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Drivers and barriers for employee-driven innovation at 3 scandinavian hospitals

- An anthropological field study

KASK INNOVATION

THE EUROPEAN UNION
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Interreg IV A
ÖRESUND – KATTEGAT – SKAGERRAK

CONTENTS

INTRODUCTION

KASK Innovation was born as a project back in 2008, and began its life in March 2008. The project was funded and supported by the EU Interreg IVA program, and has been a cooperation between three large hospitals in the KASK (Kattegat-Skagerak) region,: Sahlgrenska Universitetssjukhuset in Gothenburg, Sweden; Ullevål Universitetssykehus, now part of Oslo Universitetssykehus in Olso, Norway, and Aalborg Sygehus, Århus Universitetshospital in Aalborg, Denmark.

The objective was to give priority to innovation in health care through developing and testing new logistics, procedures and research. The focus has been mainly on employee-driven innovation at the three hospitals.

This study represents the results of the research carried out in relation to work package 5; to gain knowledge of how to optimize, develop, organize and manage the innovation process, with focus on drivers and barriers for employee-driven innovation at the hospitals.

To obtain data on this, an anthropological field work was conducted over a little more than 18 months at the gynecological wards at the three hospitals. The data was collected by being present at the wards at limited periods of time, where meetings were attended and informal conversations and observations were conducted. The main bulk of the data comes from forty interviews with staff members at the three wards. The number was an attempt to compensate for the lack of time it was possible to spend at each ward, and to get knowledge of the context in which the data was collected. This has produced a lot of data, and only part of this being presented here, but the amount of data collected has meant that the conclusions presented here are better qualified.

Main finds

- Not all informants were familiar with the term 'innovation' or its exact meaning. However, lack of knowledge of the term 'Innovation' doesn't mean that ideas are not being promoted.
- Hierarchies exist between the nurses, midwives and doctors as professional groups, and within the groups. These hierarchies diffuse into the field of employee-driven innovation, as doctors find it easier to promote ideas compared to nurses and midwives.
- The main strategies for promoting ideas were promoting an idea yourself without handing it over or taking the idea to your immediate superior.
- The higher an individual is in a hierarchy, the more options there are for promoting ideas.
- Ideas must live up to being 'evidence-based', which can potentially be a barrier to innovation.
- The main gatekeepers for employee-driven innovation are the immediate superior, the level of motivation by the person having the idea to promote it, and if the idea is expected to make an impact in a complex organization.
- Lack of resources is not seen as simply a barrier to innovation but can also be a driver.
- Motivation to be innovative is achieved by being taken seriously when presenting an idea to colleagues or a superior, and by seeing that promoting an idea is compatible with existing norms and behavior.
- Constant changes from above have adverse effects on the bottom-up flow of ideas.
- There is a lack of incentives to use innovation as a tool to save or redistribute resources.

The context of the research

This study aims to supplement the existing literature on innovation in health care, of which not a lot of research focusing on the barriers and drivers for employee-driven innovation could be found in advance, especially in a Nordic context. The research is based on knowledge of the sociological research done on cultures at hospitals (such as Leckie, Pettigrew & Sylvain; Kragh Jespersen & Ermann), on the vast amount of managerial literature on innovation based on case studies (such as Denis et al. (2002); Davila, Epstein & Shelton og Tabak & Jain), and on the research on innovation in a public organization (Such as Porzsolt et. al.; Mulgan & Albury og Plsek (2003)).

In a Danish context the inspiration has mainly come from writers like Annemette Digman, Steen Hildebrandt and Cristian Bason, who have written about innovation in the public sector (Jensen, Jensen, Digman & Bendix, 2010, og Bason, 2007). A main source of inspiration and knowledge

for this research has been the PUBLIN project (Malikova & Staroňová; Halvorsen, Haukness, Mills & Røste; Den Hertog, Groen & Weehuizen; Cunningham), where one of the main focuses were barriers to innovation.

About the research

It should be noted that the quotes on which the conclusions are based are translated from Swedish, Norwegian or Danish. It has been attempted to make the translation as close to what was originally said as possible, at the cost of a more fluent English, but a balance had to be struck to make sure it was understandable.

As this is a qualitative study its generalizability is based upon that the cultural and organizational contexts which the conclusions are based on can be found elsewhere at other hospitals, and that the same barriers and drivers can therefore be found and recognized in other comparable hospital settings (for more on generalizability, see Delmar, 2010).

