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”Chasing a Moving Target”



A Case Study on using External Consulting on Interactional Issues in Building Projects

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Abstract

Consulting companies exist in many different fields and are used by most businesses in the modern world. To work as an external consultant in different companies means having other challenges than being an employee in one company. An external consultant must be able to work within several working environments and have different roles based on the nature of each assignment. The construction industry is complex due to cooperation of multiple companies for a limited period of time. And the combination of being an external consultant in the construction industry must be a very challenging way of working.

The motivation for doing this thesis was find out what impact an external consultant could make on interactional issues in building processes. And finding ways to improve the consultant's work was another goal in this process. I have looked at the complexity in the construction industry as well as looking at the role of an external consultant.

From a thematic analysis of observations and document analysis, as well as dialogues and simpler interviews, a relation between "stress" and "ownership" emerged trying to understand the relationship and collaboration between a consultant and his clients. I developed an empirical model out of the analysis data, and I found that the client's ownership of the problem had impact on the consultant's level of stress and quality of his work. Low ownership of the problem increased the consultant's level of stress while high ownership of the problem decreased the consultant's level of stress.

For the discussion, I took different perspectives on the results from the data analysis. I have used theoretical perspectives based on other studies from the construction industry; and in relation to process consulting, the theoretical perspectives from Edgar H. Schein has been used as a basis in the discussion. The consultant being in a selling position, his poor introduction to the building projects and lack of role clarification between him and the clients, where all issues hampering the quality of the consulting process. Lack of role clarification made the consultant take ownership of the problem instead of the client, and that made it difficult for the consultant to get in a position where he could perform his consulting tasks.

Suggestions to improve the consulting situation are first of all to emphasise that the client owns the problem and the consultant is the helper with regard to convening any arrangements. Another suggestion is to have external consultants work in pairs to improve the processes with regard to roles, facilitation and flexibility.

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1 Introductions

In the construction industry, every project can be seen as pilot project. The organisation structure is complex due to involvement of several companies like builders, contractors and subcontractors. The construction object is planned by planners and built by construction workers; two groups that normally don't meet during a building project. And when one project is finished, the planners and workers move on to the next project where they meet other people to cooperate with.

Consulting companies have special competence they can offer to other companies who need that field of competence in certain periods. When a company hires a consultant instead of employing a person, the responsibilities as an employer are avoided and payment for special skills is reduced to the actual amount of hours needed. In addition will professional consultants become more and more specialised, and they can draw experience from different kind of companies into their working fields. Being an external or third party consultant means working with different companies for shorter or longer periods of time.

Due to the complexity in the construction industry, being an external consultant is there more challenging than in simpler organisation structures.

1.1 Purpose of study

In my search for a master thesis theme, I came in touch with a consulting company where I know the manager from high school, and this company is referred to as the case company or the Consulting Company in this thesis. They had just started working in a new field of consulting called "interaction", and they needed some feedback on their performances. The company had a few months earlier employed a man to work as a consultant within the interaction field, and he is from now on referred to as the Consultant. The Consulting Company had talked about having this new interaction field reviewed by a master student. I presented "human relations" as my field of research, and it turned out to be a convenient match for both of us.

During the initial meetings, we agreed that I should follow the new consultant at two different building projects. The same contracting company managed both these building projects, and this company is referred to as the Contractor in this thesis. In this context, the Consulting Company wanted to use the construction industry for two main reasons. First, they have worked as consultants within this industry for several years and they presumed to benefit

from this experience. Second, they figured that if they can manage consulting within interaction in an industry as complex as construction, they can manage and offer interaction consulting in most other industries as well.

Based on what came out of the initial meetings with the Consulting Company and the Consultant himself, I came up with these research questions:

- 1. What impact did an external consultant have on two building projects?*
- 2. How could the consulting work have been improved?*

1.2 Approach and structure

For this thesis, I chose to do a case study where I observed meetings and read documents, as well as having discussions and doing a few simple interviews. From the data analysis, a need for better role clarification stood out as essential early in the process. In addition did a relation between “stress” and “ownership” emerge later in the analysis process.

After the introduction, I will first present relevant theoretical perspectives for this thesis. Second, I will describe the methodological choices I have made considering data collection, the analysis and validity of the data. Third, a presentation of the companies in this case will serve as an introduction to the results from the data analysis. Fourth, I will discuss the results with the most relevant theoretical perspectives. Finally, I will answer the research questions in a conclusion that is based on the discussion, in addition to giving some future considerations for the Consulting Company.

2 Theoretical perspectives

In this chapter, theoretical perspectives will be described. Already from the beginning of this project, two main categories stood out as interesting with regard to finding literature; *the construction industry* and *external consulting*. I have chosen to use those main categories in organising the theoretical perspectives. For the perspectives of the construction industry, the gathering and analysis of data did not influence the choice of literature essentially. But for the perspectives on third party consulting, the observations and analysis of data had significant influences on the process of literature review.

I found the process of literature review both challenging and exciting. It was challenging to find literature combining the core categories in this project; external consulting in the construction industry. And it was exciting to eventually find the central themes, like for instance role clarification, and get them organised under the main categories, especially for the external consulting section.

2.1 Perspectives on the construction industry

The construction industry is complex, and the complexity originates from a number of sources, but there are two main categories; *uncertainty* and *interdependence* (Gidado, 1996). The uncertainty relates to causes like management being unfamiliar with local resources and local environment; lack of complete specifications for the activities at the building site; lack of uniformity of materials, work and teams with regard to place and time (every project is unique); and unpredictability of environment. Prevailing conditions call for decentralisation of authority. The interdependence relates to factors like the number of technologies; the rigidity of sequence between the various main operations; and the overlap of stages or elements of construction. The nature of these interdependences seems to favour local co-ordination rather than centralised. The emphasis on site-specific activities provide us with two central features when it comes to house-building; focus on individual projects and local adjustment at the building site (Dubois & Gadde, 2001).

2.1.1 Tight and loose couplings

There are tight couplings between the activities undertaken in single projects, for instance because stages and elements of construction are overlapping. The couplings in the supply chains are both tight and loose; tight in the relation between the activities undertaken on site and activities carried out in the supply chains; and loose between the production of building materials and what is done with it at site. But there are loose couplings between firms in the

construction industry compared to other industries. The firms rely on short-term market based exchange where the individuals are changed from one project to another (ibid).

Figure 1 below describes how group C1 from company C collaborates with company A and B in one project, and group C2 collaborates with other companies in other projects. In addition, company C has to deal with company D in a third collaboration. Company A and B are in the same situation where for instance company A has group A1 in collaboration with B and C while group A2 works in another project.

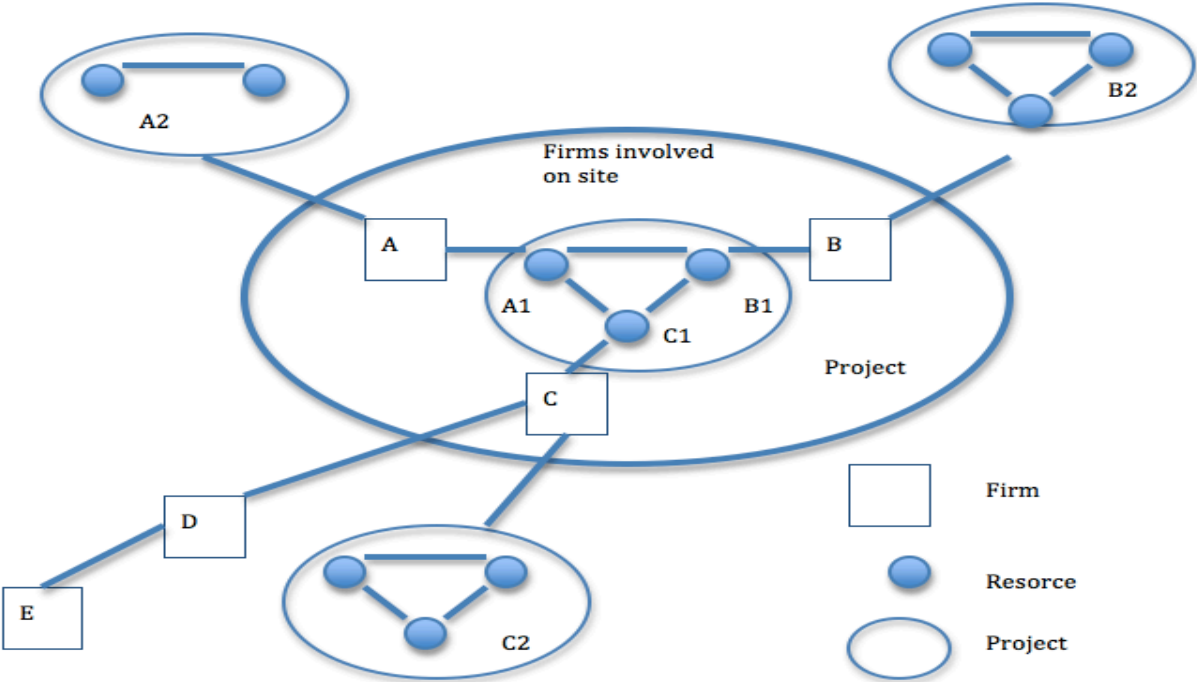


Figure 2.1. The construction project in its network context (modified). Source: (Dubois & Gadde, 2001)

The pattern of couplings seems to favour short-term productivity while hampering innovation and learning (Dubois & Gadde, 2001). The temporary nature of the project organisation does not promote learning because of no guarantee of further contacts among team-members. Another issue is the organisational arrangements within the firm, where any creative process in one project does not diffuse to other projects because of the pattern of couplings. The loose couplings also serve as a barrier to innovation because neither the individual nor the company becomes “one within the group”, just “one within a group” that most probably will be changed in their next project. The community of practice in the construction industry stabilises conditions that promote short-term activity and hamper innovation because they tend to make companies similar and independent. And the strong focus on single projects complicates inter-firm cooperation (ibid.).

2.1.2 Collaboration and change

A study from the UK construction industry showed that collaboration was seen as important for developing a team culture and fostering the “right attitudes”. Support from the senior management was vital in making a collaborative approach both credible and legitimate (Bresnen & Marshall, 2000). To support the importance of leadership in a company, Jim Collins concluded in his study that having the right people as leaders are crucial to make the step from a good to a great company (Collins, 2001).

A common theme in the UK study was awareness of the benefit of building long-term relationships where core teams and workforces will stay put from project to project (Bresnen & Marshall, 2000). That is not always possible to implement, and other efforts are being adopted. The use of teambuilding workshops supported by an external facilitator proved to be valuable helping promote collaboration, especially in the early stages. The study showed that teambuilding also promoted group identity and cohesion, as well as improved feelings of ownership in the project. But teambuilding had limitations, as it could not be a substitute for the actual experience of teamwork and it involved neither lower hierarchical levels nor key persons in other organisations. Teambuilding workshops were not sufficient for overcoming team-related problems. The respondents in this study felt that it was important to have collaboration in the whole supply chain, but this did not seem to be habitual. Some of the subcontractors were enthusiastic, but some had a tendency to have an adversarial attitude. They expressed strong misgivings about contractors’ underlying intentions and saw client-contractor collaboration as having very little or no effect on their own work (ibid.). Another study from the UK construction industry concludes that companies failed in achieving the full benefits of implementing collaboration environment because they underestimated people and organisational issues (Erdogan, Anumba, Bouchlaghem, & Nielsen, 2008).

When a change is to be introduced in an organisation, there will be resistance from the employees that must be managed. To implement changes in an organisation that affects social relationships take longer than technological changes with obvious benefits (Kast & Rosenzweig, 1974; Thorpe & Mead, 2001). If one of the project’s key persons refuses to participate in the change, the whole system loses its effectiveness (Thorpe & Mead, 2001). When introducing new information technology in the construction industry, the success factors to handle user resistance to change were found to be early user involvement, user-friendly interfaces and training (Erdogan, et al., 2008).

There are several steps to achieve a successful change in an organisation and one is to establish a sense of urgency. It is also important to assemble a group that can lead the change and keep focus on the vision they have created and communicated within the organisation (Kotter, 1996).

2.2 Perspectives on third party consultation

Third party intervention has traditionally been used in situations including mediation and arbitration. *Third party consultation* has evolved from intervention and includes facilitating problem solving through improving communication and analyzing the basic relationship between the parties (Fisher, 1983). Having said that, it is important to be aware that observing, doing interviews and surveys is part of intervening. And this must be considered when to make a diagnosis (Schein, 1988).

