in-depth exploration of this factor is well worth trying.

### 3.3 Business management and teams

So where to go for theoretical reflection and sustained analytical interest in teams? Business management literature contains a solid amount of theoretical reflections on a number of management issues, to include teams. An in-depth elaboration on business management will not be carried out here but as is illustrated by the following quote, business is a context different from that of intelligence:

> Business management is the process of the planning, co-ordination and control of a business. To survive in the long run, a business must be profitable and liquid. To do so, it must create sufficient value for its customers so that its revenues exceed its total costs. The overall task of business management is to address successfully the problems that confront a business in its role as a value-creating organization. (The Canadian Encyclopedia 2009)

The above quote points to several aspects which are central in a business context: One is the wide scope of tasks that is encompassed by such management, which for example can include cost accounting, marketing, strategy, logistics and human resource management. Another is the aim of business which is to create value in terms of profit. However, when responding to change is crucial, success depends upon forms of organization that promote information flow, and private “firms in rapidly changing environments succeed because they are better at learning and applying information than their competitors. They have such features as ‘flat’ structures, project teams, matrix responsibilities, and fluidity and apparent untidiness.”. (Herman 1996:331)

Herman claims that intelligence’s environment also has its large elements of change because it has to deal with the constant modifications in its targets defences in a manner which he claims “is
rather like dealing with competition and market changes in a volatile private sector.” (Herman 1996: 331). Therefore the need for flexibility, opportunism and entrepreneurial drive in intelligence organizations can be interpreted in the direction that they would benefit from freer information flow within the organization (Herman 1996:331-332), which again could point to the relevance of modern management theory to intelligence. In addition, one has to consider the augmented challenges in intelligence analysis which come as a result of the complex conflicts of our time, also known as new wars (Olsen 2007), which must be said to qualify as a major element of change relevant to both strategic and tactical intelligence. However, security requirements limit the spread of information within an intelligence organization, and there are operational pulls in the hierarchical and formal direction (Herman 1996:332).

Even so, both settings - business and intelligence - can be said to involve people with complementary knowledge who work together within the framework of an organization to create a product which is of high value to someone outside the organization or unit. Wherever people are involved in group efforts, the dynamics of interaction between them is likely to have some impact on the process and the quality of the product in the organization. So business has enough in common with intelligence to make a connection between the two fields potentially useful. One such potential useful area is the discipline of teams.

But what exactly is a team? Many have at some point in their working lives been told or have believed that they were part of a team. But were they really? A team is not just any group working together, and groups do not become teams simply because that is the label someone puts on them (Katzenbach and Smith 1993:112). Real teams that work differs from amorphous groups which we often call teams simply because we “think the label is motivating and energizing.” (Katzenbach and Smith 1993:111). Thus it is time to explore what insights business management research has yielded on ways to make teamwork function well.

3.4 The discipline of teams

So what insights does business management literature provide about what the prerequisites are for a high-performing team? Here I will take a closer look at some of the indicators which can assist in determining if one is dealing with merely a working group or a real team (Katzenbach and Smith 1993:113). The distinction between working groups and teams revolves around performance results. The formers performance is a function of what members do as individuals, whereas the performance of the latter includes both individual results and what the authors call “collective work-products” (Katzenbach and Smith 1993:112). Such products can be a number of different things, the authors mention interviews, surveys and experiments, but the point is that a collective work-product is what two or more members of the team must work on together and which reflects a joint, real contribution from the team members (Katzenbach and Smith 1993:112).
Another distinction between teams and working groups revolves around accountability. In working groups the accountability focus is always on individual goals and accountabilities, and working group members do not take responsibility for work other than their own, nor do they try to develop incremental performance contributions which require the combined work of two or more members of the group (Katzenbach and Smith 1993:112). Teams however require both individual as well as mutual accountability, and rather than merely depend on sharing information and best practise performance standards, teams rely more on group discussion, debate and decision (Katzenbach and Smith 1993:112):

Teams produce discrete work-products through the joint contributions of their members. This is what makes possible performance levels greater than the sum of all the individual bests of the team members. Simply stated, a team is more than the sum of its parts. (Katzenbach and Smith 1993:112)

As an early step in developing a disciplined approach to team management, the authors offer a working definition or an essential discipline that real teams share:

A team is a small number of people with complementary skills who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable. (Katzenbach and Smith 1993:112)

The essence of a team is mutual commitment, without it the group performs as individuals, but this “commitment requires a purpose in which the team members can believe.” (Katzenbach and Smith 1993:112). The best teams invest time and effort in “purposing” activity which continues throughout the life of the team, and which is about exploring, shaping and agreeing on a purpose which belongs to them both collectively and individually (Katzenbach and Smith 1993:113). Furthermore, the best teams also translate the greater purpose into specific performance goals and are successful in making purpose and goals build on one another; and by means of combining this with team commitment “they become a powerful engine of performance” (Katzenbach and Smith 1993:113).

Open-ended discussion and active problem-solving meetings is also important in achieving high performance in teams, and the point here is that a clear perception of the goals enables the team members to focus discussion on how to pursue those goals (Katzenbach et al. 1993:113). So a brief summing up would be that real and high performing teams discuss, decide and do real work together (Katzenberg and Smith 1993).

In addition, size matters and according to Katzenbach and Smith the effective teams they have met, read or heard about have all been between 2 and 25 people and the majority of them have numbered less than 10 (1993:114). In addition to being of a suitable size, a team must also develop the right mixture of skills which is necessary for the team to be able to its job (Katzenbach and Smith 1993:114). Such skills fall into three categories, respectively technical or functional expertise, problem-solving and decision-making skills, and finally interpersonal skills (Katzenbach and Smith 1993:115). In the first category, not only is it important that the team members have the prerequisite
professional skills to perform the expected tasks, it is also relevant that emphasis is placed on ensuring the presence of complementary professional skills in the team (Katzenbach and Smith 1993:115). The second category refers to the ability of the team to be able to identify the problems and opportunities they face, a skill which may be present at the onset of the team effort or will subsequently be developed on the job (Katzenbach and Smith 1993:115). The third one revolves around the importance of effective communication and constructive conflict, which depend on interpersonal skills and include “risk taking, helpful criticism, objectivity, active listening, giving the benefits of the doubt, and recognizing the interest and achievements of others” (Katzenbach and Smith 1993:115).

The challenge lies in achieving the right balance between on the one hand personal compatibility and on the other hand the necessary mix of skills, but it is worth knowing that of all the teams Katzenberg et al. considered, “not one had all the needed skills at the outset.” (1993:115) and they discovered that teams “are powerful vehicles for developing the skills needed to meet the team’s performance challenge.” (1993:115). Therefore the authors point out that team selection should rely on skill potential as much as on skills which are already proven (Katzenberg et al. 1993:115).