The research and conclusions relate to the professional groups on a general and cultural level, and the aim of the research is not to suggest that the professional groups do not work together well on a daily basis, but merely that there are differences which influence the potential bottom-up flow of ideas from employees, along with the other factors mentioned in the report.

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Jesper Bredmose Simonsen
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Part I
INNOVATION PRACTICES

The first part of this research paper deals with the practices associated with ideas, creativity and innovation by the informants. The second part will deal with the cultural aspects of the data and how they influence innovation. The division is somewhat artificial as the two aspects interfere with each other, but the decision to make a division was made in order to make the results more accessible.

This part deals with how the informants relate to ideas and innovation in their work lives. It is divided into two chapters, one that deals with different aspects that influence innovation, and one that deals with the bottom-up flow of ideas.

Each chapter will end with a conclusion on the main points, which in turn will be used in the overall conclusion, where a list of main finds and recommendations can also be found.

Factors seen to influence innovation

The concept of innovation

As stated in the introduction, the main idea behind this research has been to explore how the health care employees relate to innovation and ideas in their working environment. Due to the increased focus in the media and amongst decision makers and theoreticians alike in the concept of innovation, one of the first aims of the study was to establish if the interviewed health care professionals were familiar with the concept at all. The second aim was to attain knowledge of how the informants understood this word or concept, and the third and last aim was to establish if they felt innovation was relevant to them when at work.

There were two main reasons for examining this. First of all it was important to know of the informants' levels of knowledge about innovation, to be able to match this level when doing the research. Secondly, innovation, and especially employee-driven innovation had been picked as an area of focus by the hospitals in question, which the existence of KASK Innovation itself testifies to. 'Idepoliklinikken' at Ullevål had been running since 2007 and 'Idéklinikken' at Aalborg had been running effectively for a little less than a year when the research process started. The aim was to see if the focus on innovation had diffused down the organizations at the point when the interviews were conducted, and if the focus on innovation could be found in the everyday running of the wards.

When looking at this it should be remembered that the first interviews took place almost two years ago, and that knowledge of what the concept of innovation means is likely to have spread since then. However, the points here remain valid as recommendations.

When asked about when they were last innovative at work, the informants' answers can be sorted into three different themes:

First, it was clear during the interviews that many informants didn't know what innovation was exactly. Answers like the following were common.

"I would like you to, please, explain what exactly this 'innovation' is" (Informant 28)

"I'm not exactly sure what you're thinking about when you say 'innovative'" (Informant 25)

"What do you mean by 'innovative'? What is it you mean when you say 'innovative?" (Informant 18)

"You will have to elaborate on 'innovative'" (Informant 38)

Another main group of informants related innovation to getting new ideas and to create something new, but were uncertain about the correct definition, asking for their views to be confirmed.

"I don't know, what is it you're thinking about? [...] Innovative is when you've been part of starting up something new, or?" (Informant 22)

"Creating something new? Or? What is it you're thinking when you say 'innovative'?" (Informant 35)

"When was I last innovative? That depends on how you define 'innovative', if it's thinking about new things or inventing something...?" (Informant 39)

"Innovative? By that you mean when I thought of something new?" (Informant 24)

A third and last part of the persons interviewed were confident using the term "innovation", and happy to discuss when they had last been innovative at work, as these examples show.

"Well, I think I try to be [innovative] every day" (Informant 12)

"A situation where we were innovative at the unit... we try to be innovative, we try to bring out some ideas..." (Informant 6)

"The last time I was innovative? Just now, a little less than an hour ago" (Informant 13)

"I try to be [innovative] all the time, but it takes a lot of energy" (Informant 34)

When looking closer at the correlation between the kind of answer and the position the informant hold at the hospital,

two main tendencies are visible. The first relates to education and the latter to job function. In general, the longer the education, the more certain the informant was using the concept. This means that basic nurses and assistants were more likely to be uncertain than doctors. As for job function, informants whose jobs were largely in administration or management would be more familiar with the term than the informants having mainly or solely health care functions.

This suggests that, first of all, innovation is not a word common on among the non-managerial staff, as this conversation shows:

Informant: *"It is not a word that I would normally use..."*
Interviewer: *"So, when the managers talk about innovation, do anybody here understand what they are talking about?"*
Informant: *"No"*

The quotes raise the question: Does the concept of innovation mean anything to the informants?