The third party *identity* requires that the consultant is impartial with only moderate knowledge of the parties in advance and has low power over the participants. He needs to be professional and have high control of the consultation situation (Fisher, 1983). Being professional does not exclude being personal; those are not opposites – rather the contrary. In interpersonal meetings, good professionalism include being both personal and present (Skau, 1998).

Theories on third party consultation have a weak link when it comes to the quality of research (Fisher, 1983). In this section I will use the ideas from Edgar H. Schein as a basis, supported by other authors.

2.2.1 Process consultation and role clarification

When a company searches for an external consultant, the manager often does not know what he's looking for. All he knows is that something is not working right and he needs some kind of help. An important part of any consultation process is therefore to help the manager identify the problem, and then decide what further kind of help is needed. There are three basic models of external consultation - the expertise model, the doctor-patient model and the process consultation model (Schein, 1988). In the *expertise* model, the manager must have a clear idea of strengths and weaknesses of the present structures and processes. In the *doctor-patient* model, something is “sick” and the manager needs someone to come and “fix it”. The *process consultation* model is anchored in social psychology, sociology and anthropology with the following definition: “Process consultation is a set of activities on the part of the consultant that help the client to perceive, understand, and act upon the process events that occur in the client's environment” (Schein, 1987, p. 34). Another description of a process consultant is someone with the highest-level skills in process consultations in contrast to basic

facilitating skills. “A process consultant must be able to coach senior executives and community leaders in facilitative leadership; design multilevel intervention processes; and lead a team of consultants and trainers to support an intervention” (Straus, 1999, p. 143).

When a consultant first meets with a client, he must establish contact and define a relationship. The initial meeting is important to find out whether or not the consultant should proceed with this project. An indication of need for reassurance for some course of action that is already embarked on, or need for a quick solution to a surface problem, is rarely a good starting point for process consulting. In addition, a process consultant must be free of the pressure to sell so that he can genuinely evaluate whether or not he can be helpful to the client. If the consultant has to sell the services he is offering, it will violate the process consultant model of helping others to help themselves (Schein, 1988).

The role of a third party consultant is to facilitate problem solving and to diagnose the nature of the conflict (Fisher, 1983). It is important to distinguish between the roles of managers and consultants. Managers are *insiders* and have the formal responsibility for the organisational outcomes, they are expected to follow the organisational mission and they have accountability that cannot be delegated. Consultants are *outsiders* even when they are so-called inside consultants, they are free to negotiate their area of responsibilities and in most cases they are free to leave a difficult situation. On the other hand, both managers and consultants have a helping role (Schein, 1987). One of the most central premises for a process consultant is that the client owns the problem and continues to own the problem also after the consultant is involved. It is important that the consultant doesn't release the client from the problem saying that he will take care of this for him. The consultant must clarify his role as a helper and the client as the owner of the problem (ibid).

In a concept called “consensus building process”, convening a meeting is complex due to the context of multiple meetings over weeks, months or years. “Convening involves planning and organising the process with participants, or working with a facilitator or mediator to do so.” (Carlson, 1999, p. 169.) In this sentence, it is implicit that the responsibility to convene a meeting lies with the contractor and not the facilitator. Carlson emphasise this by saying that, it is important how the convening steps are carried out, and also who carries them out. These factors can have impact on whether a building process is successful or not (Carlson, 1999).

When a process consultant chooses a setting, he should be as near the top of the organisation as possible because it's easier for the consultant to find the organisation's norms and goals at the top level. The consultant should also choose a setting where real work is going on,

especially in the beginning. It takes time for a consultant to gain observational data to help in the group discussion and for the participants to trust the consultant enough to talk about interpersonal relations (Schein, 1988). With regard to another view on this issue where the consultant is supposed to organise informal group discussions in a neutral and informal setting (Fisher, 1983), these two theories can be interpreted either as opposites or as complementary. I choose to see them as complementary where the consultant should strive for attending scheduled meetings, as long as the locations can be regarded as neutral and he can influence these meetings by organising group discussion.

Given the fact from above where the consultant's only roles are facilitating and diagnosing, he still has multiple tasks working in a group. A group leader should keep his engagement to four points: the agenda; the process; senses, observation and intuition; conclusions and results. Someone else should be in charge of keeping track of time and serving coffee (Spurkeland, 2005). I will come back to these four points in the next section of this chapter. Based on the multiple roles a process consultant must play, David A. Straus recommends that at least two consultants work as a team when possible (Straus, 1999). The multiple role can be illustrated with regard to only one of the tasks - listening - where the consultant should listen to several factors like engagement, knowledge, participation, motivation, dominance, attitude, suggestions, ethics, interaction and support (Spurkeland, 2005). In addition, interactional and communicative processes are complex due to the search for both problem-solving and building relationships, and more management are being required than in simpler processes (Elliot, 1999). Having the multiple roles and the process complexity in mind, it is easier to understand the allegation that a consultant is more likely to make a contribution in smaller groups (Schein, 1988).

2.2.2 Group work and communication

“A truly engaged and collaborative group is probably one of the most productive tools we have in humans possess.” (Kvalsund & Meyer, 2005 p. 68) When a group is put together, the members will in most cases have an opinion on the group composition. How strongly the members feel about the group composition will depend on how much they knew each other in advance and what criteria that has been used in the process. It's also important to remember that when an individual is placed in a group, he or she may not be aware of who they are when they step into a possible unknown setting (Kvalsund & Meyer, 2005).

It is not easy to develop and maintain an engaged and productive group. The development of groups will be in wave motions where it sometimes must pull back, return to an earlier stage

in development to be able to come back with renewed power (ibid.). This can be compared to Molander's theory saying that when people work together on a task, they need to dive into the problem and then pull back, get a distance and try to understand the other's way of seeing and solving the problem (Molander, 1996).

It is essential for a process consultant to have a simplified model of the process of building and maintaining a group (Schein, 1988). The process can be organized in two phases where the first phase addresses the problems when a person enters a new group and his or her self-oriented behaviour. Questions that occur are about identity, control and influence, individual needs and group goals, and acceptance. The second phase addresses the tasks and group-maintenance functions, and this phase is divided into three categories: task functions; building internal maintenance functions; and boundary management function (ibid.).

One way of arranging group work is presented as Idealog (NTNU, 2008) and is a variant of Brainwriting. There are many varieties, but the general process is that all ideas are recorded by the individual who thought of them. Then, they are passed on to the next person who uses them as a trigger for their own ideas (Mycoted, 2007). These can also be compared to the World Café method that is a simple methodology for hosting conversations about questions that matter. These conversations link and build on each other as people move between groups, and they receive and contribute with ideas to discover new insights. As a process, the World Café can evoke and make visible the collective intelligence of any group, thus increasing people's capacity for effective action in pursuit of common aims (Brown & Isaacs, 2005).

“One of the most important basic processes in organizations, and one of the easiest to observe, is how people communicate with each other, particularly in face-to-face and small-group situations.” (Schein, 1988 p. 21) There is a term of speaking within every working field, and an external consultant must adapt some of the language used in the group. He must also be aware of the language he is using to his participants (Molander, 1996).

With regard to Spurkeland's four points from the section above, he emphasizes that the agenda must be adjusted to the development of the meeting. Process leaders should observe and listen more than they speak, and to be able to handle all these observations they must have all senses towards the group and for instance leave the computers behind. The process must be managed by asking questions and challenging the participants (Spurkeland, 2005).

Attention can be learned as a routine. One can learn to see, listen and take in, and to a certain extent let this be a routine. But this is not enough because one must also pay attention to the untypical, the unexpected and the (until now) unknown. To be able to do this, parts of one's

work must be routine without demand for special attention. There is a tension between routine and attention (Molander, 1996).

When group work is used for problem solving and decision-making, Schein has a six-step process where the first section can be regarded as theory and the last section as practice or action. Both sections go in a loop before one can move on (Schein, 1988). These steps and loops can be compared to the findings a Swedish company doctor had in his work on studying how to successfully make decisions in a company (Johnsson, Lugn, & Rexed, 2006). He also divided the plan into theory and practice, but he only made one loop. The theory part consists of finding causes and choosing solutions, while the practice part consists of taking action and look at the facts. The facts are related to the situation today and the finding causes are related to the situation we want. “How do we look and act when we are at our best?” was his most important message (ibid.).

Any meeting or conversation should end up in a conclusion and hopefully some results. By doing that the participants feel that they have been seen and had some influence (Spurkeland, 2005). A decision made by a group can be done by many different methods. The decision methods can be by lack of response, by formal authority or self-authorization, by minority, by majority rule like voting, by consensus or by unanimous consent. The consultant must first make the group aware of the decisions it has made, but he must also talk about the methods used and get the group to assess whether they feel comfortable with it or not (Schein, 1988).

In this section, I have outlined the main theoretical perspectives that I utilize in this thesis. In the discussion chapter, these perspectives will highlight the results I proceed to discuss. The perspectives will contribute to understand the processes in this case, and they have been chosen in an iterative process between data findings and data analysis. I can never disregard my preconception and I am aware that it has influenced my choices. I will now proceed with the methodological choices and challenges before I present my results and discussion.

3 Methodology

3.1 Method approach

“The distinction between qualitative and quantitative methods is a matter of emphasis - for both are mixtures” (Stake, 1995 p. 36). In addition Stake talks about three major differences between qualitative and quantitative emphasis saying that qualitative methods emphasize *explanation* instead of understanding; *personal role* instead of impersonal; and *knowledge discovered* instead of knowledge instructed. In this project I wanted to see how an external consultant made an impact on building projects as an interaction coordinator. I will try to *explain* how he *as a person* made an impact and by that *discover knowledge* about the subject. Based on this, a qualitative approach seems like the most appropriate way to proceed.

My intention with this research is to make a useful contribution to the case company in a field where they have less experience than their other working areas. I hope that the themes I have found will be discussed and used by the case company to improve their work on interaction coordinating for the years to come.

In qualitative research, the researchers are interpreting the conditions in different situations based on their own frame of references. That means that the researcher brings his or her own experiences and theories to understand and create meaning in the collected data material. Science can therefore never be free of values or completely objective (Postholm, 2005). My motivation to do this thesis was to get a better understanding of what impact an external consultant can make on interrelational processes within and between organizations. When I started on this thesis, I brought in my experience as a union leader in a company going through a big restructuring process, and I had mixed feelings on decision-making processes. In addition, my father works as a process consultant and the conversations I’ve had with him might have coloured my research process. I have tried to keep focus on being as objective as I can by being aware of my preconceptions. When the researcher describes his or her perspectives and meanings to show how this has influenced the scientific work, it will help ensure the quality of the study (ibid.).

I knew the manager of the case company when I started working on this thesis, but I had no prior knowledge of the company’s working areas. It was a very positive experience to work with the interaction consultant who gave me all the information I could ask for. I also felt that the Project Manager at the Contractor saw that they could benefit from having someone there to make observations of the process.

3.2 Research design

Case studies are an exploration of a bounded system when it comes to time and place. It is a specific, a complex, functioning thing (Jorgensen, 1989; Stake, 1995). The case here is the Consultant and the impact he made on two building projects as an external interaction coordinator.

Stake made a distinction between intrinsic and instrumental studies where instrumental studies also are divided into individual and collective case studies. An intrinsic study takes place because the researcher is interested in that particular case and not so much about other cases or some general problem (ibid.). I wanted to get more insight into the question of using an interaction consultant by studying one particular case, and an instrumental case study gives a more general understanding. Since the Consultant was my only research object, this case can be regarded as an individual, instrumental case study.

3.3 Empirical collection strategy

“To be able to catch processes including a perspective of interaction, two concepts are leading the way for the researcher - dialog and activities” (Postholm, 2005 p. 29). I had three different sources of data collection for this case study - documents, observations and dialogues. Initially, I received a presentation from the Consultant covering his role as an interaction coordinator and a copy of this power point presentation became the first *document*. Later in the process I received more documents from him like agendas and background for interaction meetings, as well as administrative information about the building projects made by the Project Manager.

“There is no particular moment when data analysis begins.” (Stake, 1995 p. 71) I started making observations about the consultant already at our first meeting. During my work with this thesis, I met with the consultant five times in addition to the interaction meetings where I made observations. We had *dialogues* about the interaction meetings that we had attended and the meetings that were about to take place. I took notes when we talked, but I also shared my opinions with the consultant that made me have an indirect impact on the process as well. At one of our meetings, I had made a list of questions about his intentions in leading interaction meetings, and that conversation was more like an interview than a dialogue between us.