The above outlined discipline of teams is believed to be critical to the success of all teams (Katzenbach and Smith 993: 116). So in which cases is the team approach most suitable? Team performance may have the greatest impact on the “critical delivery point” of a company, i.e. where the cost and value of the company’s services or products are most directly determined (Katzenberg and Smith 1993:117):

If performance at critical delivery points depends on combining multiple skills, perspectives and judgements in real time, then the team option is the smartest one.

(Katzenberg and Smith 1993:117)

Based on the above findings, it is time to consider how suitable it would be to strive for team performance in intelligence analysis, and how this could be assist in improving the quality of intelligence.

3.5 The relevance of a team approach to intelligence analysis

Previously in this work the role of analysis in intelligence failure has been outlined, and analysis increasingly depends on a combination of skills and perspectives. Based on the aforementioned it would seem reasonable to claim that intelligence analysis is a critical delivery point of an intelligence organization: The record shows that not only is analysis where failure in the delivery of the organization is most likely to occur, such failure precludes the ability of the intelligence to serve as a guide to the future and thus diminishes in value to its users. This way of viewing intelligence analysis as critical delivery point can also be said to apply not only the strategic level of intelligence, but also the tactical level. If tactical intelligence is flawed, it can potentially endanger the lives of military and other personnel and hamper mission success.
Even though analysts are individuals, there is no apparent reason why an intelligence prediction cannot be a collective work product. In addition, there seems to be no apparent reason why intelligence analysis could not be carried out in a setting which includes both individual as well as mutual accountability. Both of the previous two arguments support the idea that intelligence analysis can be carried out in a team.

The “purposing” described by Katzenberg and Smith (1993:113) can also be applied in an intelligence analysis setting. In fact, this seems compatible with the idea of intelligence as having an advisory function (Herman 1996:56) but yet a role which is of critical importance to the ability of the government or the Armed Forces to be able to respond appropriately in a given situation.

Also, there seems to be no apparent reason why intelligence analysis can not exploit the value in open-ended discussion and active problem-solving meetings. In order to be a real high-performing team, the analyst would have to discuss, decide and do real work together. This does not seem like an impossibility, even in the secrecy-ridden world of intelligence and intelligence analysis. The success of this measure depends on the ability to contain the discussion to a specifically identified team setting.

Size matters in teams, and in order to be effective they should number somewhere between 2 and 25 people, but probably best if less than 10. The view that intelligence analysis can not only take place, but is in fact best served, in small numbers is supported in the intelligence literature (Herman 1996:237), and thus this is an indication that intelligence analysis can satisfy this critical success criteria for teams.

It is fair to assume that intelligence analysts are primarily chosen on merit of expertise in a specific field of study. Miller (2008) would probably applaud such a view. Furthermore, the need to increase diversity among analysts will likely entail that the pool of analysts will become more heterogeneous, both in terms of personal background and area of expertise, which entails a combination of multiple skills. A team of analysts can thus be put together specifically to achieve the presence of complementary skills, even if not so diverse as envisioned by Katzenberg and Smith (1993). Also, even though a team of analysts have a critical task to carry out, there is no reason why not the team setting can be exploited to build and develop skills in individual analysts, and in this way the team can play a role in developing the skills needed to meet the team’s specific performance challenge.

Most importantly however, a high-performing team requires the use of effective communication and constructive conflict, and this can be exploited to the benefit of analysis. It has previously been mentioned that a form of intellectual breakdown in linked to analysis failure, and consequently intelligence failure. The lack of conscious awareness of the workings of our own minds makes addressing our cognitive flaws quite challenging, to put it modestly. But sometimes these flaws may be more noticeable by others, even if not consciously. Maybe emphasis on the team as a frame for constructive conflict can assist in uncovering and addressing some of the distortive impact of such flaws. If so, this would be a significant indicator that the deliberate use of teams in analysis could
assist in improving the quality of intelligence, and herein lays the major potential gain in using teams in analysis.

3.6 Summary and tentative conclusion

The following sums up the main points in this chapter:

- The inherent weakness in intelligence analysis is closely linked to intellectual shortcomings which are hard to correct by oneself.
- Several approaches and methods have been devised to counter the effect of those shortcomings, but so far no in-depth discussion on the use of teams in analysis has been carried out.
- Business management has identified the use of teams as a way to enhance performance, and the approach is considered most suitable at critical delivery points of an organization.
- Intelligence analysis can be seen as a critical delivery point for an intelligence organization, both at the strategic and tactical level, thus a team approach seems suitable.
- A team can be distinguished from working groups in a number of ways, such as collective work products, mutual accountability, small numbers, complementary skills, a strong sense of purpose, reliance on discussion and debate, and achieving performance levels greater than the sum of the individual best.
- There is reason to believe that the use of teams could be applied also in intelligence analysis, and team reliance on discussion and constructive conflict can be a useful way of partially countering the negative impact of individual intellectual shortcomings on analysis.

Based on the above, the tentative conclusion is that by using knowledge about the use of teams in business management, intelligence analysis can improve its quality by enabling analysts to make more accurate predictions, i.e. predictions that are more accurate in describing the intentions of the opponents than what would have been the case without the use of teams. This leads into the next and fourth chapter wherein the empirical findings following analysis of the data collected in the interviews will be presented, before proceeding to the fifth and final chapter which following a discussion presents an overall conclusion.
Chapter 4

The empirical findings and the team approach

This chapter will present the findings resulting from the analysis of the data collected in the individual interviews. The data yielded insight into areas which went beyond issues related to the use of teams in intelligence analysis, and this chapter includes only the findings which were deemed relevant to the core perspective of this thesis and the discussion on teams in intelligence analysis. The findings will be presented grouped according respectively 1) new wars and augmented challenges in analysis, 2) how diversity can enhance analysis, 3) managing a diverse workforce, 4) characteristics of organizational culture, 5) intellectual shortcomings and analysis, and finally 6) the team approach. The final section of the chapter sums up the main points and presents a tentative conclusion.

4.1 New wars and augmented challenges

The findings confirmed the assumption that complex conflicts, or new wars, have had a profound impact on the demands for knowledge and competence in the intelligence organization and among intelligence analysts. This applies across a broad spectrum of issues and competence areas, to include but not limited to the need for strengthened cultural awareness, complementary perspectives in analysis and greater diversity among analysis staff.

As emphasized by interviewee Z, the Norwegian experiences in Bosnia and Kosovo in the 1990’s were viewed as pivotal in leading to a shift in ‘shift in paradigm’ with regard to recognizing the need for diversity in intelligence analysis. The findings point to that this view of diversity was primarily perceived as having to do with different backgrounds in fields of academic study or knowledge. However, there was also support for the notion that diversity in personnel background such as for example gender, ethnicity and social background was relevant in an analysis resource perspective.