The question can be answered in two ways, depending on the interpretation. The first is: *"Does the word innovation mean anything to the informants?"* The second would be: *"Do the informant relate to the concept of innovation as defined in the introduction?"* In other words, does the hospital staff know of or use the word innovation, and are they innovative according to the definition despite knowing or not knowing of the word?

With the data at hand, the answers to these two questions are as follows: Innovation would seem to be a concept used primarily by administrators or managers, and which has not yet diffused to the non-administrative staff.

Unfamiliarity with the term does not mean that the informants in question are not innovative, or do not bring forward ideas. It does, however, mean that there is no widespread perception of innovations as an area, on which management has chosen to focus attention or resources, at the time of the study. As it will be shown in the following chapters, ideas are taken forward and new solutions and procedures are constantly implemented at all three wards visited, but nowhere could a particular pull for bottom-up ideas from above be identified.

Ideas and creativity

The informants' views differed as to whether a hospital was a creative work environment or not. The answers span from absolutely to absolutely not, as can be seen from the quotes below. Most of the answers, however, fall between the two extremes. Thus, when asked whether a hospital is a creative work environment, the following quotes exemplify the different views:

"No, I don't think it is, not especially, no" (Informant 22)

"No, it is very much embedded in traditions, I think" (Informant 33)

"Well, basically I don't think it is" (Informant 29)

"If we are creative? Absolutely!" (Informant 26)

"Yes, I think so. I think so. It's very creative...now... I work with my hands, and I love my job because you can be creative during surgery" (Informant 13)

"Yes, you talked about hospitals, but if I look at the nursing staff then... if you talk to nurses, and nursing staff in general, then they are often creative people outside their jobs, and energetic, they take care of things, they solve things..." (Informant 35)

"It is somewhere in between [creative and not creative] I would think" (Informant 21)

"I think it has become ... a lot more creative ... over the last two – three years ..." (Informant 10)

"...Can I say both yes and no?" (Informant 40)

This of course relates to job function, but also to what seems to be different understandings of what creativity means in a hospital setting. In relation to job functions, it would seem that doctors feel they have more individual freedom to be creative at work, especially surgeons during an operation, whereas administrators as well as basic nurses feel they have limited possibility of straying from the written procedures and restraints that limited resources pose.

When analyzing the different views on creativity and ideas, five different variations of this can be identified. First of all, research in the sense of scientific research. As will be discussed later, scientific research is, at least in theory, the basis of all patient related work in the wards in which this study was carried out. As these quotes show, both creativity and innovation are often linked with research.

"...but at the same time, health care wouldn't have made progress if nobody were creative, then everything would have stopped, you wouldn't have had any new cancer medicine, you wouldn't have changed the rate of infants who survive the birth, all of this is controlled by being creative and doing research... research is an example that you have to be creative" (Informant 40)

"There is research, of course, but that is not connected to us, who work in the units, but of course those in research environments have to come up with something new and better, and that is implemented as soon as we know of it" (Informant 19)

"You're thinking of how we try to improve things, though research and so on?" (Informant 5)

The second understanding of creativity is linked to problem solving and being creative when faced with a difficult situation at work. This is often related to situations in the delivery room or the operating theater where the standard procedure do not apply for one reason or other, and hence thinking 'out of the box' is required. These are a few examples of this perception of creativity.

"If we are creative? Absolutely! We have become creative because we've been forced to do so. Things go very fast and you come up with... we are very creative, at times we are a little too creative, we do our own couplings to equipment to work more effective, however too creative. And I think that hospital staff are a lot about 'fix and tricks' and their own solutions" (Informant 26)

"This group of midwives is rather creative, because we often find ourselves in a situation where things suddenly change, which means that a woman can stand up and start giving birth instead of laying down, you can't predict how it will end, and if she jumps out to the side where the sink is, then there is hardly any room all of a sudden, and you have to find out ... where can I find room for myself.. practically, we have to be able to deal with finding new ways..." (Informant 25)

"Yes, I think so. I think so. It's very creative...now... I work with my hands, and I love my job because you can be creative during surgery. I do some things as well as I can, aesthetically, nice and evidence based, yes it is creative" (Informant 13)

The changing of work procedures and working smarter is another commonly found perception linked to creativity and innovation. In this form it's mainly top down, as the changes and ideas are initiated from administration and management of the ward or section in question.