I attended five meetings during these two building projects where I made *observations*. But I had also spent some time doing research before the actual meetings took place. I got copies of meeting notices and e-mails sent between the Consultant and members of the building projects. And I was notified when the seminars kept being postponed, rescheduled and in one

case, cancelled. The first observation meeting was an interaction seminar, and after that I attended four meetings at two different building sites. The four meetings evolved from the seminar, as a result of the group work that took place during that day. The method I used for observing was first of all being present at meetings. Then I could see, hear and feel the atmosphere in the meeting room. I did not take the role as a “participating observer” (Jorgensen, 1989) as I did not participate in the discussions that took place. At the interaction seminar, I arrived one hour before the start-up and by that I was able to observe how the meeting room became organised and how the participants reacted as they entered the room.

The methods for making observations on the interaction seminar were taking notes on the first half of the day and using a video camera on the second half. On the other meetings I took notes only. Prior to all meetings, I had made tables to fill in. During the meetings I made maps of the rooms where I placed the participants, and this way it was easier to take notes from the discussions. After each observation I wrote memos of what I had observed, in addition to my own reflections.

3.4 Selection criteria

When I started cooperating with the case company, we agreed on including two different building projects with the same contractor in this project. I was supposed to attend one interaction seminar at both projects, but as the seminars kept being postponed or cancelled, I ended up with attending only one seminar. But as more interaction meetings evolved from the seminar, I asked for permission to attend those. I wanted to see where this would end up and if they achieved any results at the building sites. So I attended all the meetings that I could in the two building projects, but I did miss a few observation opportunities: I was not informed about a meeting that the consultant had with one of the projects until after it was over; One meeting had already started when I got there because they had accelerated it; And both the Consultant and I missed a meeting because it collided with a meeting at the other project. I did however attend a meeting at the building site where the Consultant was not presented. I see that it may not seem relevant to attend a meeting without “the case” present, but the meeting was a continuance of something he had started so it seemed sensible at the time. In retrospect, I made some interesting observations that day that are included in this thesis.

3.5 Methods for analysis

The analysis of the different sources of data like document analysis, observations and interviews was conducted concurrently, in continuous iteration. As mentioned, I had

transcribed the data and made memos from each observation day. I started out by making a table with four columns to use as a tool, see figure 3.1.

Consultant's intention	Consultant's action	What the participants said and did	My reflections

Figure 3.1: A table used as a tool to analyse the observation data

I used material from the observations to fill in the second and third column; the Consultant's action and what the participants said and did as a response to what the Consultant said. To fill in column one, the Consultant's intentions, I used the documents he had sent me and I did an interview with him in the wake of the meetings. In the fourth column, I wrote my reflections and the thoughts I had about the meetings I had attended. This analysis gave me an overview of the material and I could see the main tendencies.

“Two strategic ways that researchers reach new meanings about cases are through direct interpretation of the individual instance and through aggregation of instances until something can be said about them as a class. Case study relies on both of these methods.” (Stake, 1995 p. 74) When I analysed the data, I looked for things the Consultant did several times and actions he made that had essential impact on the meetings. After this process of thematic analysis, I ended up with a list of categories. When I interviewed the Consultant about his intentions, I got a different angle on some of my categories. Three main categories emerged from the interview with the previous analysis as a backdrop, and I used axial coding to proceed (Strauss & Corbin, 1998). I went back to the documents and observation data, and the earlier emerged categories were coded to the three main categories as subcategories, in the term of relations creating the main categories. The subcategories could be coded to one, two or three of the main categories, while some earlier categories could not be placed in any of the main categories.

Given the fact that the Consultant worked on two projects in parallel, the projects had most likely impact on each other. To get a better overview on how much impact the projects had on each other, I drew a time scale. That scale gave me a better understanding on how using an external consultant gave the two building projects access to knowledge and experience from each other. The emergent themes from the thematic analysis and the interview were compiled in an analysis summary, and I started looking for additional theories in relation to this.

When the interaction seminars I was supposed to observe kept being postponed or cancelled, I also had to change my focus in this case. This was further enforced when the interaction seminar resulted in the beginning of two other similar processes. In my search for understanding all this, I had to go further and further backwards in the material. Some of the topics in my discussion and conclusion are based on the presentation I received from the Consulting Company during our very first, initial meeting.

3.6 Ethical considerations

In this project, the case was one man and the impact he had as an external interaction consultant. It can be very personal for the consultant that is being analysed, and I tried to keep this in mind when I observed and did research. The Consulting Company and the Interaction Consultant wanted this analysis to be performed, and I find that to be very mature in an organisation. To be able to find out what impact the Consultant's had on interaction processes, I had to observe him when he had direct contact with his customers. But the work I could do as a researcher was also affected by the fact that they are dependent on their customers. For instance, I wanted to use a video recorder and asked for allowance prior to the interaction seminar. The Consulting Company was very sceptical and wanted to ask the Contractor first. So when I brought the video camera to the interaction seminar, it was without knowing if I could use it. Fortunately, I was allowed to use it, but only on the second half of the day. However, I felt that having to ask for this was uncomfortable for the Consultant, so I did not ask for allowance to use it again. The rest of my observations were performed with paper and pen only.

When I introduced myself at the seminar and at building site meetings, I emphasised two elements in addition to saying my name and why I was there. I explained that I was there to observe the Consultant and what he did, more than observing the meeting participants. I also stressed that everything I wrote was anonymous. Confidentiality is a very important principle in qualitative research (Kvale, 1997). Given these times with information technology, confidentiality can be a hazard. Here is what I did to make sure I retained confidentiality in my project: I made a protected folder with the documents I had received from the Consultant. Apart from the Consultant's name, I only used names on handwritten documents. All electronic documents are with anonymous referrals like the Consulting Company, the Consultant and the Project Manager. The participants in the meetings are referred to in accordance to their profession like the Architect, the Builder, the Electrician Foreman and so on.

When it comes to the independence of the researcher, I did not get any guidance from the case company on how to angle my project. We agreed on the approach where I should follow the process and see what impact the Consultant made, in addition to identifying possible improvements. But apart from that, I was free to do the research I wanted. I was however aware of the fact that they would benefit from getting a document saying that their consultant had a positive impact in building processes, but I did not feel any pressure on writing a document for them to use towards their customers. The case company did not contribute with any financial support in this project, so I was a totally independent researcher when it came to the outcome.

3.7 Triangulation

It is important for the qualitative researcher to use different procedures to make the study as thorough and credible as possible. In qualitative research, the term *triangulation* means that the researcher uses many and different sources, several data collection strategies, earlier research results from more than one scientist and different theories to support the findings (Postholm, 2005). Norman Denzin (1989) identified several angles or protocols for triangulation, and I will discuss four of them in connection to this thesis.

3.7.1 Data source triangulation

The researcher is looking to see if the case remains the same under different circumstances, and that is called data source triangulation (Denzin, 1989; Stake, 1995). I got to observe the Consultant in several situations and circumstances like our initial meeting, preparation meetings, interaction seminar, and meetings at two different building sites. In addition I got copies of his e-mail correspondence with his clients and the other meeting participants.

3.7.2 Investigator triangulation

The researcher makes changes in what he does, and investigator triangulation is about having other researchers take a look at the same phenomenon (Denzin, 1989; Stake, 1995). In this matter I did not bring another researcher to the observations, and I have not shown the observation recording to anyone. What I have done is discussing my observations with a person actually working as a third party consultant, and those conversations gave me a better understanding of the consulting position. Those dialogues did however play a bigger part in looking for improvement areas for the Consultant than the actual observation analysis.

3.7.3 Theory triangulation

When two or more investigators interpret theories and compare their data, this is theory triangulation (Denzin, 1989; Stake, 1995). According to Stake (1995) researchers rarely use

this form of triangulation because it is too time consuming, and I join the group of most researchers in this issue.

3.7.4 Methodological triangulation

The most recognized protocol is methodological triangulation that is use of multiple approaches within a single study (Denzin, 1989; Stake, 1995). My approaches in this study were document reviews, observations and interviews. The documents represented a stable and precise source. The observations covered events in real time and gave me insight in the interaction between the Consultant and the Contractor, as well as between the Contractor and their cooperative partners. Given the fact that I could use a video recorder at one of the observation days only, I had to rely merely on notes from the other days. Taking notes requires a need to be selective in my observations, and that means that important things could have been deselected. When doing interviews, it is possible to target the questions for the case topic, and since I wanted to get the Consultants intentions, I aimed for that. An interview can also uncover the perceptions of the person being interviewed. There is however a possibility for getting a biased interview if the questions are poor, the interviewee tries to give the answers the interviewer wants to hear or the interviewer loses control of the dialogue.

In addition to documents, observations and interviews, I talked to the Consultant that I observed to see if we had the same understanding of what happened in the meetings we attended. This was done in terms of the participants' behaviour and not *member checking* that I will come to in the next section.

3.7.5 Member checking

Member checking can take place through the whole researching process and is considered to be the most important procedure to create a credible study (Lincoln & Guba, 1985; Postholm, 2005). During this process, I have had several dialogues with the Consultant where parts of the conversations can be regarded as member checking. I have also had e-mail correspondence with the Consultant to clarify issues and get the facts correctly. But the main member check was to send the whole "Result section" to the Consultant so he could read it and correct any misinterpretations and misunderstandings I might have had.

In this chapter I have described the methodology used in this case study. I will now proceed with the results chapter where I present the outcome from the observations and the data analysis.

4 Results from analysis

4.1 Summary of results

In this chapter, I will present the results from the thematic analysis. The main source of data came from observations at one interaction seminar and four meetings at two different building sites. As a supplement, I've had several dialogues/interviews with the Consultant as well as short dialogues with the project managers and site managers at both building sites. A third source of data was document analysis supplied by the Consulting Company, but often developed by the Contractor like the Project Administration Book. However, documents were mostly used in the early stages serving as an indicator rather than a source of data.

First in this chapter, I will give the organisational context based on data from dialogues in this process. At the end of this chapter, I will present an inductive model that emerged out of the data material.

The Consultant's initial intention was to arrange interaction seminars for two different building projects three months before the planning periods were over, but he had difficulties getting the participants to attend the seminars. Three months later than intended, one of the seminars was arranged, but the delay changed the goal and the intention of the seminar. A new project evolved from the interaction seminar, and the external Consultant was able to bring experience from one project to another. Therefore, the new project had impact on two different building sites.

In this thesis I have included quotes from Norwegian e-mails, written and oral presentations in addition to conversations. I am responsible for the English translation of all these quotes and I am aware that some nuances can be lost in translation. I have tried to keep the intention of the sender in mind when I did the translations, and I made some minor changes in the sentences instead of making an English sentence with less meaning for the reader. Before I present the results, I will shortly describe relevant issues about the construction industry in this context and how these building projects started.

4.2 The organisational context

In a consulting process, the relationship between the consulting company and the client is of importance to understand the interaction. Therefore, I will start by giving a brief story of the Contractor, the Consulting Company and the relationship between them. Both companies are located in Norway.

The Contractor is nationwide and delivers building projects to both private and public developers. One of the public building projects in this case started with the Municipality initiating a tendering process. The Contractor developed the concept in collaboration with technical engineers, architects and other suppliers. When the Contractor won the tendering process, they signed a collaboration contract with their collaborators and the Builder, and that eventually ended up as a turnkey contract. The responsible leader of the whole project was the Project Manager. A planning group was established and led by the Planning Manager, employed by the Contractor. The planning group met every week after signing the collaboration contract, and they were supposed to end their work in December 2008. The Municipality wanted some changes during the process and therefore extended the collaboration period by approximately 11 months. The work on the building site started up in January 2009 and was led by the Site Manager and two supervisors. The Site Manager was in charge of operational meetings at the building site every other week, and the Project Manager attended those as often as he could. The Supervisors led the weekly foremen meetings, and the foremen led the workers in each field like carpenters, electricians, plumbers, ventilation workers, masons and painters.

The Consulting Company was founded in 2003 and provide consulting services within strategy, financial management, value, system development, recruitment and interaction. They have 10 employees in 2010.