Interviewee X spoke of how the Norwegian Armed Forces need to shift from being what was termed solution oriented to being problem oriented, in order to adequately be able to deal with the challenges in the new operational environment of new wars. This deserves a more detailed explanation: By solution oriented was meant that before one can point to an issue - popularly termed ‘challenge’ - which should be addressed, in many circles within the Norwegian Armed Forces it is expected that one has to be ready to present a solution at the same time. If not, the issue will in many cases not receive further attention. Such an approach can help avoid jamming a leader or a commander with a plethora of ‘challenges’ which must be addressed. But it has a down-side too. In the view of the interviewee, in a complex system there is not always proximity between cause and effect, and so a
recognition of and analysis of the problem is required, and this process one has to seek new knowledge and identify knowledge gaps both at the individual and organizational level. The failure to acknowledge the existence of problems, and the strong emphasis on solutions as described above, results in many knowledge voids being left uncovered.

In the complex interdependencies in for example Afghan society, the need to uncover knowledge voids is a prerequisite for ensuring appropriate responses to any number of situations. Thus the context of new wars could entail that the greater organizational approach to handling problems need to be readdressed. The prior points not only to the need for being able to analyse the complex interdependencies in the societies in the new operational environments, but it also points to how such new environments challenges the entire intelligence cycle, to include appropriate tasking of the intelligence resources.

The above also illustrates the wide range and profundity of the reflections on how conflicts such as for example in Afghanistan impact on the challenges encountered in intelligence analysis carried out in support of the mission. However, even though the interviewees recognized the complexity of new wars as demanding for intelligence analysis, this complexity was by some also viewed as a motivational factor in their work. As interviewee X expressed it "The degree of complexity demands that we venture into the unknown, and that is what makes it interesting".

The findings support the previous assumption that new wars and complex conflicts, as for example in Afghanistan, have augmented the challenges in intelligence analysis by adding new complexities to the prediction efforts. Furthermore, diversity in knowledge and background among analysis staff is a resource in addressing those challenges and complexities. This underlines the need to have a conscious approach to managing diversity among analysis personnel, and more importantly the need to make every effort to address the inherent and the emergent challenges to the production of high-quality intelligence predictions.

So now the attention will shift towards exploring how diversity can enhance analysis.

4.2 How can diversity enhance analysis?

Diversity can be understood as greater variety in for example educational, professional as well as personal background or in group identity. On a whole the interviewees expressed a positive view on diversity as a resource, but the data left a general impression that the appreciation of diversity in this analysis milieu primarily revolved around differences in fields of study of analysts, but to some extent this appreciation also extended to for example gender and ethnic background. The impression following analysis is that the focus on academic diversity to a great extent is the result of the experiences that this unit so far has been able to draw on, and is not a lack of appreciation of diversity in a wider sense.

So how exactly can diversity improve analysis? It was viewed as a resource because it made it more likely that different perspectives would be applied in the course of the analysis process, and it was recognised that different professional backgrounds would likely have an impact on what people
focused on, and in this way diversity could help shed light on aspects which would otherwise not be taken into consideration in analysis. For example, as stated by interviewee M:

"It is not adequate for analysis to merely be aware of topics such as cultural and ethnographic intelligence. The decisive value of such awareness is to be able to determine what consequence such intelligence may have for the conduct of operations."

In elongation of this interviewee M pointed out that cultural awareness is about more than understanding the local and regional etiquette, in the end it revolves around insight into ‘what makes people tick’ and understanding the rationality behind their actions. This illustrates the relevance of for example anthropology to intelligence analysis in the face of the new cultural settings where operations may take place, such as for example in Afghanistan or in Sudan.

As such competence most likely will be gained in a civilian educational setting this also illustrates how increased diversity in fields of study among analysts could increase the number of analysts with a primarily civilian background. It cannot be assumed without reservation that mixing personnel with respectively primarily civilian or military background will be without consequences. Care has to be taken to ensure that minority members with reference to background do not feel left out or unappreciated in the greater group. The working environment has to be conducive to letting all perspectives and contribution come into play and be valued.

Interviewee Z mentioned that diversity in analysis staff usually entailed that the predictions would be different, and when prompted with 'different in what way', the answer was that “It would probably be closer to the ‘truth’, it will have more angles, usually be better substantiated.” A similar view was offered by interviewee L, who stated that:

"If the team works, then diversity can be very positive as it can add resources which are decisive for being able to understand or uncover important aspects which might otherwise have gone undetected. It is not necessarily about the knowledge as such, but it is about being able to know what to look for. It is important to have the whole picture in order to be able to make predictions which are more precise, more ‘true’ in the sense of being closer to the way things really are. Then the Afghans do not appear irrational and it is possible to understand how the Taliban gains influence."

The above quote also illustrates how the realization of the benefits of diversity depends on the framework which it is set to work within, and the role of the team in this respect will be addressed later on. The quote also underscores how diversity among analysts is a prerequisite for establishing situational awareness in today’s new wars, and how such diversity can contribute to increasing the quality of intelligence.

Interviewee Y expressed concern that in spite of the emphasis on diversity among analysis staff, Y was concerned that although “They may have diversity in academic fields of study, they are still probably too homogenous.” In Y’s opinion this can be considered a weakness, as personal
background has an impact on what people focus on. This implies that greater heterogeneity among analysts can contribute to a wider perspective in analysis.

The findings provide support for the view that diversity can improve the quality of intelligence analysis by enabling the production of predictions which are closer to the truth than they would otherwise be, and that this value of diversity is augmented in the context of new wars. However, increased diversity among personnel may have an impact on the approach to management and how the work is carried out, and this will be addressed in the subsequent section.

4.3 Managing a diverse workforce

A number of the possible follow-up questions in part one of the interview guide were designed to obtain information on whether the organizations view of diversity could be said to primarily belong in the learning-and-effectiveness paradigm the discrimination-and-fairness paradigm, or the access-and-legitimacy paradigm (Thomas and Ely 1996:80). If the approach to diversity can be said to fall under the learning-and-effectiveness paradigm, it entails that an organization will be able to reap benefits which for example encompass “encompass learning, creativity, flexibility, organizational and individual growth” (Thomas and Ely 1996:80).

When people from different identity-groups come together to work, the composition of the group will have an effect on the dynamics in the workplace: The experiences in corporate America have been that in spite of numerous and varied initiatives to increase diversity, the positive impacts of diversity have not materialized, but rather the efforts to increase diversity in the workplace have in many cases “backfired, sometimes even heightened tensions among employees and hindering a company’s performance.” (Thomas and Ely 1996:79-80). The quote serves to illustrate that in order to reap benefits from increased diversity, it is not enough to assemble a number of people of different backgrounds and expertise and then expect organizational performance, or analytical performance in intelligence for that matter, to somehow magically improve.

The findings are that the unit which the interviewees belong to has come far in adapting an approach which can be said to fall under the new paradigm of managing diversity. For example, high and uniform standards of performance, high tolerance for discussion and different views on issues, and the recognition that diversity can add value to the core activity of intelligence analysis, all pull in the direction of the learning-and-effectiveness paradigm.