"[Would you tell me about last time you were innovative?] Well, the latest thing is that we have had an enquiry, if anyone at the ward, gynecological and obstetrical, might want to take part in a project about [...]" (Informant 3)

"[Would you tell me about last time you were innovative?]...we have to implement a whole new line, new research that we are going to implement into our line of work..." (Informant 9)

"[Would you tell me about last time you were innovative?] Well, innovative, to me, is changing things when it is needed... routines or wherever it is necessary, and this we do continuously at the ward, when it comes to routines... how you work... and... things like that, and I update – we have standard ward plans – for each patient group, and I update those continuously..." (Informant 15)

Especially when discussing creativity a fourth perception surfaces, where creativity is understood as working together in the best possible way. The focus is on getting the job done in the best possible way, and if that means ignoring professional demarcations and breaks etc. then so be it. Hospital staffs that are creative in this sort of way are held in high regard by seemingly all professions interviewed, as the quotes below show:

"It's a bit of the same thing, someone who is part of... who can think... think across borders and outside the fixed frames we work in, think outside this and who gets help from other sources when it is needed" (Informant 22)

"Someone who... it's... Someone who is capable of seeing what is needed in this situation, even if we have official procedures for almost everything, in this situation we do this, and in this situation we do that, we can almost look up every situation to check what we have to do, then... the creative doctor, and the creative midwife for that matter, is someone who is able to say, 'this is what the procedure says, and here is the woman giving birth who's important, and with both in mind, this is what we will do'" (Informant 7)

"Well, a creative midwife... that is someone who can solve problems she faces on the spot, and decide that she will do this and not that... right?... that you can use each other's competences, and that counts for both...for all professional groups ... that you can use each other's competences to make the team-work flexible ... that you allow yourself to hand over tasks and receive tasks [from other professional groups]... yes..." (Informant 17)

The last of the five understandings or perceptions of creativity is the bottom up flow of ideas for new products or changes related to the daily work in the units. The following quotes show how this type of ideas is perceived by the informants.

"Just this morning we talked about a surgical technique ... and because I used to be [...] and because of that I had some suggestion as to what could be done, and it sounded to me like something that would be considered... that is something innovative from this morning" (Informant 21)

"I've realized that at the [patient] hotel we had a problem, we moved around so much due to because of all the floors and rooms when you were alone in the evening shift. But then one of my colleagues said that we should have a rucksack, so now we've got a rucksack with all the most important things and we don't have to run to fetch this and that a billion times... it's a small thing and it looks a bit funny when we walk around with them, but it's worth a lot that we don't have to run to the second floor and back to get something we need..." (Informant 25)

"I think we do [get ideas] but it's not groundbreaking things. But often when someone brings forward an idea we wonder why we didn't think of this, ages ago, because ... it's ... often a small thing that might have annoyed us or complicated things for ages and then all of a sudden someone asks why we don't just do it like this... and then we do it like that..." (Informant 7)

The concept of innovation, the definition given in the chapter on 'Methodology and theory', does not apply to all of these understandings or perceptions of creativity. This definition would strictly apply to creativity as problem solving, the changing of work procedures, research and bottom up ideas for new products or procedures if they are implemented. Scientific research is also linked to innovation at hospitals in other ways, the manners of which will be shown later on. The remaining perception of creativity is that of working together in the best way possible. This is an approach to work rather than a way of working that could potentially be standardized.

This leaves four different types of innovation, and one creative and innovative approach to work. The four types of innovation that could be identified through the interviews are different types of innovation, as categorized by Bason (Bason (2007)). Research is its own category, whereas the top down approach to work procedures would qualify as both process innovation and management innovation in the sense that it's about improving existing processes.

New ideas for products or processes by the staff, as well as the ad-hoc problem solving, will be categorized as employee-driven innovation, but of different sorts. To start with the latter, it's a new approach that is implemented immediately, but with no generalization or corporate learning. New approaches or methods are discussed, but not on a systematic level and thus what goes on in the operating theater might be discussed afterwards, and it might not. It might even only be relevant in this particular case.

The bottom up flow of new ideas is aimed at some sort of generalization. By the fact that they are spoken of, they are by definition meant to be able to change something for more staff members than just the owner of the idea. Here, the problem is the implementation. Ideally, all good ideas should be implemented and all bad ideas rejected, but it isn't that simple for a number of reasons, which will be discussed in the following part. As this study focuses on employee-driven innovation, the five perceptions of creativity are important to be aware off when discussing creativity, ideas and innovation in a hospital setting. As this research focuses on employee-driven innovation, the rapport is centered on the last category, the bottom-up flow of ideas.