For many years, there has been an unwritten contract between the Contractor and the Consulting Company. The Contractor has used the Consulting Company in several business fields, and in the last years they have also added the new field “interaction”. At the Consulting Company, there is one man working as an Interaction Coordinator and he started working with the company in February 2009. Since the field interaction is new for both the Consulting Company and their clients, they wanted to have someone take a closer look at that working field. My ambition with this project was to better understand what impact an external consultant could have in such a complex environment.

4.3 Using external consulting

When the Contractor decided to get help from an external consultant, they had ideas about efforts they wanted to implement and they needed help to make it happen. In addition it is easier to hire a consultant when you know both the Consulting Company and the Consultant himself in advance. As the Project Manager said:

I have much belief in interaction work and in arranging interaction seminar to make projects run more smoothly. And I do like the way this consultant works, he has a different approach than we have experienced earlier.

Given the fact that the Consultant is educated within sociology and interdisciplinary studies of culture, he did not have much theoretical background within building subjects when he started working with the Contractor. During the seminars and meetings he held, the Consultant clarified this several times, for instance by saying: *“I am not the expert here when it comes to putting up a building, you are.”* Despite this, the Consultant said he had to get acquainted with the construction industry and focus on practical challenges. He also said that many participants were sceptical to an interaction seminar, and trying to convince people to participate he emphasised the practical work. From an e-mail:

“The agenda is being prepared with the themes we pick up in our measurements (current) and requests you must have for topics and focus areas for such a seminar. So far we have received several themes we want to address at this seminar – challenges specific for this project. I can assure you that the seminar will not be held as a having fun day where we sit around and do “team-things” in the traditional sense. The Consulting Company will not stand there and talk about how important it is that we play on the same team etc – there are enough real challenges to address, so that is not a priority© The goal is that we through a seminar like this will remedy the current phase and the project forward as a whole.”

Since he started working with the Contractor, the Consultant had become more familiar with the building industry and he could more easily facilitate work on practical tasks in the projects.

The two projects in this case were two of many projects that the Consultant worked with at that time. Working with several projects simultaneously, he could bring ideas and experience from one project to the next. As the Consultant said after a meeting with the Site Manager in Project B:

We have decided to make a project in the project at the building site, and we will make arrangements in three steps. I believe those arrangements will work just as well for Project A. We will call it something like “ready for painter”.

The “ready for painter” –project was first introduced in Project A. When Project B was about to start up a few weeks later, the Consultant could bring experience from the first process. But being an external consultant means having only short visits in one working environment. During a period of approximately three weeks, the Consultant spent 15 hours working with the “ready for painter” –project for Project A and 8 hours for Project B. Only a few of those hours were spent being present at the building sites. This means that the Consultant was not completely aware of the situation at the building site for Project B when he entered the start-up meeting for “ready for painter”. I took these notes from the decisions in Project A: *“And after a while they had agreed on making a checklist, and the foremen should use that list 30*

minutes before the next foremen meeting.” The Consultant suggested the same solution in Project B, and the Site Manager replied: “We have this system here already between the carpenter and the painter. A quality safety scheme is weekly submitted, and the painter and the foreman go for an onsite inspection walk before start-up.”

Since the Consultant was external and worked with several projects simultaneously, he had to take account of many different calendars. In Project A he missed step two in “ready for painter” because of a mission for another company, so the Site Manager took over and led the meeting. When step three came up, the Consultant said: *“I can’t participate at the step three meeting because I have to be at the step one meeting with Project B.”* The Site Manager in Project A finished the “ready for painter” –process by leading the third step meeting as well. And a few weeks later the Consultant said to me: *“We have concluded that the project “ready for painter” was a fiasco.”*

4.4 Issues on role clarifications

The Consulting Company had a power point presentation about what contributions they could provide for companies about interaction, and in relation to role clarification I want to address two issues: First they called the Consultant an “Interaction Coordinator”, indicating that he will be *coordinating* the process instead of *helping out* as a consultant. Second they said they could *provide relief* for the project management in areas attached to human relations and collaboration challenges.

4.4.1 Convening

Early in this process, it emerged from the observations that the roles between the Contractor and the Consultant were not clarified. When they agreed on arranging interaction seminars, it seemed like the Consultant partly had the role as *the arranger* instead of being a consultant *helping* the arranger. For instance, it was the Consultant who convened the seminars by sending out meeting notices and reminders to the participants. But he had trouble getting people to attend. Here are a few quotes from different e-mails from subcontractors or other possible participants about attending:

The project demands so much that we cannot spend a whole day at an interaction seminar. I ask that you reconsider the planned seminar and find a template that is better adjusted to a very tough production phase in the project.

OK Consultant – before I say yes to us participating in this I want to see a suggested agenda, otherwise we will prioritise production.

Hi. We must deliver another tender that day. I suppose that people have been “working their butts off” the days before. (...) And I have just promised to give a lecture for the County that day (must take care of possible clients too)... help.

Unfortunately, I don't have the opportunity to participate because that day is fully booked.

Hi. We have discussed this case with our superiors. We don't have the opportunity to spend a whole working day for this.

Unfortunately, I don't have the opportunity to participate.

And here are some quotes from e-mails sent by the Consultant; reminders and replies:

Hi again! A reminder about feedback term on previous sent e-mail, which is tomorrow. Send an answer to me with a copy to the Project Manger (project.manager@contractor.no).

I have had a close dialogue with the Project Manager about the seminar lately. He expresses that this is something the Contactor wants to implement and says at the same time that the program, as planned so far, is satisfactory in relation to the wanted benefit for the Contractor after this to lift this project further in the process. I hope that you can make time, and not least want to do it, for a seminar like this. We will, on our side, try to make this as academically constructive and relevant for the project as possible after input on subjects/focus areas from you in the planning group.

It's noted and I fully understand, no problem – I was told about this a few days earlier. As far as I know, the seminar will take place on Tuesday, giving we don't get to many rejections. If you can be there with 'only' one that's no problem, great that you have the opportunity to be represented at all. Do you know who it will be?

Hi! A short time ago we had to cancel the planned seminar with regard to Project A. We have now made some clarifications, got more personnel into the project and come up with a new date with the Contractor. (...) The Contractor and the Consulting Company are very pleased that you all have been positive to an arrangement like this and see the benefit of discussing common issues interdisciplinary at "several levels", where the building and planning processes are more closely attached. We hope for full participation this time to get a productive seminar that both the project and the process will benefit from! Remember – you are all invited for a reason!

Here is an e-mail from the Consultant cancelling one of the first scheduled seminars:

Unfortunately, we have to cancel the planned seminar since some key personnel have declined due to necessary priority of resources. To have effect from a seminar like this, and to get appropriate solutions on challenges in this project, we are dependent on getting as many as possible to attend – at least central personnel in the project.

From all this, it looks like the Consultant had all the correspondence with the participants, but a few e-mails also point to the contrary; for instance this e-mail from the Contractor to the Consultant: *"It is only the electrician that has responded to the invitation."* However, it seemed like the Consultant was the junction between the Contractor and the participants. When the Consultant realised that central people in the project wouldn't participate at the interaction seminar, he sent an e-mail to the Contractor asking them to make decisions, and he made some suggestions himself. Here are quotes from that e-mail, sent 36 hours before the seminar day:

I don't have a distinct feeling about how we are with this arrangement, do we go through with the seminar with the ones who have accepted or not? (...) If I were honest it would be an advantage to postpone the seminar about 1 week - 1½ week, to get more control and better

composition of the group of people participating. (...) We can early this week have a chat about whom we want to participate from the different fields. A postponement will give us more time with regard to getting more foremen to come. (...) On the project meeting Wednesday, we should be able to show a participants list, agenda (which I complete from the participants list we make) and suggestion to a new early date. Again – you make the decisions, but do it quick so we/I have time to get things in place tomorrow: Final agenda; place; possibly dinner; and notifying people about it ☺

The next morning, the responsible people at the Contractor agreed to postpone the seminar, and the Consultant sent another e-mail: “OK. For us not to make a mess and switching roles, I suggest that you send out a cancelling text to those who had accepted.” The Consultant attached a text that he suggested they could use towards the participants, and he ended the e-mail with: “When can we meet before Wednesday so we asap can get the participants list set? After lunch today? Early tomorrow?”

After the second cancellation in Project A due to cancellations particularly from one of the engineering companies, the Consultant wrote a text and asked the Project Manager to send it to them. Here are quotes from that e-mail:

Your lack of participation makes it difficult to implement a constructive seminar where we achieve the goals that we want. It affects all the other participants that are positive to such a seminar, and among them the Builder. (...) When you say that you cannot spend a whole working day for this, I want you to take another look at your agenda and reconsider. This is not something we do just to have a nice time together. (...) We are all short of time – but we want to implement a seminar like this! (...) We cancel again and try for the last time in a few weeks. But before that, we want you to make up your minds and give us a clear message if you want to accept the meeting notification or not. (...) What do you think?

4.4.2 Interaction seminar

After having to cancel the interaction seminar for Project B and postponing twice for Project A, the latter seminar finally took place approximately three months delayed. At the seminar day the Consultant arrived first and started to rearrange the tables into group tables. His role was clearly the arranger of this day. This was enhanced when the Project Manager after a while arrived and took a participant’s role. Here are the notes that I took from that situation:

As the starting point came closer I got more and more concerned about the old water standing there in a mug, for all I knew it could have been there for weeks! The Consultant didn’t know where to ask about it, so when the Project Manager came, I asked him and he said he would take care of it. I felt that the responsibilities between the Consultant and the Project Manager were unresolved when it came to the practical tasks. The Consultant was the leader of the meeting, but the meeting was held at the Contractor’s locations.

When the seminar started, the Project Manager sat down in a group with the other participants while the Consultant gave the introductions and led the whole seminar with 24 participants.

The meeting agenda was a product of cooperation between the Consultant and the Project Manager. The Project Manager wanted to let participants from the different fields make contributions about their experience in this project, and the intention was to create understanding among them. As the Consultant said: *“The Project Manager wanted the building site workers to better understand the Builder’s point of view.”*

During the foremen’s presentation, the Health Environment and Safety (HES) coordinator talked about his role at the building site. He said:

I am not responsible for the workers’ safety at the building site; the foremen are the ones who carry that responsibility. It is my job to make people aware of the safety precautions that has to be made, but it is not my responsibility to make sure the workers take the precautions.

4.4.3 A project within the project: “Ready for painter”

The Project Manager, the Site Manager and the Consultant decided to address the problems that came up during the seminar, and they agreed to have a meeting at the building site the following week. The Consultant said to the two of them: *“I will start working on the arrangements.”*

When they met two weeks later, the Consultant presented the idea “Ready for painter”. The managers liked the plan, but they had different concerns based on their roles in the project. The Project Manager said: *“I’m concerned about what motivates people. Some care for welfare and some care for money.”* The Site Manager said: *“I’m concerned about the time consume in this project.”* They agreed on hooking this project up on the foremen meetings, and they decided to get started two days later on the next scheduled meeting.

At all the meetings I attended in this case study, the Consultant started the meetings and introduced himself. The only exception was the first step meeting in “ready for painter”, Project A where the Project Manager started and then introduced the Consultant. He said:

We need to get things working better at this construction site, and you foremen have to contribute. But we do not intend to force anything on you – the solutions shall come from you. (...) We have asked the Consultant to help us implement the arrangements in this process.

During the building site meetings in Project A, one of the foremen seemed to play the role as victim in this process. In addition to sitting with his arms crossed, checking his phone a few times and saying very little, here are some of the answers he gave (to the questions):

He doesn’t pick up the phone when I call. (Q: Can you fix this?)

No, you tell me, we are working on it. (Q: When will you finish in that area?)

Yes, now I’m installing pipes without testing for pressure just to get progress (Q: Does it take that long?)

4.5 Meetings – intentions and content

Some of the issues in this section are also relevant under the previous section about roles, but in this section my intention is to present to the reader some of the intentions and content of the seminar and meetings, regardless of the roles.

4.5.1 Creating a discussion by asking questions

Ahead of the interaction seminar, the Consultant wrote this about his intentions: *“To create an atmosphere where the construction workers understand what this is all about, with a popular approach.”* At the seminar day, he welcomed the participants and then he asked: *“Does everyone know who everyone are here? Do we all know who the architects are? Do we all know who the site manager is (...)”* And he ended the introduction by asking: *“Do you know who the customer is?”* The first and only reply was from the coming caretaker of the building who said: *“The users of the new building!”* The Consultant moved on with the agenda without taking the opportunity to let this be the topic of the first discussion that day.