However, in other areas the unit is not within the sphere of the new paradigm. For example I found no indications of recognition that diversity can bring with it new ways of doing work. The resilience in this area may depend on the presence of specific methods already used in analysis, but nevertheless it signifies a lack of appreciation of the full value which diversity may bring to the organization. More importantly however, it indicates that if the unit pursues increased diversity in analysis staff, unless steps are taken to explore the perspectives a more diverse group of employees bring to the table, the unit may not be able to fully reap the benefits of the diversity and may even face
reduced performance. Even if such a reduction in performance is passing or marginal, given the critical importance of intelligence steps should be taken to avoid such an impact.

At present the analysis personnel in the unit can only to a limited degree be considered to be diverse, but there seems to be an ambition to increase that level diversity. This underscores the need for preparedness to address management issues associated with greater diversity among analysis staff if an organization or unit aims to maximise the potential value which lies in increased diversity. Organizational culture is one aspect which is interesting when exploring the management of diversity and in the next section the link between the two will be one of the issues addressed.

### 4.4 Characteristics of the organizational culture

When the topic of the interviews turned to organizational culture, more specifically on the general style of professional interaction of the personnel in the unit, the interviewees shared their views on the organizational culture in the Norwegian Armed Forces in general, in their own parent intelligence unit as well as on the culture in some of its sub-units. All the interviewees in some way perceived the culture of their parent unit and its sub-units as different from the greater general organizational culture in the Norwegian Armed Forces.

One might expect that this view of being different would primarily be associated with the nature of intelligence organizations which often tends to have some inherent traits based on ‘need-to-know’ and secrecy. But although such aspects were included in the answers, the data revealed that emphasis was equally if not more on a culture which recognizes the value of diversity, places less emphasis on hierarchy, and where open discussions are recognized as a tool in getting the job done. For example interviewee X commented that:

> The Norwegian Armed Forces has a tradition for strangling diversity, as diversity is viewed as something which creates insecurity, friction and chaos, and they end up transforming diversity into homogeneity. In my unit we view diversity as resource the various individuals bring with them into the organization.

In the description of the culture in the parent unit, several of the interviewees emphasized that the unit is viewed as being very professional, in the sense of being capable of performing to the expected high standards of excellence, it is flexible and adaptable and the personnel has a high level of competence. Another aspect which was highlighted by the majority of the interviewees was the high degree of personal motivation for the work in the unit, and as described by interviewee Z “People are interested in their job to a degree which is beyond what is normal.”

In the analysis milieu of the unit the presence of a culture which emphasises “high ceilings” with regard to tolerance for debate and critique was not merely present but was also seen as a pivotal resource. The data indicates that the work demands a great degree of personal involvement as discussions run deep and it is demanded of the individual analyst not only that they present their own
judgements on issues but also have the courage to critique the judgements and views of their colleagues.

Another aspect which was emphasised by several interviewees was how the traditional military emphasis on hierarchy was downplayed in the unit, and how this served to enhance the likelihood that all contributions and points of view could come into play, regardless of the rank of the contributor. This again allowed for a relaxed atmosphere, and as expressed by interviewee Z “We have fun at work!”

The finding following examination of the data is that in this intelligence parent unit as well as in its analysis sub-unit the culture perceives itself as being different from the general hierarchical culture in the Norwegian Armed Forces. This ‘differentness’ includes a greater appreciation of and reflections on the value of knowledge as a pivotal resource, and the view that discussion, questioning and receiving critique on judgements and analysis is not only positive in the intelligence analysis milieu at hand, but is in fact seen as a tool which is necessary to ensure a high level of performance. The identified characteristics also facilitates the management of a diverse workforce, as the tolerance for discussion and critique can also be of value in the process of absorbing new approaches to work and in dealing with the potential heightened tension which can follow in the wake of increased diversity in personnel.

However, now the attention turns in a different direction towards forms of intellectual shortcomings in analysis.

4.5 Intellectual shortcomings and analysis

When queried about whether it is fair to claim that intelligence analysis also can be said to contain decision-making aspects in evaluation and judgement, the interviewees were all careful to initially emphasise that the role of intelligence is merely advisory and is only one of several elements in a commanders planning- and decision making process. Even so, the collected data clearly indicates support for aforementioned view of analysis as containing some characteristics of decision-making, within the judgement portion of intelligence analysis. The purpose of the question was to establish if the data could provide some support for the view that the approach of Finkelstein, Whitehead and Campbell (2008) might be relevant in an intelligence context. Briefly, that approach is the use of a system of expressively communicated safeguards to assist in avoiding the unconscious cognitive processes from having a distortive impact on judgements and decisions.

The attempts in the data collection to uncover the views of the interviewees on the possible value of the use of a specific and explicitly stated system of safeguards against the impact of cognitive biases only yielded a limited amount of data. This could be due to a number of factors, but likely causes are firstly that the question and the lead-in to it was not clear enough to facilitate substantial answers, secondly the question came late in the interview and thus maybe at a time when the interviewees and the interviewer were experiencing what can be termed a touch of interviewing
fatigue, and based on the earlier answers during each of the interviews it did not seem equally relevant to ask this question in every interview.

The two answers which were provided to this question were modest in their support for the idea of a system of explicit safeguards, but clear in their indication that although the potential value of such a safeguard system would depend entirely on the way it was designed, it could not be ruled out that it could be of value as a tool to attempt to minimize the impact of various cognitive traps. However, the collected data in this case did not provide adequate grounds for any more specific interpretation or conclusion in this area.

The data which resulted from questions relating to the role that emotions might play in affecting the analysis process indicated a solid level of awareness among the interviewees that emotions, or biases as the interviewees preferred to call them, can distort analysis. However, the data further indicated that the interviewees were confident that the effect of such emotional bias to a large extent was offset by some of the methods used in analysis, such as for example ACH which several interviewees claimed contributes to objectivity.

The interviewees were to some extent all familiar with the potential affects of unconscious though processes, or cognitive traps as they described it, on judgements and analysis. The data indicates that the topic had been modestly addressed in previous training of the interviewees, but few if any specific references to this phenomenon are made once that training has been completed. Nevertheless, among them the interviewees mentioned several examples of how attempts are made to counter the potential distorting impact of cognitive traps. For example, there is recognition that individual analysts may become trapped by cognitive bias, and therefore any individual product must be read by and subjected to evaluation by more than one analyst, as well as the head of section. ‘Sparring’ between analysts was also highlighted as being a useful way to obtain relevant corrections on individual products.

The data is clear in indicating that the use of specific terminology or explicit claims that one might suspect that a colleague has fallen prey to bias was not normally used. The closest thing would be as described by interviewee M when a comment such as “now you are thinking conventionally” might be used to point out possible flaws in a colleague’s judgement or analysis. Nor does the data indicate that there are any control mechanisms to attempt to specifically uncover group-think, something which can be a challenge in a small team of analysts.