Understandings of creativity

Four different understandings of creativity could be identified from the data. These are:

Research

Research is often connected to creativity and innovation, and is seen as important in a modern hospital setting. Other aspects of research will be discussed in the chapter on 'Evidence based'.

Ad hoc problem solving

Problems arise and are solved on the spot, for instance during surgery or delivery. This is viewed as a creative process, but the results are not regularly shared or implemented in the organization.

Changing of work procedures from above

Procedures and changes in work routines and organizations are often implemented, and key staff members involved are often middle managers and administrative staff, who implement a top-down creative process.

Smoothly cooperating

In certain work situations a level of creativity were seen to be important in making proceedings go smoothly, even if it meant relaxing the forms and procedures, or professional pride, in order to generate a better result of the work.

The bottom-up flow of ideas

The informants talked about how ideas where promoted by the staff (A bottom-up strategy), and possibly proceed to implementation. These strategies will be discussed in the chapter on 'Strategies for promoting ideas'.

The different understandings show how difficult it is to discuss creativity in a hospital setting if the understand is not specified. In the context of employee-driven innovation it is the bottom-up flow of ideas which is the focus. The reason for this is that the study is aimed it gathering information on the processes whereby ideas are generated and promoted to a potential decision maker. In the case of the ad-hoc creativity, which is related to the bottom-up flow of ideas in that ideas are generated by employees and are imple-

mented, the evaluation and implementation is executed on the spot, and thereby this is a completely different process to the promotion of ideas in the organization.

Age, gender and innovation

The informants were asked about whether certain factors would influence innovation, ideas and creativity, and if so, how.

Gender

The first parameter was if there was any difference between males and females in relation to innovation. It should be noted that as the study was carried out among staff members employed in a medical specialty that focuses on women, there were very few male staff members compared to female. This is especially the case when it comes to nurses and midwifes, where the percentage of women pushes hundred.

"Well, I really only work with women, there are very few men here. The absolute majority of my colleagues are women, all the nurses are women, and a large part of my colleagues as a doctor are female too" (Informant 8)

As the following quotes show, there used to be a higher ratio of male doctors, but it's increasingly changing in favor of female doctors.

"These days there are many female doctors, young female doctors [...] among the older doctors it's mainly men... and... my previous experience from nursing is that men dare apply for management positions whereas women... 'no, that's... I'm not good enough'... and... 'I don't have enough experience'... it's... of course I can, and if I can't then I will think of something else. And in that sense there are still differences between men and women. But at our unit, there are... I... I think we have a lot of very skilled female doctors..." (Informant 34)

"There are quite a lot of women here... and... there are actually only men among the doctors, and they are becoming a minority here" (Informant 18)

This means that when discussing gender has any influence on innovation, according to the data, the very low number of male staff members has to be considered. Never the less, from the data it is possible to point to two main trends.

"I can imagine there is [a difference], yes. I would imagine men being more interested in ideas on more craft related... things... where women were more... [...] were more into the softer issues, the softer aspects and values, 'It's so horrible that these ladies have to sit and wait' and things like that, I would imagine that this was something women thought more of compared to men" (Informant 11)

It shows here that when it comes to ideas, when talking on a very general level, men are considered to be more interested in technology and gadgets, whereas woman are considered to value the more caring, in the meaning of health care, and the smoothing of procedures to decrease patient stress and discomfort.

"Traditionally I think it's been easier for men. But men have this ability to treat it like a given thing that they get their ideas implemented" (Informant 29)

"Yes, but that is purely because they are better at promoting them. I don't think they get better ideas than women, as such, but they sell their ideas better. It's as simple as that!" (Informant 11)

The second point, exemplified above, is that male staff members are more likely to push through their viewpoints and ideas, compared to female staff members. It should be noted that most of the male staff members in this connection are doctors, who are seen to be more likely to push their ideas though, compared to the other professional groups, this may simple reflect this conception. Many informants did not think there were any differences between the sexes in relation to innovation.