As he said afterwards:

I wanted a different answer, really, but I also liked that answer. I didn't know if I wanted to follow that thought there and then, I felt it was out of my agenda and I didn't know how to manage it. I felt the pressure of making a good day here because of all the trouble of getting people to attend.

After the introductions, the Consultant started a presentation round. He said afterwards:

I wanted to place a face to the names and roles that so far had been communicated on e-mail. But I was very concerned about not letting this be too frightening to people. At the same time I felt the pressure to create a successful day.

During the presentations, the Consultant took a facilitator role by occasionally asking questions. He said about his intentions:

I saw that people were small talking and I would rather keep focus on the topic. In addition I believe that if I don't understand what the presenter says, there are probably more people who don't understand. I also wanted to break off the presentations with discussions.

Also during the group work, he intentionally asked questions that the Consultant himself referred to as silly. For instance when one person explained how pipes can collide, the Consultant said: *“Do these collision have a name?”* The reply was: *“That was a silly question”* which induced laughter among the participants as well as the Consultant.

At the first step foreman meeting at both projects, the foremen were reluctant to start talking when the Consultant asked questions. At both sites, the site managers influenced the discussions. For instance in Project A, the Consultant said: *“This is a project within the project, and they think about calling it “ready for painter area c”. Any questions?”* The Site Manager started talking about why they had chosen this project and said: *“We want this to be*

an arena for personal issues. We know for instance that both I and the supervisor over there can be idiots sometimes.” In Project B the Site Manager answered when the foremen when hesitated, but he also interrupted them. Here are notes I took after the meeting:

It was difficult for the Consultant to get the foremen to talk (...) The Site Manager could have waited a bit longer before he took over and answered the Consultant’s questions and he should have stopped interrupting the foremen when they finally talked.

4.5.2 Taking notes

I observed the Consultant’s work in several situations and he had different ways to take notes during those meetings. Here are the notes I took from different meetings:

The Consultant wrote directly on his computer so the points came straight on the board, there had to be pauses in the gathering of results when the Consultant was busy writing.

The Consultant took notes on a large piece of paper lying in the middle of the table.

There was no board to write on, so the Consultant had to use large paper sheets and attach them to the wall by tape that he had to borrow from the electrician.

4.5.3 Group work

The decision to divide the participants into groups from the beginning of the meeting was made by the Consultant, and he explained: *“It is easier to talk in smaller groups. I wanted them to find their group at the beginning, make it as harmless as possible for the engineers and the foremen.”*

The group compositions were decided in advance and the different fields were placed together. The Consultant did not fully agree, but he saw the advantages too, as he said: *“The Project Manager composed the groups. I wanted to mix both working fields and levels more. But I do think it would have been quieter with mixed groups.”*

Group work was used to address the coming problems and challenges in the project. In the first part of the group work, the Consultant had different roles like facilitating the group work, leading the discussion when it was time to look at the results, as well as taking notes from the presented results. The Consultant introduced the group work to the participants by saying:

And now we have come to part two in this day, and that’s the group work. Here we want to make a twist on the work to make sure that everyone gets to participate, say something and mean something about the challenges we are up against. The coming focus areas will become clear and argued for. It’s important that you shear your thoughts with the others on why you think the way you do. For you at the construction site, why is this so important to focus on right now? And then we’ll address the problems and work on solutions.

He continued by explaining how to start working:

We’ll start by saying something about the problems we have in the project today. And we answer that individually in a quiet moment where all of you write down three points and why.

When you all have written three points, each group chooses a secretary and you start hearing each other's points. And then each group will agree on three points that are essential in this context. Have you all understood the task? (Observed gently nodding.) OK, then we start and you have 3-4 minutes.

After the initial group work, all the groups had eventually ended up with three common problems or challenges to present. I took these notes about the situation:

Group four started on a long explanation on point number one, and the Consultant sat at the desk writing it down on his computer. After a few minutes, the Consultant asked "are you still at the first point?" which the presenter was. Since the Consultant was alone, he had to sit down and write while the groups presented their results. That made him not capable of starting a dialogue about what was presented. If there had been two consultants, one could have just talked and given the content of the presentations more attention while the other one could have been the secretary just taking notes.

After the initiating group work, the Consultant introduced a method called "Idealog". During the Idealog part in the group work, the Builder had the role as host. I took the following notes about that situation:

Why does the Builder stay as a host? Will the foremen have the courage to argue against his suggested solutions? And wouldn't it be better to let the Builder get insight in what the others are struggling with in this project?

When I asked the Consultant about it, he said: *"I had planned to ensure that the Builder's representative did not stay as a host, but I forgot it when we got started."*

When the Builder sat as a host for the foremen and supervisors from the building site, they were very reluctant to respond. After presenting the problem several times without getting any response, the Builder started talking about what the planners had said about this subject. Then one of the supervisors responded:

Bad planning can cause several problems when we start working on the construction site. We experience delayed deliveries, wrong deliveries, things braking down during the process etc.

When the Idealog session was over, the atmosphere in the room was quite good. One of the engineers that had been reluctant to attend the seminar said: *"That's not too bad!"* when they talked about how the Idealog session had made contributions to their problem.

The group work resulted in seeing needs for improvement at the building site with regard to interaction. The Project Manager, the Site Manager and the Consultant stayed behind after the seminar had ended, and the Site Manager said:

It is clear that something has to change at the building site, and I would appreciate some help from the Consultant to facilitate addressing those issues. There is in particular one foreman we struggle with, to make him cooperate. At this point I'm afraid we'll come in a situation where we have to get him replaced.

4.6 Complexity in the construction industry

In the two building projects in this case, respectively 12 and 14 different companies are involved in the planning and building processes. In the planning groups, the planning managers were working with architects and technical engineers from four and five different companies. At the building sites, the site managers were both working with executors from six different companies.

Having people from so many different companies made it difficult to arrange interaction seminars with all companies present. Finding a day that would fit the calendars for several companies seemed to be hard. Here is an e-mail quote from one of the architects: *“For resource reasons I ask for understanding that the architects prioritise another project in the current situation.”*

There are two different groups of people planning and executing the same project, and in the transfer of information between them, misunderstandings can occur. The problems that the architect experiences in his work may not be visible and obvious for the foremen at the building site, especially when they are waiting for the drawings. As one of the foremen said: *“Can’t the planners just get the work done?”* In addition another foreman said addressed to the planning group: *“I do question the planners’ cooperation since at site, we experience that for instance piping crash every time.”*

The planners and the executors normally don’t meet during building projects like these. This creates a distance between these two groups and lack of understanding may also occur. The Consultant said: *“The Project Manager wanted the foremen to meet with the Builder to create understanding because of growing dissatisfaction at the building site.”*

Given the fact that the composition of planners and workers in building projects are temporarily, many of them possess different experiences from previous projects. In both building projects they seemed to be aware that the workers’ experiences could be beneficial for the current projects. As the Site Manager in Project B said to one of the foremen: *“You have experience from building that hospital, tell us about it!”*

The complexity in a building project seems to cause challenges for an external consultant to get involved. When the Contractors made decisions to use the Consultant in these building projects, they made a decision that involved several persons and companies. As the Consultant said:

Even though I had an agreement with the top management about working for them as a consultant, I had to convince every person I got in touch with about my purpose of being there.

4.7 The emergence of core categories - “stress” and “ownership”

After working with the data above, two core categories emerged. These core categories will serve as the basis for an empirical model that will be presented. Based on the data analysis, a dichotomy between “stress” and “ownership” appeared.

When I, during my analysis, interviewed the Consultant about his intentions related to the interaction seminar, he summed up his experience of that day by expressing a feeling of pressure. He had spent a lot of time and struggled for weeks to get people to attend the seminars in two building projects. He had to cancel one of them and after two postponements he finally got people to attend at the other project. He felt a huge pressure to make a good and fruitful day of the seminar, and that made him stressed. The *stress* category emerged in different episodes like forgetting to introduce me just a few minutes after saying that he would; not taking advantage of starting a discussion when he was given an unexpected answer to a question; and forgetting to keep the Builder from staying as a host during the group work – something he had planned to in advance. Also at the building site meeting in Project B, the Consultant experienced stress when he didn’t get any response in the “ready for painter”- process. He even expressed to the foremen a feeling of trying to force something on them that they didn’t need.

Internally within an organisation, it is clear that the top management owns the problem and has power down the system. When an external consultant is hired, issues like responsibilities, power and ownership of problems must be addressed. The *ownership* category emerged when I found that the ownership of the problem was not addressed between the Consultant and the Contractor, and that it shifted according to the settings. The Consultant owned the problem when he convened the interactions seminars, and when he started the “ready for painter” – process in Project B. In Project A, the Consultant had less ownership of the problem in relation to the “ready for painter” –process. There they used scheduled meetings to implement the process, the Project Manager made the introductions and the process continued even though the Consultant could not attend; the Site Manager took over and led the process further.

4.8 The emergence of an empirical model

During my observations through one interaction seminar and three meetings at two building sites, I experienced that the Consultant had different levels of stress. I believe this is related to

issues like role clarification and ownership of the problem, and I wanted to make a model that shows how those issues had impact on the Consultant’s level of stress. Before and during the interaction seminar in Project A, I experienced that the Project Manager had a *low* level of ownership due to the fact that he let the Consultant convene the meeting. At the seminar day he also acted like one of participant while the Consultant led the whole day. This resulted in a high level of stress for the Consultant, and this situation is illustrated in figure 4.1.

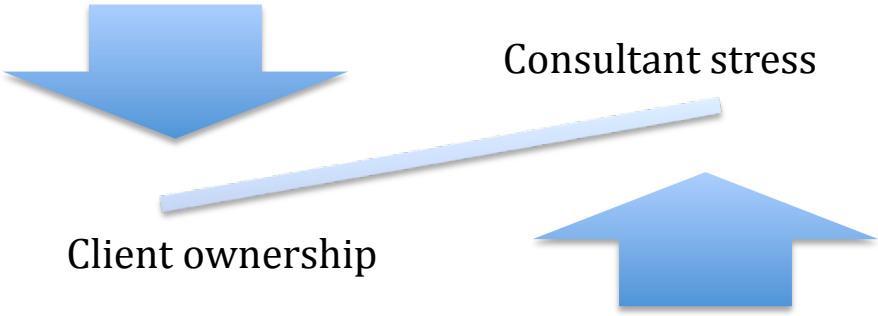


Figure 4.1: Shows how a low or decreased level of ownership with the Client increased the Consultant’s level of stress.

The first step meeting in Project B is another meeting where ownership and stress can be illustrated with Figure 4.1. There the Site Manager had a *low* ownership of the problem. He arrived as the last person to the meeting, and the Consultant was in charge of the whole meeting from making the introductions to leading the discussion and taking notes. When this is combined with coming to an occupied meeting room and having to arrange the meeting in the lunchroom, the Consultant’s stress level raised. And when the Site Manager and the foremen went from having a *low* ownership of the problem to giving signals of having *no* problem at all, the Consultant’s stress level raised even more. The Consultant’s asked: “*Is this just nonsense? Do you have everything under control?*”

In Project A, the Project Manager had more ownership of the problem at the building site meetings compared to the interaction seminar, and that situation can be illustrated in Figure 4.2. There he made the introductions on the first step meeting, and by that putting less pressure on the Consultant who then had a low level of stress. The Site Manager in Project A also took ownership of the problem when he led the foremen meetings through step two and three in the “ready for painter” –process.

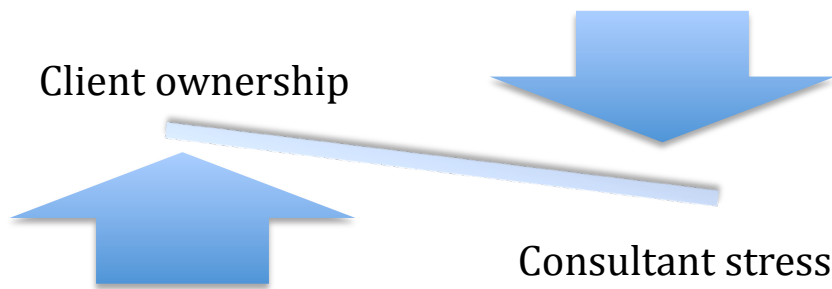


Figure 4.2: Shows how a high or increased level of ownership with the Client decreased the Consultant's level of stress.