In the response to the various questions which in some way dealt with judgements, the impact of biases and how to counter them, one thing was mentioned again and again; the value of open discussion among the analysts. This indirect approach was also highlighted as being a valuable method to attempt to avoid method was also seen as being a countering force in efforts to avoid group-think from gaining hold in a small team of analysts.

The findings are that the intelligence personnel is aware of the potential distorting impact that unconscious mental processing may have on their judgements in analysis, but that there is at present no explicitly expressed system or method to specifically safeguard against such impacts. Rather the
personnel have considerable confidence in that the methods used in analysis, such as for example ACH, are of value in ensuring objectivity and evading the impact of biases. In the opinion of the interviewees, the culture which allows and emphasises a tolerance for discussion among analysts is of pivotal importance in reducing the impact of biases on the prediction as well as reducing the likelihood of group-think. As will be shown, these aspects are put to use in the team approach to analysis, which is the topic of the ensuing section.

4.6 The team approach

Several of the interviewees made references to teams, and the topic was in some way touched upon in all of the interviews, and the findings revealed that the unit uses a team approach to all-source analysis at the tactical level. For example interviewee Z stated that the main purposes in selecting a team approach were to ensure that the members of the team become familiar with one another’s strengths and weaknesses, make them confident with each other, increase the ‘ceiling height’ and make them accept responsibility for more than just themselves: “It is the team which delivers the product!” The team as such is responsible for and stands behind the product, and this serves to create mutual accountability and a sense of common purpose.

The teams are small, usually less than five, one of which is the team leader. Even so it was emphasized that the structure of the teams is flat and is characterized by the un-hierarchic approach to work and thus ensuring that rank is not a determining factor in whether or not a view is presented in the team.

The goal is also to put together teams which are not homogenous in their areas of expertise. This is intended to serve as a resource in approaching the analytical challenges from several angles, but it is also viewed as a resource in avoiding group think. When queried on how small teams may lead to group think, the reply was that there are strong personalities involved which are confident in their own professional competence, and that diversity is viewed as an asset in reducing the likelihood of cognitive convergence, also known as group-think.

For example, interviewee N claimed that the high levels of expertise and insight among all-source analysts and other relevant experts was an enabling factor for creativity and new ways of thinking, and that in combination with an open approach this lead to new inputs and thus had a positive impact on all-source analysis. This brings the attention to what seems to be the pivotal resource in the team approach - that of encouraging as well as demanding that the team members engage in discussions wherein they critique each others job-related views, judgements and analysis. The discussion is intended to serve as a way of avoiding a distortive impact of unconscious mental processes, or biases, on the final product. It must be pointed out however that this approach does not come in lieu of other methods, such as for example ACH, but is a supplement to them and is meant to improve the quality of predictions.
The realization of the benefit of this approach requires that the team members are able to differentiate between critique directed towards the work of a person and the person him- or herself. This applies both to the ones presenting the critique as well as the ones whose work is being subjected to the critique. As said by interviewee L:

Those who have worked together over some time are more likely to function well together. In teams where this is not the case there is greater likelihood that criticism is taken personally, that individuals do not challenge each other, and that although a thought or a comment on the issue at hand is present in the mind of one the team members – it is not communicated.

Later on L added that “When criticism is taken personally, it can make the team fall apart”. The ability of the team to handle discussions in a constructive manner must be ensured if the team approach is to bring with it the intended improvement in the quality of analysis. In order to ensure the presence of such ability, emphasis is placed on integrating the teams prior to deployment to the area of operations. Even if challenging and discussions work well while at home in familiar surroundings, this does not necessarily mean that it will be the case when deployed to more taxing and demanding working environment. For example, as expressed by interviewee L:

Here at home, in peacetime, it is unproblematic to challenge one another, but not quite so when deployed abroad in a more demanding environment.

Awareness of this nuance is why the integration of the team prior to deployment is so important. The goal is to establish small teams of analysts which are moulded into a team prior to deployment to the area of operations in order to be able to exploit the benefits of the team approach while on site. The intelligence organization has several groups of analysts which the members of the respective teams are drawn from. The ‘life span’ of a team is the duration of the deployment period which is usually about six months, equivalent to the length of the deployment period for most Norwegian military personnel in operations abroad. Upon completion of each tour the analysis teams are dissolved shortly after having returned home.

Interviewee Y also stated that when the analysis teams are deployed to operations abroad, they are well integrated, they feel confident in each others capabilities, and this serves to enhance the quality of the products. Interviewee N also stressed how the analysis processes are enhanced when the team which are deployed abroad are well integrated prior to deployment, and how important it is that the persons who will make up the team get to know each other well.

It was also mentioned that the team approach is not unique to intelligence analysis, but is important in many settings, for example in mobile observation teams, and according to interviewee X “somehow it seems easier to integrate teams once abroad.” However, and as stressed by several of the interviewees, what sets the all-source analysis team approach in this unit apart is the degree of emphasis which is placed on team integration prior to deployment, and how this integration is of pivotal value in addressing a previously identified primary pitfall: the lack of feeling secure enough to
engage in debate and critique. As an example of why this important, interviewee X exemplified by saying

If I am going to work with you, then I have to know your limitations with regard to what you are likely to say to me and how. The establishment of an understanding of each others’ way of reasoning is decisive for the ability of the analysis team to deliver.

The above quote illustrates the profundity of the purpose of the integration of the analysis team, and how this is viewed as having a direct impact on the ability of the team as such to deliver high-quality intelligence products. So the team approach is not chosen merely to improve the work atmosphere environment while deployed abroad, or simply to put an interesting label on the analysis resource. The team approach is specifically adopted with the purpose of improving the quality of all-source analysis at the tactical level while deployed to a challenging operational environment abroad.

The findings also support a conclusion that the team approach in this case so far has emphasized establishing processes which favour free exchange of ideas, judgments and critique as a way to enhance the usefulness of the existing expertise. Less emphasis seems to have been placed on specifically using the team approach as a way to building cohesion and realizing the value to analysis of greater diversity among analysts, and this point in the direction that the unit has not yet fully realized the potential of a team approach in analysis.

4.7 Summary and tentative conclusion

In summing up, the main points of the findings are that:

- Intelligence analysis is faced with augmented challenges as a result of new wars, and diversity in knowledge and background of analysts is a valuable resource in addressing those challenges.
- Diversity among analysts can improve the quality of intelligence by providing a wider scope of expertise and by drawing on more diverse personal backgrounds among analysts, thus enabling the production of predictions which more accurately describe the intentions of the opponent.
- There is an ambition to increase diversity among analysts, underscoring the need for preparedness to address management issues associated with greater diversity, although aspects of the organizational culture seem well suited to integrate diversity.
- The intelligence personnel is aware of the potential distorting impact that intellectual shortcomings, or ‘cognitive traps’, may have on their judgements in analysis, and they rely on methods such as for example ACH in striving for objectivity in analysis, but a culture which emphasises a tolerance for discussion among analysts was also perceived as important in reducing the impact of biases on predictions as well as reducing the likelihood of group-think.
- The unit uses a team approach to all-source analysis at the tactical level while deployed to a challenging operational environment abroad. What sets this particular team approach apart is the depth of integration which emphasises building awareness among analysts on each others
ways of reasoning and building a sense of security which ensures the engagement of all team members in debate and critique.