"I don't think there are any differences. It doesn't matter if it's a male or a female doctor who have ideas" (Informant 18)

Both of the differences found in the date on gender differences, in relation to innovation and ideas, image traditional stereotypes, as some of the informants note. However, it does seem from the data that these stereotypes are, by some of the informants, seen to hold some truth. If the notion that men are more likely to succeed with their ideas and that they are more likely to come up with ideas for new products, persists even to some extent, then it could be both a self-fulfilling prophecy and a cause for female staff members to be less motivated to bring forward ideas. The possible cultural influences of gender differences on innovation in this context are discussed in a later chapter.

Age & seniority

A large part of the informants believe that the younger staff members are more creative and come up with more ideas than the older ones.

"Yes, I think so. The older you get, the more... you think 'this cannot succeed'. You've tried it before" (Informant 3)

"I think that... the ones who are most... with the most kick, who have new ideas, it's the ones who finished their education about six years ago... four years ago. The young nurses, who hold a bachelor... they have little kids, they are having babies, they go to work and have busy days but they... they are in a bubble... they keep thinking 'how can we make this smarter', because they need to do a lot of things and make ends meet, they multitask, it's a busy time, when you're in your thirties and your forties, a very busy time, and if they choose to be busy... choose that their work lives also have to be exciting and not just a place they come whereas the busy life takes place at home with family and kid, building houses and all that... and it is, they are very dedicated, and busy at work, they come up with things and they hunger, really, really to get something where they can say 'this is me who is in charge of this, this is something I want to be responsible for, and take it to the next level" (Informant 35)

"...and perhaps there is a difference as to... how interested those who have been working for a long time are in changes, compared to those who are new and are engaged in... or who perhaps have come directly from school and are occupied with learning and be smarter and reflection... yes, that can influence on the group in relation to who bring forward ideas and how they seek to implement them" (Informant 38)

These quotes show that age in itself is part of what make these informants view the younger as bringing forward more ideas. But it's age and certain factors that are usually linked to being younger, such as building a family, having just finished your education and having recently been employed that are seen as important in this relation.

Younger doctors are forced to move around as part of their education, and the data lends support to the hypothesis that younger nurses change their jobs more frequently than their older colleagues, which means that in many cases the newly employed staff members are also likely to be younger. A few informants noted that new employees tend to ask a lot of questions and compare procedures to those of the ward or unit they come from.

"When someone new comes to the ward, and she asks out of curiosity 'why don't you do it like this' and you stop and think 'right'... sometimes something is brought forward where you think 'that's logical! Why have we been missing this for two years when it's that simple to do something other or differently', often someone else's perspectives are needed, a fresh view from outside the ward, to change these little things that we... that could have been done easier" (Informant 22)

The idea of utilizing this curiosity and getting a fresh perspective seem to be something at least worth considering in order to obtain a constant evaluation of practices.

"Actually, any senior consultant should, when someone is employed from somewhere else, hold a... evaluative introductory interview, to hear if they have something new that could be important. That is the time when they are new, fresh and come from somewhere else, is there something... is there something we could use here? It should be mandatory, by law, that you tried to... get some knowledge from the new employees who have been employed somewhere else before" (Informant 12)

Some informants hold the view that the younger and older staff members have different roles or come up with different types of ideas.

"They have different roles. The older doctors are the ones with standing and clout in the system and are able to... to... say that they have been working with this for a long time, and they are professionally very competent, and if you ask them a concrete question then you get a concrete answer, and that is their role... but at the same time, the younger doctors wish that the ward should be better overall, better at aiding by deliveries, better communication at the clinic, we are much more 'we need to do something with the system here, and that is our part in innovation, whereas their [the more senior doctors'] part is to... be consultants, be the ones who can tell this is how it is and this is how it's done, in a medical context, they are less innovative when it comes to the running of the ward" (Informant 40)

In this view, the older staff members use their experience and serve as the memory of the ward, in the sense that they can tell the younger colleagues what have been tried previously and how their idea relates to the medical practice and other implications of the idea that it takes experience to know of. As explained here, this finely tuned balance seems to work rather well, but a lot depends on the goodwill and the acceptance of innovative ideas by the older colleagues.

Finally, a number of informants didn't think that age had an influence on ideas and innovation.