These models have been extracted as a result of the iterative process of the analysis. My intention is to illustrate how the Client's ownership of the problem affected the Consultant's level of stress and consequently the quality of the consulting job within interaction issues. It has been a difficult process trying to find the relation between ownership and stress from the results and analysis of this case. My previous experience and knowledge has taught me that ownership of the problem is promotional in relation to performing a task, and here I found that ownership of the problem could be inhibitory when you are working as a consultant. One of my difficult questions has been if there is a contradiction between the Client's and the Consultant's ownership of the problem. But independent of that question, it is clear that the main inhibitory factor for the Consultant was when the Client had low ownership of the problem.

In this chapter, I have presented results from an analysis based on a coding system of categories. This ended in the emergence of the core categories stress and ownership, and in the next section these categories will be discussed through multiple theoretical perspectives.

5 Discussion

From the inductive analysis, aspects of the proposed model will here be discussed in light of theoretical perspectives. A correlation between ownership of the problem and stress emerged from the data, as well as a need for awareness about roles in a client - consultant situation.

In the first part of this chapter, I will discuss complexity in the construction industry with subcategories like change and role clarification, and several theoretical perspectives will be assessed. In the second part, I will discuss settings and methods of work where the position as an external consultant is reviewed, and additional theories will be used.

5.1 Complexity in the construction industry

Compared to other industries, the construction industry is more complex because of the inherent network characteristics (Kornelis & Warmelink, 1998). Every building project is unique and two main categories build up under the complexity; *uncertainty* and *interdependence* (Gidado, 1996). In Project A in this case, one of the planning engineers confirmed the uncertainty by saying that one of the challenges in this project was working with the indoor climate; the use of building materials combined with the local outdoor climate. The engineer said that due to several factors it is very difficult to estimate use of energy to regulate the indoor climate. In addition to use of materials, there are uncertainty factors like hours of sunlight and number of people staying in all the individual rooms during the day. The interdependence factor is relevant between the planners and building site workers who never meet but are dependent on each other to get a project finished. In addition, the interdependency was confirmed during the building site meetings where the foremen often talked about how they were hampered from starting to work because they had to wait for other groups to finish their tasks. In the “ready for painter”- projects, the goal was to let the foremen address the interdependence issues and come up with ideas on how to solve them. I will say that both complexities, uncertainty and interdependence, were reasons for the Contractor to hire the Consultant.

In addition to being complex, the construction industry is also a loosely coupled system since the firms rely on short-term market based exchange where the individuals are changing from one project to another. In construction, the team changes from project to project, and if the same team end up working together in two projects, it is rather by coincidence than by conscious planning. But the couplings may not be tighter in a second project because the roles can vary (Dubois & Gadde, 2001). In the two projects in this case, it was obvious that the

workers had different experience from previous work. In both projects, they asked about experience when they discussed the “ready for painter” - processes. They talked about a method called “lean construction”, but as one of the foremen in Project A said: *“I do have experience from using the lean construction method, but I can’t bring that experience to this project because the rest of this organisation is not at the same level.”* This foreman had gained personal learning and his statement confirms what Dubois and Gadde (2001) said about learning taking place at an individual level rather than at industrial level. Projects do not have an organisational memory. The Project Manager was aware of the system and the advantages of lean construction, and he knew they had a long way to go to get there.

In the theory section, I used Figure 2.1 to illustrate the loose couplings in the construction industry. During the data analysis, I tried to place the Consulting Company in that figure, see figure 5.1 on the next page.

- First of all I will regard the Contractor as “Firm A” in Figure 5.1. For the Contractor, each building project is so comprehensive that people work with only one project at the same time. That means that the resources in A1 are different from the resources in A2.
- A subcontractor can for instance be regarded as “Firm B”, and they are in the same situation as the Contractor where people work in only one project at a time. The resources in B1 are different from the resources in B2.
- The Consulting Company can also be regarded as one of the firms involved on site, like for instance “Firm C”. However, they will be different than firm A and B because the project is less comprehensive for the Consulting Company, so the resources in C1 and C2 could be the same. One consultant can work in two projects simultaneously. But to regard the Consulting Company as Firm C, does not explain their role correctly.
- A better picture of the situation is to add the Consulting Company as an extra element in the figure, “Firm X”. The Consulting Company is involved in the project to assist the Contractor, and by adding Firm X to the figure it is easier to explain that X1 is there to assist Firm A. With this picture, the X1 resource can assist the resources in both A1 and A2 simultaneously. The figure also shows that the Consulting Company can assist more companies at the same time, like for instance “Firm E” in this figure. X1 and X2 can also be the same resource.

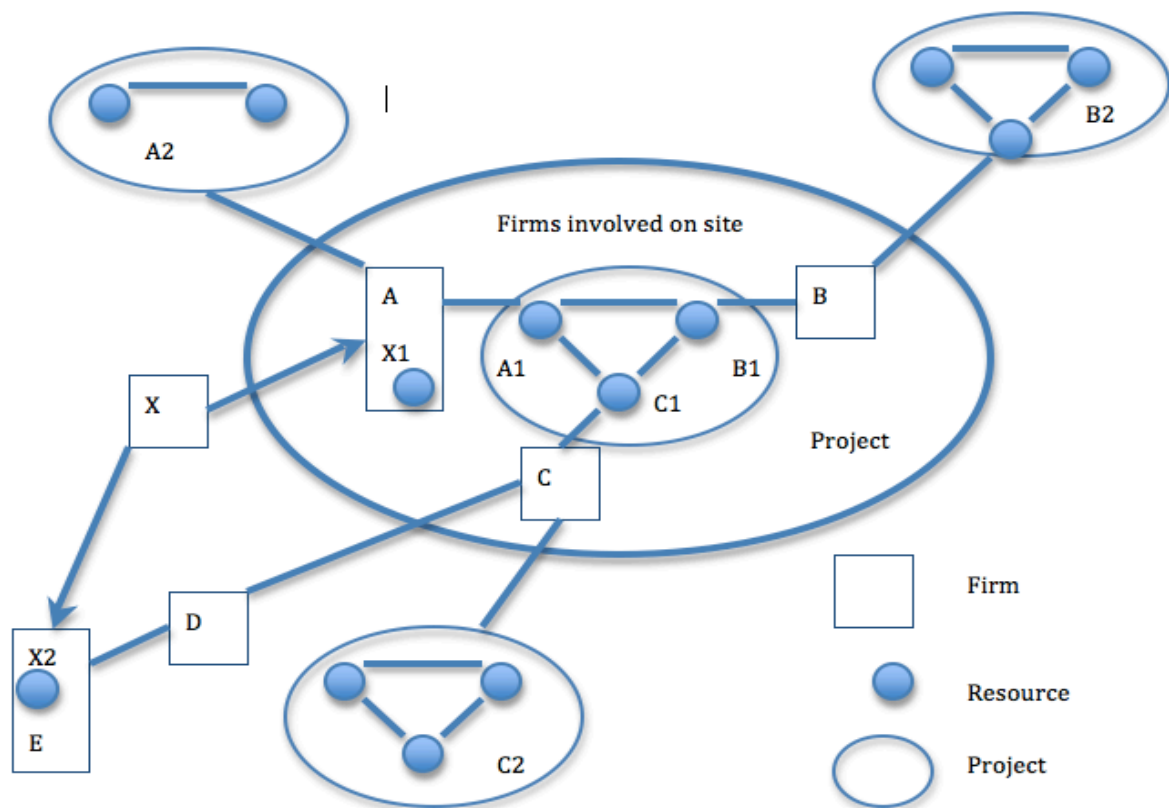


Figure 5.1. The construction project in its network context including placement of an external consulting company as X and its possible resources as X1 and X2 in two different companies.

The activities at construction sites generate a lot of ideas from creative problem-solving tasks, but the pattern of couplings in the industry is a hinder for their diffusion (Dubois & Gadde, 2001). With regard to this case, that statement from Dubois and Gadde can best be explained by the fact that interaction seminars were planned in the first place. The Contractor had realised that the construction workers' experience can be useful for the planners, and in collaboration with the Consultant, the Project Managers planned for a seminar where that experience could be transferred. As the Consultant said: *"Planners and constructions workers normally never meet."* And that refers to the pattern of coupling that hinders the transfer of experience and good ideas.

5.2 Change

A study from the UK construction industry concludes that companies failed in achieving the full benefits of implementing collaboration environment because they underestimated people and organisational issues (Erdogan, et al., 2008). When the Consultant started working with the Contractor, they wanted to do something different and make changes by trying something new. Arranging interaction seminars introduced a change for both the planning group and the construction workers group. Both groups were supposed to meet and cooperate with each

other, and according to the Consultant, a meeting between those two groups had never happened before. The two projects in this case were comprehensive and long-term, and with that in mind I regard these arrangements as smaller changes; but there will be resistance that must be managed when a change is introduced (Thorpe & Mead, 2001). In addition this was a change affecting social relationships, which takes longer time than technological changes with obvious benefits (Kast & Rosenzweig, 1974; Thorpe & Mead, 2001). This resistance to change can explain the resistance that the Consultant met when the participants declined his meeting notices. Why should they spend time on an interaction seminar when they never have done that before?

Other possible explanations are lack of establishing a sense of urgency (Kotter, 1996) or lack of motivation to participate because the participants didn't see the benefit of attending the seminar. In a study from the British construction industry, some of the subcontractors expressed strong misgivings about the contractors' underlying intentions and they saw client-contractor collaboration as having very little or no effect on their own work (Bresnen & Marshall, 2000). In this case I could see similarities to this part of the British study; some subcontractors were enthusiastic and positive while others were negative and reluctant to participate. And if one of the project's key persons refuses to participate in the change, the whole system loses its effectiveness (Thorpe & Mead, 2001). The Consultant knew for instance that he had trouble getting the engineers to attend when the architects had declined attending the interaction seminar in Project B. As he wrote in an e-mail to me:

The Contractor has granted the Architects not to attend – and then everything falls apart. We could have made the engineers attend, but I think they would have “snapped” if they came and the Architects were not there.

Another change regarding the interaction meeting notices was that a consultant sent them, instead of the Project Manager. During the last year, the Project Manager had led the cooperation of the planning group. And when a meeting notice about interaction seminars came from a person that hardly had been involved in the process so far, it represented two new elements to them. I do believe that the planners' resistance to participate is related to the meeting notices coming from a consultant instead of the Project Managers, but I don't think the main reason is resistance to change – I believe it can be better explained by role clarification.

5.3 Role clarification

The project managers in the two projects were the top leaders having the main responsibility for the processes. The subcontractors and other cooperating companies had made agreements

and signed contracts with the Contractor. The cooperating companies did not have contracts with any consulting company and therefore they did not have the same responsibility to prioritise resources to them. According to Fisher, the third party *identity* requires that the consultant have low power over the participants. He does need to be professional and have high control of the consulting situation (Fisher, 1983). When the project managers hired the Consultant to help them solve interaction issues, they also handed over their problems to him. The Consultant took full responsibility to arrange the seminars by making the meetings notices and sending these to the participants, and by this the ownership of the problems were transferred from the project managers to the Consultant. This situation is described as a part of figure 4.1 in the empirical model in the Results chapter. The left side of the model shows how the client's ownership of the problem became low or decreased.

This transfer of ownership was enhanced when the Consultant in addition took responsibility to get people to attend, and this is contrary to one of the most central premises for process consulting; the client must continue to own the problem also after the consultant is involved. The consultant must clarify his role as a helper and the client as the owner of the problem (Schein, 1987). David Straus also emphasise the importance of ownership for the stakeholders in a building process. And in relation to using a facilitator, he says that it is important to clarify roles. He also says that the facilitator's responsibilities must be written down (Straus, 1999). This statement can be interpreted as a contradiction to Schein who says that there should be no formal contract except agreement on fees and potential number of days to be committed (Schein, 1988). With regard to this case, a better clarification of both roles and responsibilities would have been an improvement of the process. When it comes to a written agreement or not, a piece of paper may not have made any difference here. This Contractor is the biggest client the Consulting Company has, and they have cooperated to a significant extent for years without a single written agreement.