- The teams are small and when composing them emphasis is placed on complementary areas of expertise among analysts, and emphasis is placed on integrating the teams prior to deployment abroad.
- The product of the team belongs to the team, not to a group of individual analysts.
- When the teams are well functioning, they are believed to improve the quality of analysis by enabling the production of collective work products, i.e. predictions on the intentions of ones adversaries which are more precise than they would have been without the use of teams.
- Although using an explicitly stated approach to the use of teams, the unit does not seem to yet have realized the full potential value of the team approach with regard to the potential gains in analysis capability which can come as a result of greater diversity among analysts.

Based on the above main points, the tentative conclusion in this chapter is that what the interviewees claim is the use of teams has improved the quality of intelligence analysis. I use ‘claim’, because prior to making a more definite conclusion on this it has to be determined if these teams can be said to qualify as being real teams, or if they are merely a variation of a working group approach. However, a discussion on this issue belongs in the next and final chapter.
Chapter 5

The use of teams in intelligence analysis

The purpose of this chapter is to pull together the main points and tentative conclusions from the preceding chapters before presenting an overall conclusion. The first section scrutinises the claim of a team approach which was uncovered in the empirical findings in the previous chapter. Then the attention shifts in section 5.2 to focus the discussion on how the use of teams can improve the quality of intelligence. The next section contains a discussion on how teams can be a resource in managing a diverse workforce, followed by the final section which concludes the work by presenting some final remarks and answering the research question.

5.1 Are they really teams?

The first step is to examine if the use of teams as the described in chapter three is really about teams, and not merely a variation of groups. As far as performance results are concerned, the findings show that in this case the teams produce what can be termed “collective work-products” (Katzenbach and Smith 1993:112) in the way of predictions which one or more members of the team must work together on and which reflects a joint and real contribution of the team members.

Also in the areas of accountability the findings support the idea that the teams are ‘real teams’, as they produce discrete work-products through the joint contributions of their members. In this case the discrete work products are the predictions, and the production of them rests on the concept of mutual accountability of the team members. As stated by one interviewee Z “It is the team which delivers the product!”, and the finding in the empirical material that ‘It is the team which is responsible for and stands behind the product, and this serves to create mutual accountability and a sense of common purpose.’ This latter comment also supports the idea that these teams engage in purposing activity, and it is fair to assume that this is present throughout the six month lifespan of the teams.

The findings did not uncover any reference to specific performance goals, but the use of teams was viewed as pivotal in order to be able to deliver high-quality predictions, and the view on the teams revealed in the interviews certainly seemed to fit what Katzenberg and Smith would call “a powerful engine of performance” (1993:113).

The teams in the findings also emphasise the use of discussions, and though I am uncertain if it can be termed active problem solving meetings, the findings support the claim that the teams have a clear perception of the goals as well as a strong focus on how to pursue those goals. So these teams, to paraphrase Katzenberg and Smith (1993) really discuss, decide and do real work together, and thus they can be considered to be high performing teams.
Also with regard to size do the teams described in the empirical findings qualify as real teams, as they usually consist of less than five analysts and the findings of Katzenbach and Smith are that the majority of effective teams have less than 10 members (1993:114).

The final aspect which will be considered in this qualification process is the issue of the mixture of skills in the teams. The skills fall into three categories, respectively technical or functional expertise, problem-solving and decision-making skills, and finally interpersonal skills. In a real team, in the area of functional expertise, the emphasis should be on prerequisite professional skills as well as complementary professional skills. In these teams, the functional expertise by way of the prerequisite background in knowledge in order to be able to carry out analysis is present, and with regard to complementary professional skills, it seems to be present to a limited degree but with the intention of augmenting the complementarities of skills by pursuing greater diversity in the background of the analysts.

In the second category, which refers to the ability of the team to be able to identify the problems as well as the opportunities it faces, this must be said to be present, as this is closely connected to the very reason why these teams are put together: to be able to function in the challenging and taxing environment while deployed abroad in a conflict area, and in order to serve as a counterweight to the distortive impacts of biases on analysis.

The third category revolves around the importance of effective communication and constructive conflict, which again depend on interpersonal skills. The teams in question places significant emphasis on the use of discussion and creating an atmosphere characterized by ‘high ceilings’ with regard to tolerance for debate and challenging the judgments of others in analysis.

All together, in the area of mixture of skills in the teams, there are adequate grounds for claiming that these teams qualify as ‘real teams’. The challenge for these teams, as for any team, is in achieving the right balance between personal compatibility and the necessary mixture of skills.

Katzenberg and Smith pointed out that of all the teams they considered, none had all the needed skills at the onset, and that teams are powerful engines for developing the skills needed to meet the performance challenge (1993:115). However, given the decisive importance of the intelligence predictions to a commander on the ground, these analysis teams should have the skills needed prior to being deployed. The emphasis on integrating the teams prior to deployment will enhance the likelihood that the team will possess the prerequisite skills as they set out to carry out the task of analysis. In this area, the skills include the acquired appreciation of how the various members of the team reasons, what the limits are for to what degree and how they will challenge each others judgements, and establishing the necessary level of trust and familiarity which is needed to ensure that all views and thoughts on an issue is shared within the team, regardless of rank or area of expertise.

The conclusion here is that the use of teams in all-source analysis at the tactical level in the empirical findings can be said to qualify as true and high performing teams. As teams have been put to use in intelligence analysis it provides grounds for re-examining how their use has a positive impact on the performance of analysts, and thus serve to enhance the quality of their predictions.
5.2 How does the use of teams improve the quality of intelligence?

As described earlier, it is accepted within the intelligence community that intelligence analysis can fall prey to impairment in judgement resulting from biases, forms of intellectual shortcomings. The authors of *Think Again* suggested that in order to reduce the likelihood of unconscious biases having a negative impact on judgement, a systematic approach of safeguards could be used (Finkelstein, Whitehead & Campbell 2008).

However, as biases are often too deep rooted in emotions and unconscious processes to be objectively analyzed, relying on self-analysis seems like an insufficient solution (Finkelstein, Whitehead and Campbell 2008:175). This points in the direction that a team setting would be well suited to utilize a system of safeguards, to include in an intelligence analysis team. As mentioned before, intelligence analysis depends heavily on methods which they believe go far too severely reduce the likelihood of biases having a negative impact on judgement, such as for example ACH (Heuer 1999). However, any contribution which may serve to counter the negative impacts of cognitive biases on intelligence analysis should be welcomed, and the use of teams is one such possible contribution.