5.3.1 Introductions

The observations in this study imply that the Consultant did not have any power over some of the subcontractors since they declined the Consultant's notices and accepted the Project Managers' notices. The consensus building theory emphasises the importance of who convenes the meeting. The convenor must be regarded as credible and fair-minded (Carlson, 1999). The way I have got to know the Consultant during this case, I have no reason to say that he is not credible or fair-minded - rather the contrary. So I don't think the rejections can be explained by lack of credibility, as long as the participants knew the Consultant in person. I have asked myself if the Consultant could have succeeded better in getting people to attend if

he had been better introduced to the participants in advance. Based on the fact that the Consultant had to convince every person he got in touch with, I will say that the Consultant was poorly introduced to the organisation he was supposed to help; and this can help explain the difficulties he experienced during the processes. According to Edgar H. Schein, the most important thing in process consulting is to be aware that the whole group or organisation is the client, not just the contact person. This is important, but tricky (Schein, 1988). When the seminar was arranged, the Consultant had met most of the participants in advance except the foremen, and he had also attended a few planning meetings. My question is then *how* he was introduced; what role was he given by the person who hired him in relation to the others involved in this project?

5.3.2 Selling

The Consultant experienced scepticism from people he was supposed to help, even though the top manager had hired him for a specific task. The Consultant was challenged to prove that he could help, and he had to enter a selling role where he had to convince every middle manager and others he got in touch with when he started working. And that role violates the process consulting model of helping others to help themselves (Schein, 1988). It is important to make a distinction between selling the concept to the Contractor to get the assignment, and selling it again and again to all involved persons and cooperating parties after getting the assignment.

In this case, interaction consulting was a relatively new business area for all parties involved. When I did my observations, the Consulting Company had to make some effort selling the concept to get the assignment in the first place. Schein says that a consultant being in a selling situation, is a disadvantage for the consulting process (Schein, 1988). In this case, I believe that there is a correlation between the two selling roles. In their eagerness to sell the interaction concept, the Consulting Company called the consultant's role *Interaction Coordinator* and one of the selling points was to *provide relief* for the project management in human relations issues. Being a *coordinator* can be interpreted as a position that takes more responsibility than being a *consultant*. And by saying that, the project manager will expect to receive relief in interaction issues, and a feeling of being able to transfer one problem to someone else might have occurred. By saying these two things, the unintended consequence for the Consultant was to enter a role taking ownership of the problem because that is what the project managers expected.

5.3.3 Convening

Even if the Consultant had the main ownership of the problem, he seemed to be aware that the trouble he had getting people to attend, was related to role clarification issues. For instance, the Consultant asked the Project Manager in Project A to send notices calling the seminar off. Here is a quote from the e-mail: “OK. For us not to make a mess and switching roles, I suggest that you send out a cancelling text to those who had accepted.” And when they finally got people to attend, the Project Manager was the one who had sent the meeting notices, instead of the Consultant.

When the interaction seminar in Project A started, the Consultant had owned the problem for several months, and that had impact on the job he did leading the seminar. He felt a pressure to make this seminar as successful as possible since it was his responsibility. And this is illustrated by figure 4.1 of the empirical model, where the Consultant became stressed due to the Client’s low ownership of the problem.

When they started on “ready for painter” in Project A, the Project Manager and the Consultant had a better role clarification. The Project Manager made the introductions at the first meeting and by that took the role of leading the process and owning the problem. He introduced the Consultant by saying that “we have hired him to help us with this process”. Here the Consultant could start working on his agenda without the same pressure as at the interaction seminar. First of all he did not have to get people to attend, instead the Consultant attended a scheduled foremen meeting. And second he did not have the main ownership of the problem; the Project Manager and Site Manager took ownership and by that took some pressure off the Consultant. The Site Manager also took responsibility to help the communication to get started. This situation is described in figure 4.2 of the empirical model in the Result chapter, and it shows that a high or increased ownership with the Client led to little stress for the Consultant.

5.4 Settings and methods of work

In this study I made observations in two different settings; an interaction seminar and foremen meetings at the building sites. In this section, I will place the interaction seminar in the category of *teambuilding workshop* while the foremen meetings and “ready for painter” – processes will be categorised as *teamwork*. I will explain and discuss why I have chosen these categorisations, and I will discuss why there are no clear boundaries between the categorisations.

The decision of arranging an interaction seminar in the first place can be questioned. According to Schein, the setting chosen should be one in which real work is going on. And if an arrangement where the participants meet to discuss interpersonal relations is wanted, the meeting must take place after a relationship has developed between the consultant and the participants (Schein, 1988). When the task was to get people who never meet to get acquainted and cooperate, it was difficult to make this happen where real work was going on. There had to be an extraordinary arrangement, but when the Consultant tried to keep the focus *off* interpersonal relations and *on* tasks related to the project, he got closer to meeting Schein's theory. The Project Manager emphasised that a focus on real tasks was very positive and important. However, it seems like the Consultant could benefit from spending more time with the participants in advance to develop a closer relationship. The setting chosen should also be where it is easy to observe problem-solving, interpersonal and group processes (ibid.). In this case the Consultant had received information about the problems in the two projects from the project managers. And since the interaction seminar was an abnormal setting for all of the participants, normal problem-solving work and group processes was not achievable.

In the building projects, there were two main teams cooperating *within* each team, but not *between* the two teams. When the Consultant planned the interaction seminars, he wanted to initiate some cooperation *between* the two teams in solving future problems. In a study from the British construction industry, the use of teambuilding workshops supported by an external facilitator proved to be valuable helping promote collaboration, especially in the early stages (Bresnen & Marshall, 2000). I believe that the original purpose of teambuilding workshops was to improve the collaboration *within* teams, but I see no reason why the term cannot be used here as well. The British study showed that teambuilding workshops had limitations, as it could not replace the actual experience of teamwork, and it involved neither lower hierarchical levels nor key persons in other organisations. Teambuilding workshops were not sufficient for overcoming team-related problems (ibid.). The participants at the seminar consisted of people from different hierarchical levels, and three foremen from the building site represented the lowest level among 21 other participants. This means that the lowest level of workers was not represented at all, and the lowest level represented was inadequate due to the low number of foremen. When I compared the participant list with the organisation chart, it looks like key persons were present, but this factor alone is not enough to place the seminar into the teamwork category. In addition, when people who have never met before are placed to do group work, it is more teambuilding workshop than real teamwork.

5.4.1 Timing

The group work resulted in identifying a need to work on interaction at the building site, but as the Consultant said after this whole process: “*The seminar should have taken place three months earlier*”. By this statement, he correlates with the British study showing that collaboration is more improved if the workshop takes place in the early stages. Teambuilding can promote group identity and cohesion, as well as improved feelings of ownership in the project (Bresnen & Marshall, 2000). I have my doubts whether promotion of group identity, cohesion and feelings of ownership in the project were achieved at the seminar, mostly because the planning group had finished their work and already arranged their last planning meeting. But I do believe that a meeting arranged three months earlier than this could have promoted a better feeling of ownership for the foremen at the construction site. In an earlier meeting, the foremen could have provided input to the planning group and by that introduced a feeling of contributing and therefore ownership. On the other hand, teambuilding workshops are not sufficient for overcoming team-related problems (ibid.).

It is more straightforward to talk about teambuilding and teamwork in the “ready for painter”-processes because these are teams that normally work together. I have already talked about how the Consultant was less pressured due to better role clarification compared to the interaction seminar. At the building sites, the Consultant could choose a setting where real work was going on, the foremen meetings, as he did in Project A. There, the “ready for painter”- process was introduced before the foremen started on their regular agenda. The first step meeting in Project B, however, was an extraordinary meeting and very little came out of it compared to the Consultant’s intentions. Based on my observations, I would explain the lack of progress by unfortunate *timing*. The meeting was set at a time when Project B ran smoothly and nobody could see the need for help to solve interpersonal issues. The Consultant and the managers have another explanation; they said it failed because of decision-making at a level too high and with the wrong focus areas. Due to the settings described, I will not categorise the “ready for painter”- processes as teambuilding workshops, they are more like actual teamwork.

5.4.2 Group work

When the participants came to attend the interaction seminar, they found that the room was organised as group tables, and on the board they could find their names and which group they belonged to. Would the first impression have been different with the tables placed as a school class or a horseshoe position? Thinking about all the seminars I have attended during the last year and a half, I have never met group tables when I first entered a meeting room. When a

group is put together, the members will in most cases have an opinion on the group composition (Kvalsund & Meyer, 2005). The arranger's intention was to place people who knew each other together and by that create a feeling of harmlessness. Did the foremen achieve the feeling of harmlessness, or did they get a confirmation that there is a difference between the building site workers and the planners since they are placed in different groups? How strongly the members feel about the group composition will depend on how much they know each other from before and what criteria that has been used in the composition process (ibid.). Based on my observations, the participants had not received any information on what criteria had been used to compose the groups. The foremen seemed uncomfortable that day; they hardly talked. And the Consultant believed that they would have talked even less with another group composition.

When I compare the foremen's contribution to the discussions between the seminar and the foremen meetings, they participated more at the building site. To me they seemed more comfortable in their own environment, the building site. It is important to remember that when an individual is placed in a group, he or she may not be aware of who they are when they step into an possible unknown setting (Kvalsund & Meyer, 2005). This theory can explain why their behaviour was different in the two settings; at the building site they knew their role, position and co-workers and they had participated at several foremen meetings before. The interaction seminar was the first of this kind, they didn't know most of the other participants and they might have been insecure about their own role in this. This can be seen in the timing context as well, what difference would a contribution from the foremen to the planning group make when the planners already had finished their work?

5.4.3 Leading the process

As a process leader, the Consultant had multiple tasks during the meetings and group work. He kept track of the agenda according to the time, and I observed some difference from the seminar to the foremen meetings. At the seminar he was reluctant to let the discussions interfere with the agenda, but at the foremen meetings he let the discussions form the agenda. To let a meeting take form and making it efficient and present, flexibility and ability is more important than insisting on keeping the planned agenda (Spurkeland, 2005).

I observed that the Consultant asked many questions during both the seminar and the foremen meetings, and according to Spurkeland is "the question" the most important tool for the leader of the meeting. Asking questions and challenging the participants gives new directions, deeper thoughts and new energy. And multiple responses are often necessary to draw a

conclusion (ibid.). When the Consultant didn't receive answers within a few seconds, he moved on and by that missed several opportunities to challenge the participants. At the beginning of the seminar, he also moved on *after* getting an unexpected answer to the "who is the customer?" –question. Did he, by letting that emergent issue be overridden by his agenda, miss an opportunity for a perfect start of the seminar were all participants were involved in a fruitful discussion? He said afterwards that the pressure that day made him stick to the agenda, as he was insecure about spending too much time on different issues. The way the Consultant handled the unexpected could also be explained by a theory saying that there is a tension between routine and attention. To be able to pay attention to the untypical and the unexpected, parts of one's work must be routine without demand for special attention (Molander, 1996). Given the fact that his consulting experience was just a few months old, lack of routine combined with pressure, made him miss the opportunity to embrace the unexpected and make use of it.

At the foremen meetings, the Consultant had a looser agenda and he let the answers to his questions manage the process. He could move on without challenging the participants also in those situations, but in addition he had a different challenge. Especially in Project B, the site manager was quick to answer his questions when the foremen hesitated. I am wondering if he could have done more to stop the Site Manager from answering the questions meant for the foremen that day, but I think it was difficult due to the roles they had as client and selling consultant. Maybe the Consultant and the Site Manager should have clarified their roles in advance?

Another issue separating the seminar and the foremen meetings was the use of computer. At the seminar, the Consultant brought his computer and used it connected to the board. He had the placing of groups when the participants entered the room and he had prepared some slides to support his interaction presentation. He also used his computer to write the results from the group work as they presented it. This way they could all see the results from the group work immediately. I found this situation unfortunate for two main reasons: First because the Consultant kept his eyes on his computer instead of the person talking to him. A few times he had to ask again because he didn't catch everything, but that was not a big issue. Second, there were breaks in the dialogues where they were all waiting for the Consultant to finish writing. According to Spurkeland, process leaders should observe and listen more than they speak, and to be able to handle all these observations, they must have all senses towards the group and for instance leave the computers behind (Spurkeland, 2005). At the foremen meetings, the Consultant had better compliance with Spurkeland as he did not bring his

computer and took notes using a large piece of paper. Due to the setting, this was easier to do in these meetings compared to the seminar, because all the participants were sitting around the same table. To avoid using his computer at the seminar he could have used the chalkboard or engage someone as a referrer. This way he could have had full focus on the conversation while someone else was writing. Another suggestion would be to do consulting work as pairs were both had different roles during the day. Being two consultants might have helped the “ready for painter”-processes as well.

5.4.4 One consultant or two

Based on the multiple roles a process consultant must play, it is recommended that at least two consultants work as a team when possible (Straus, 1999). This is supported by Michael Elliot who says that interactional, communicative processes require considerably more management than doing simpler processes (Elliot, 1999). With regard to my previous working experience within sales and marketing, I will first of all express my understanding for the Consulting Company’s situation were they are trying to imply a new product to their existing market. They have a well-established relationship to their customer within the construction industry, and the introduction of an interaction coordinator must be handled very carefully. I therefore fully understand that trying to introduce a new concept consisting of *two* consultants working as a pair, and making the product twice as expensive for the customer, is very risky and therefore not desirable. But having said that, a pair of consultants could have been beneficial for the processes I observed.

First of all, I believe it could have relieved some of the pressure due to the subcontractors’ reluctance to participate the interaction seminar. Second, the two of them could have taken different roles during the interaction seminar were for instance one leads the discussion and one observe the participants; or as mentioned, be a referrer. In addition it would have given them a few breaks while leading the seminar. The third reason is due to the role as being external and involved in several projects simultaneously. Being two consultants, they can split up when meetings at two different building sites are scheduled at the same time. In this case, the Consultant missed both step two and step three in the “ready for painter”-process for Project A, and that could have been avoided with two consultants working as a pair. Maybe the process could have ended up with another conclusion?

According to the Consultant and the Site Manager in Project A, the conclusion after the “ready for painter”- process was that it ended as a fiasco. They did not succeed in getting one of the foremen to cooperate, and that turned out to be the decisive factor. This is described in

the theory chapter as well; if one of the project's key persons refuses to participate in the change, the whole system loses its effectiveness (Thorpe & Mead, 2001). Another possible explanation to the fiasco conclusion in this case, comes from a UK construction industry study. That study concluded that companies failed in achieving the full benefits of implementing a collaboration environment because they underestimated people and organisational issues (Erdogan, et al., 2008). At the interaction seminar, the Project Manager in Project A didn't want to address problems that had already taken place; he wanted to keep focus on future problems. Did he by doing this underestimate people and organisational issues? And maybe they underestimated those issues when the Project Manager and the Site Manager decided to move forward to step two and three in the process without the Consultant's help?

In this chapter I have discussed the results from the data analysis with relevant theories. The model that emerged from the analysis, describing the relation between "stress" and "ownership", has also been discussed in this context. In the next chapter, I will outline the findings from this discussion in a conclusion, and finally I will answer the two research questions.

6 Conclusion

In this thesis, I have performed a case study where my goal was to find out what impact an external consultant had on two different building projects. In addition I wanted to have a look at how the consulting work could have been improved. The research questions was:

- 1. How can external consulting have impact on interactional issues in building projects?*
- 2. How could the consulting work have been improved?*

6.1 Findings

First, I will present the findings from my analysis about the construction industry and about using an external consultant. Second, I will present findings that will answer the research questions more directly.

6.1.1 Complexity and couplings in the construction industry

I found signs of both uncertainty and interdependence being factors confirming the complexity in the construction industry (Gidado, 1996). The complexity regarding interdependence, for instance that the planners and the building site workers never meet, was one of the main issues the Contractor wanted to address when they hired the Consultant.

I also found signs confirming the loose couplings that hamper innovation and learning (Dubois & Gadde, 2001). Both building projects had resources with experience from a desired method called lean construction, but none of them could make use of those experiences because the rest of the organisations were not at the same level.

6.1.2 Using an external consultant

The Contractor's contact person poorly introduced the Consultant who had to spend a lot of energy trying to convince key persons at different levels that it was well worth having him there. The Consultant had to enter a selling position several times, first when he sold the interaction coordination concept to the contact person, and then when he had to explain the rest of the organisation and cooperating companies why he was hired. These selling and introduction issues must be seen in the context of convening the interaction seminars, and I found that this, in relation to role clarification, was one of the main problems he experienced trying to get people to attend the seminars.

6.1.3 Role clarification

The main findings in this case study were issues on role clarification. I found that ownership of the problem was placed with the Consultant in both building projects, and that made it difficult to get the Consultant in a position where he could perform his consulting tasks. The main intention of using an external consultant was to get help implementing interaction seminars, and when participants were reluctant to participate, the whole situation was threatened. I found that the main explanation for participants to decline was that they got meeting notices from a consultant instead of a project manager, and indicating lack of role clarification.

I also found that the role clarification issue could be explained by the way the Consulting Company presented interaction consulting in the first place. By calling the role interaction coordinator and saying that he will provide relief for the project management, they might have created unintended expectation with their clients.

6.1.4 “Stress” and “ownership”

I found a relation between “stress” and “ownership” in a consulting situation, and this was used to induct an empirical model. The model shows how low or decreasing ownership with the client resulted in more or increasing stress with the consultant; and more or increasing ownership with the client means less or decreasing stress with the consultant.

When the only interaction seminar eventually took place, the Consultant had struggled to make it happen, and he was stressed and pressured to create a successful day. I found that the stress was enhanced when the Consultant had to take multiple roles leading the meeting, due to the fact that the Project Manager entered a participant’s role and had little ownership of the day.

In the building site meetings in Project A, I found that the project management had more ownership of the problem and released the Consultant from pressure and stress. In Project B, again I found that the project management had low ownership of the problem causing stress with the Consultant. Or in other words, they had no ownership because they didn’t have any problems in that period of the project.

6.2 How to improve the consulting work

To answer the second research question, I will make some suggestions on future consideration for the Consulting Company. The suggestions are based on some of the findings above.

It is understandable that the Consulting Company had to enter a selling role to get their first assignment, but it is also unfortunate (Schein, 1988). I found that eagerness to sell was the first factor hampering the processes in this case. My suggestions to the Consulting Company are to change the name of the position from interaction *coordinator* to interaction *consultant*, and that they change their selling point from providing *relief* for the project management to for instance providing *help* on interaction issues. In addition, I suggest that they emphasise the importance of introducing the consultant to the whole organisation, preferably during the initial meeting. The most important thing in process consulting is to be aware that the whole group or organisation is the client, not just the contact person (Schein, 1988).

Regarding the role clarification issue, a future suggestion to the Consulting Company would be to emphasise that the clients own the problem through the whole consulting process. That means letting the client convene seminar and meetings, in addition to introducing the consultant as a *helper*. Better role clarification could have reduced the Consultant's stress, which would have improved his ability to help.

The multiple roles the Consultant must take during meetings, can also be considered. An effort that could have been made to address that stressful situation, is working in pairs, as recommended by Straus (1999). And my suggestion to the Consulting Company is to let two consultants work in pairs when possible.

6.3 Limitations of the study

The main purpose of this study was to follow the Consultant during two interaction seminars and see what effect he had on the processes and compare them. When the trouble started on getting people to attend, I had to change my focus from the seminars as specific objects to study of the surroundings. The study became more abstract and complex due to this, but the role clarification issue emerged quite early in the analysis process and I feel that I was able to have a successful shift of focus. However, this case study has its limitations, and I will describe three of them here.

First, I could have entered the processes earlier than I did. Due to the initial intentions, I was waiting for the seminars to start, not knowing that I would have to shift focus later in the process. Looking back, I would have asked to participate in planning meetings and other meetings that the Consultant attended ahead of the seminars to get a better picture of the roles. Second, I was only allowed to use recording equipment for half a day on the interaction seminar, and not at all during the building site meetings. Having more data recorded would have secured the reliability of the data and analysis. Third, making the inductive model, I did

not separate the feelings of pressure and stress. When the Consultant explained that he felt pressured, I equated that with stress. However, during the member checking he approved using the stress term.

Despite these limitations, I feel that I have been able to paint a good picture of the processes that the Consultant participated in and how he made an impact. I hope that the Consultant and the Consulting Company will benefit from this thesis in their future work in both the construction industry and other industries.

List of literature

- Bresnen, M., & Marshall, N. (2000). Building partnerships: case studies of client-contractor collaboration in the UK construction industry. *Construction Management and Economics*, 18, 819-832.
- Brown, J., & Isaacs, D. (2005). *The World Café: shaping our futures through conversations that matter* (1st ed.). San Francisco, CA: Berrett-Koehler Publishers.
- Carlson, C. (1999). Convening. In L. Susskind, S. McKernan & J. Thomas-Larmer (Eds.), *The Consensus building handbook: a comprehensive guide to reaching agreement* (pp. 169 - 198). Thousand Oaks, Calif.: Sage Publications.
- Collins, J. (2001). *Good to great: why some companies make the leap - and others don't*. London: Random House Business Books.
- Denzin, N. K. (1989). *The research act: a theoretical introduction to sociological methods*. Englewood Cliffs, N.J.: Prentice Hall.
- Dubois, A., & Gadde, L.-E. (2001). The Construction Industry as a Loosely Coupled System. (17th IMP Conference).
- Elliot, M. L. P. (1999). The Role of Facilitators, Mediators, and Other Consensus Building Practitioners. In L. Susskind, S. McKernan & J. Thomas-Larmer (Eds.), *The Consensus building handbook: a comprehensive guide to reaching agreement* (pp. 199 - 239). Thousand Oaks, Calif.: Sage Publications.
- Erdogan, B., Anumba, C. J., Bouchlaghem, D., & Nielsen, Y. (2008). Collaboration Environments for Construction: Implementation Case Studies. *Journal of Management in Engineering*, 24(4), 234-244.

- Fisher, R. J. (1983). Third Party Consultation as a Method of Intergroup Conflict Resolution: A Review of Studies. *Journal of Conflict Resolution*, 27(2), 301-334.
- Gidado, K. I. (1996). Project complexity: The focal point of construction production planning. *Construction Management and Economics*, 14, 213-225.
- Johnsson, J., Lugn, A., & Rexed, B. (2006). *Langtidsfrisk: slik skapes helse, effektivitet og lønnsomhet*. Kjeller: Genesis.
- Jorgensen, D. L. (1989). *Participant observation: a methodology for human studies*. Newbury Park, Calif.: Sage.
- Kast, F. E., & Rosenzweig, J. E. (1974). *Organization and management: a systems approach*. New York: McGraw-Hill.
- Kornelis, L., & Warmelink, J. W. F. (1998). The Virtual Corporation: Learning from Construction. *Supply Chain Management*, 3(4), 193-202.
- Kotter, J. P. (1996). *Leading change*. Boston, Mass.: Harvard Business School Press.
- Kvale, S. (1997). *Interview: en introduktion til det kvalitative forskningsinterview*. København: Hans Reitzels Forl.
- Kvalsund, R., & Meyer, K. I. S. (2005). *Gruppeveiledning, læring og ressursutvikling*. Trondheim: Tapir akademisk forl.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, Calif.: Sage.
- Molander, B. (1996). *Kunnskap i handling*. Göteborg: Daidalos.
- Mycoted (2007). Brainwriting, Creativity Techniques. <http://www.mycoted.com/Brainwriting>
Retrieved April 12th, 2010

NTNU (2008). Idealog, Verktøy til fasilitering.

http://www.ntnu.no/eksternweb/multimedia/archive/00040/Idealog_40230a.pdf

Retrieved March 18th, 2010

Postholm, M. B. (2005). *Kvalitativ metode: en innføring med fokus på fenomenologi, etnografi og kasestudier*. Oslo: Universitetsforl.

Schein, E. H. (1987). *Process consultation: Lessons for managers and consultants*. Reading, Mass.: Addison-Wesley.

Schein, E. H. (1988). *Process consultation: Its role in Organization Development* (Second ed. Vol. I). Reading, Mass.: Addison-Wesley.

Skau, G. M. (1998). *Gode fagfolk vokser-: personlig kompetanse som utfordring*. Oslo: Cappelen akademisk.

Spurkeland, J. (2005). *Relasjonskompetanse: resultater gjennom samhandling*. Oslo: Universitetsforl.

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, Calif.: Sage.

Straus, D. A. (1999). Designing a consensus building process using a graphic road map. In L. Susskind, S. McKearnan & J. Thomas-Larmer (Eds.), *The Consensus building handbook: a comprehensive guide to reaching agreement* (pp. 137 - 168). Thousand Oaks, Calif.: Sage Publications.

Strauss, A. L., & Corbin, J. M. (1998). *Basics of qualitative research : techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, Calif.: Sage.

Thorpe, T., & Mead, S. (2001). Project-Specific Web Sites: Friend or Foe? *Journal of Construction Engineering and Management*, 127(5), 406-413.