What if the there is an unnoticed emotional impact on one or several specific judgements in the ACH process? What if a different view on what it would be rational to believe would change the direction and the result of the analysis process? Maybe a system of safeguards can reduce the risk of errors in judgement in many areas of intelligence analysis? Well, these questions must go unanswered for the time being, and at present the findings in the material seem to indicate that there is no specific safeguard system, similar to the one described by Finkelstein, Whitehead and Campbell (2008) in use which is designed to counter the negative impacts of biases in judgement and analysis.

The potential value of such a system “would depend entirely on what one found” in the sense that it would depend on if one were able to find or develop a system of safeguards which is would be relevant and easy to use in an analysis setting. Does this mean that the focus on teams has little relevance in countering the possible negative impact of biases? Not at all.

In the efforts to integrate an analysis team, the process also aims to familiarize the members of the team with each others strengths and weaknesses. As described above the promises that underpin an effective team is commitment and trust. In addition, the team integration in this case includes emphasis on that the team members actively should seek to challenge each others judgements. The cumulative effect of these three aspects may be that the team members point out or challenge each others biases, even if this is not done systematically or wittingly. Viewed in this way, which is supported by the empirical findings, the cumulative effect of the aforementioned aspects of team integration is that it can serve to reduce the likelihood of biases having a negative impact on judgement, analysis and predictions.

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9 According to interviewee Z.
Little attention seems to have been devoted to the potential value of true teams in optimizing the use of personnel resources in intelligence analysis. As the reflections on the value and role of true high performing teams grew out of a business management context, the above findings provides positive support to the initial research question of this thesis.

The conclusion based on the findings in intelligence and business management literature and the findings from the empirical material in this work is that intelligence analysis is a critical delivery point of an intelligence organization suitable for the use of teams, and the use of teams in intelligence analysis can improve the performance of analysts by exploiting the use of team processes which can serve to reduce the negative impact of biases on judgements, and thus serve to enhance the quality of their predictions. Decisive in this is that the use of teams in analysis, supported by the theoretical as well as the empirical findings, enables a level of performance which is greater than the sum of the performances of the individual analysts.

5.3 Teams as a resource in managing diversity in the workforce

As previously mentioned, the full potential value of diversity in an organization will probably not be realized until the view on diversity in an organization can be said to fall within the learning-and-effectiveness paradigm of Thomas and Ely (1996). According to the findings, the intelligence unit in question can in some areas be said to be within this paradigm, but not completely. This is because the current view on and practice of exploiting diversity in the unit seem to be somewhat too closely linked to diversity in academic or educational background, and not too a great enough extent linked to diversity in other areas such as for example gender, ethnicity or group identity.

At the same time there are indications that increased diversity may in some cases prove to be counterproductive if for example different identity groups are not allowed to draw on the full spectrum of the resources they bring to the organization. Even though the intelligence analysis in this case takes place in a much smaller organization and on a smaller scale than the corporate level referred to in Thomas and Ely (1996), there is no reason why the challenges they point out should not to some extent apply to an intelligence organization and its analysts. This points in the direction that as the unit moves towards achieving greater diversity among analysts, the very same diversity may potentially also have a negative impact on the collective performance of analysts. At the same time, the value of diversity among analysts is perceived as being a significant resource in efforts to improve the quality of analysis.

So in light of this, can a team perspective on analysis be of value in addressing the potential resources as well as pitfalls of increased diversity? My claim is that yes, it can. Even though the unit in question may at present not have substantial experience in dealing with a broader aspect of diversity in its teams, in my view their current approach to the use of teams may also be of value in dealing with some of the potential additional challenges resulting from future increased diversity among analysts.
As long as the unit is successful in the efforts to build solid familiarity and awareness of each others’ weaknesses among team members, along with establishing a team culture for challenging each others’ judgements, combined with the presence of commitment and trust, the cumulative effect of this may also serve as an enabler in dealing with some of the potential negative impact which may be the result from greater diversity among analysts.

This entails that the use of teams can serve as a tool in integrating a more diverse group of analysts, and so the use of teams is an important management tool in realizing the intended gains in analysis from a more diversified group of analysts. As such diversity is viewed as being of pivotal importance in improving analysis capability, this again underscores how a team approach to intelligence analysis can be said to improve the quality of intelligence.

5.4 Final remarks and conclusion

The work in this thesis is aimed at answering the question if there is something to learn from the use of teams in business management which can be used to improve the quality of intelligence analysis. Increased quality here refers to the ability of analysts to produce predictions which are more accurate in describing the intentions of opponents than they would be without the use of teams.

The conclusion based on the findings in intelligence and business management literature and the findings from the empirical material in this work is that:

- Business management has identified the use of teams as a method to enhance performance at critical delivery point of an organization.
- Distinguishing characteristics of true teams include mutual accountability, high tolerance for discussion and critique, collective work products, and a strong sense of purpose.
- Intelligence analysis is a critical delivery point in intelligence and thus suitable for the use of teams.
- The use of teams in intelligence analysis enables a level of performance in analysis which is greater than the sum of the performances of the individual analysts.
- This enhanced level of performance increases the analytical capability to make predictions which more accurately describe the intentions of the opponents, thus increasing the quality of intelligence analysis.
- The use of teams in analysis can also enable the realization of expected gains in analysis capability that more diversity among analysts is expected to bring. As such diversity is of pivotal importance in improving the quality of intelligence analysis this further underscores the relevance of the use of teams in intelligence analysis.
Based on the above, the answer to the research question

Is there something to learn from the use of teams in business management which can be used to improve the quality of intelligence analysis?

Is that yes, there is something which can be learned from the use of teams in business management which can be used to improve the quality of intelligence analysis. This is primarily valid for all-source intelligence analysis at the tactical level, but it would be presumptuous to without reservation conclude that the same is valid for all-source analysis at the strategic level. Therefore further study on the use of teams in intelligence analysis in a wider context should be carried out before a claim of wider generalization can be made.


Gill, P. (2009). Theories of intelligence: where are we, where should we go and how might we proceed? In P. Gill, S. Marrin & M. Phythian (Eds.), Intelligence theory: key questions and debates (pp. 208-226). Oxon: Routledge.


**Verbal sources**

The primary source data in this study was collected by interviewing six members of the same tactical level intelligence unit in the Norwegian Armed Forces in May 2009. A prerequisite for the participation of the interviewees was that they were assured complete anonymity. During the interview process the six interviewees were therefore non-sequentially provided the respective code names of L, M, N, X, Y and Z, and these code names have been used to distinguish between the interviewees when quotes are used.

The collected material, mind maps and notes, will be made available to the commission upon request. Appropriate contact information can also be made available to the commission should they seek to verify that these interviews were carried out as described.
Annex 1

Intervjuguide
Del 1 – Nye kriger og mangfold

Hovedspørsmål
A 1: Slik du ser det, har vår tids nye rammer for militære operasjoner, som for eksempel i Afghanistan, endret kravene til kunnskaps- og kompetansebehovet for etterretningsspesialister? (Alternativt: ..for etterretningsspesialist?)

B 1: Først innledningsvis si noe om begrepet mangfold, og deretter spørsmålet: I lys av de utfordringene du møter i ditt arbeid, kan du si noe om hvordan et større mangfold kan tenkes å påvirke kvaliteten på prediksjonene?

C 1: Dersom du tenker hovedsakelig på din egen gruppe kolleger, hvordan vil du beskrive organisasjonskultur? Slik du oppfatter det, skiller den seg fra organisasjonskulturen for øvrig i Forsvaret?

Mulige oppfølgingsfråspørsmål, avhengig av svarene på A1, B1 og C1 over
(1) Er ditt inntrykk at behovet for større mangfold er anerkjent på samtlige nivåer i organisasjonen? Eller er det en anerkjennelse som hovedsaklig er blant dere som i det daglige jobber med etterretningsteamet?
Kjener du til om det har vært foreslått eller vurdert at behovet for større mangfold blant analytikere også kan føre til endringer i måten arbeidet utføres på?

(2) Slik du ser det, hva er synet i din enhet på anerkjennelse av nye muligheter for læring som et resultat av større mangfold? Hva med eventuelle nye utfordringer som kan være en konsekvens av nye perspektiver som følge av økt mangfold?

(3) Er organisasjonskulturen slik at der er rimelig å hevde at det stilles høye krav til samtliges innsats? Tillates enkelte grupper eller personer å levere eller prestere på et lavere nivå i perioder?

(4) Er det ditt inntrykk at din arbeidsgiver legger til rette for eller stimulerer til personlig og faglig utvikling?

(5) Det neste jeg kommer inn på gjelder åpenhet, jeg tenker da på toleranse for debatt og konstruktive meningsskjell. Hvis du tenker primært på din egen gruppe av kolleger, hvordan vil du beskrive synet på debatt og meningsskjeller i arbeidet?

(6) Å være verdsatt kan handle om ulike former for anerkjennelse av jobben man gjør, også i form av økonomisk kompensasjon i form av lønn. Slik du ser det, hvor viktig er det at alle ansatte opplever at de er verdsatt av arbeidsgiver? Er det din oppfatning at ansatte i enheten virkelig føler seg verdsatt?

(7) Hvordan vil du si at din enhets oppgave er definert og forstått, både av dere selv, og i en større sammenheng for øvrig i organisasjonen?

(8) I din enhet, hvordan vil du beskrive strukturen? Flat og ubyråkratisk eller byråkratisk og hierarkisk? Hvordan påvirker dette eventuelt utveksling av synspunkter og ideer?
Intervjuguide
Del 2 – Tankeprosesser og vurderinger

Spørsmål

A Vil du kunne være enig i at det kan være riktig å si at analyse på et vis innebærer både vurderinger og beslutninger? Vil du eventuelt beskrive det på en annen måte?

B Kan du si noe om i hvilken grad dere utfordrer hverandres vurderinger? Tas slike spørsmål opp i en form for gruppedebatt, eller dreier det seg mer om en form for byråkratisk prosess i “linjen”?

C Slik du ser det, har følelser noen plass i vurderingen dere gjør i arbeidet? (Direkte/indirekte?) Vil du si at målet er at vurderinger skal foretas på et utelukkende rasjonelt grunnlag?

D Kjenner du til noen ubevisste tankeprosesser som kan påvirke ditt arbeid?

E Har du noen ideer om hvordan du eventuelt kan unngå at ubevisste tankeprosesser negativt påvirker ditt arbeid og dine vurderinger?

F I hvilken grad er det et tema blant deg og dine kolleger at ubevisste tankeprosesser kan påvirke deres vurderinger i arbeidet?

G Slik du ser det, tror du at spesifikke, systematiske og uttalte vurderinger knyttet til ubevisste tankeprosesser og deres påvirkning på arbeidet vil kunne tilføre merverdi, eller vil det bare være enda mer å forholde seg til i en hektisk arbeidssituasjon?
Annex 2

Interview guide

Part 1 – New wars and diversity

Main questions

A 1: From your perspective, has the new setting for military operations in e.g. Afghanistan altered the knowledge and competence requirement for intelligence analysts? (Alternatively: ..for intelligence personnel?)

B 1: Initially address the term diversity, followed by a question: In light of the challenges you encounter in your work, could you say something about how greater diversity in the workforce could be envisioned to affect the quality of intelligence predictions?

C 1: If you think primarily of you own group of colleagues, how would you describe the organizational culture? The way you see it, does it differ from the general organizational culture in the Norwegian Armed Forces?

Possible follow-up questions, depending on the answers to A1, B1 and C1 above

(1) Do you have the impression that the need for greater diversity is recognized on all levels of the organization? Or is this mainly a prevailing recognition among those of you who work with intelligence on a daily basis?

Are you aware of any proposals or assessments stating that the need for greater diversity among analysts could also lead to changes in the way the work is carried out?

(2) In your opinion, how does your unit recognize new possibilities for learning as arising from greater diversity? What about potential new challenges that might arise as a consequence of new perspectives resulting from increased diversity?

(3) Is the organizational culture such that it is reasonable to maintain that high expectations are placed on the efforts of all members? Are some groups or individuals allowed to periodically perform at lower levels?

(4) Is it your impression that your employer facilitates or encourages personal and professional development?

(5) My next question addresses frankness, i.e. level of tolerance for accepting debate and constructive differences of opinion. Thinking primarily of your own group of colleagues, how would you describe their view on debate and differences of opinion in their work?

(6) Being appreciated may be about various forms of job recognition, including remuneration. In your view, how important is it that employees, including analysts, experience that they are appreciated by their employer? In you view, do the employees in your unit feel appreciated?

(7) How would you say that your unit’s tasks are defined and understood, both within the unit itself and in the organization at large?

(8) How would you describe the structure of your unit? Flat and non-bureaucratic or bureaucratic and hierarchical? How does this potentially affect the exchange of views and ideas?
Interview guide
Part 2 – Thought processes and judgements

Questions

A Is it possible for you to agree that it may be correct to state that analysis somehow entails both evaluations and decisions? Would you perhaps describe it another way?

B Can you describe to what degree you challenge each others evaluations or judgements? Are such questions subject to group debates, or are they addressed in a more bureaucratic process in the chain of command?

C In your view, are emotions allowed to be part of your professional evaluations? (Directly/Indirectly?) Would you state that the goal is that the evaluations or judgements should be based on a purely rational approach?

D Are you aware of any unconscious thought processes which may have an impact on your work?

E Do you have any thoughts on how you may avoid subconscious thought processes having a negative impact on your work and your judgement?

F To what degree do you and you colleagues discuss whether subconscious processes might impact on judgements in your work?

G The way you see it, do you think that specific, systematic and explicitly stated evaluations of subconscious processes and how these may affect your work could enhance your ability to perform, or would it merely be even more to deal with in a hectic work situation?