"Let me put it like this, I think that if you have good ideas, then in an advanced age then I think you would have been a person who have had ideas from the beginning, it's more about type of person [...] Either you're an inventor, or you aren't" (Informant 21)

"No, not age... I thought of... experience... but that isn't really... experience isn't... well perhaps what kind of idea you have, but I... think it has more to do with the person... who are interested and who are ... who see solutions instead of problems" (Informant 34)

"No, age doesn't matter when it comes to getting ideas" (Informant 23)

Overall, age isn't seen to be the most important factor when it comes to getting ideas and being creative. The quo-

tes show that age as such isn't determining who comes up with new ideas, but age related issues are, such as changing jobs and being in a situation in life where you are forced by lack of time to come up with ideas. It is habit and becoming attached to procedures that makes some older staff members less innovative, more than becoming older in itself.

Motivation for innovation

Motivation is an important factor in innovation, and the informants very much agree on what promotes and inhibits motivation for bringing forward new ideas.

Receptiveness

"I am sure it looks differently, and I would have thought it is different... for the individual employee how you experience that what you say is acted upon, it is very different I am sure. I think that at the unit where I am, we are trying to open up a dialog to take care of all ideas, to... sort of... act on the best of the ideas and take care of them... I can't bring up any idea in the world, there are limits, of course, but that there is a response and that your ideas are listened to... but if they are implemented, that is another matter..." (Informant 1)

"Because... you're not scared of bringing it up, because you know that it is evaluated by some sensible people who listen to what you say, and that is very important, that you're taken serious, and ... that is showing each other respect... [...] and if you ask me, then I think it works very well [...] Well, I don't know [if everybody is respected in the same way]" (Informant 2)

As these examples show, being heard and taken seriously when you promote your idea is very motivating, whereas the opposite is demotivating. This would likely be the case in most instances, and is not surprising, but all the same it seems that many informants have experienced ideas not being taken seriously, forgotten, hushed or lost in the higher echelons of the organization (see 'Strategies for promoting ideas').

On the other hand, many informants tell tales of well working relationships too, between peers or between peers and their immediate superior, where ideas are taken forward and discussed, and reasons given for why the idea will be implemented, taken to another decision-making level or rejected.

Thus, it differs from place to place, and from situation to situation. Trouble is, the data suggest, that once demotivated you stay demotived, and presumably it would take an effort from an outside force to bring back the confidence and motivation for taking ideas forward. With this in mind, when trying to promote innovation amongst colleagues or employees, it is important to note that the positive attitude to innovation and ideas must be present at all times, and not just when there is time and room for it.

Incitements

A large issue is incitements to be innovative, and the data show that these incitements are in many cases lacking. During the first interviews, incentives and incitements were discussed, which produced statements like the following:

"But if the managers said so, or the politicians, that we know that everybody give more than a hundred percent, and we value that, but if everybody, every week, could give more than a hundred percent, then... it's about how things are formulated [...] I suggested that we could increase the budget for courses, or send people on courses, the things they want to attend, because I was sure that would reduce the sickness absence, but... [...] I've heard that, in connection to this [...] that a lot of people say, why do we need to be more efficient, we run enough as it is, all we get is... the bonus is one more patient every day, well... call it a bonus, but... if we become more efficient, then we won't get this... personal time, or time to go and read some professionally relevant literature, or read our emails, we will just be allocated another patient" (Informant 34)

"Yes, it's often like that, that if you bring up and idea or something is changed, then you don't see... perhaps you don't see... any changes, or... no visible results. And if you, when you have spared and expense, could spend some of the money you saved on something, then it would have been very visible" (Informant 14)

"I think it's important to get more innovation, that the time from idea to implementation... that amount of time can... be made shorter... because if too much time passes, or if the process becomes too onerous, then... then it dies... people won't dare to say anything and if they don't dare say anything, then... when an idea enters their heads, then... they become depressed, without having said anything, because they think that no-one will listen, it's just... I know how it's gonna be, and it becomes a self-fulfilling prophecy... and it weakens and weakens and weakens and the less of a sense of ownership you have, the less of a feeling of control over your daily tasks you have, the more absence there is, it's been shown that... Less control over your work tasks leads to more sickness absence, and it's the same, I think, if the management doesn't listen" (Informant 39)

"Of course, it would be better if all the money you save on this and that wouldn't just disappear into this black hole, because it's obvious that it doesn't stimulate the will to changes" (Informant 24)

These very different quotes testify that to the informants there is a logical link between being able to influence your work life, and thus being innovative. Likewise there is a link between being motivated and between the incitements, or lack thereof that is created by all the money being saved disappearing into a 'black hole' and the time saved per task will just result in

more task. This lack of motivation is linked, as shown above, by the informants to increased sickness absence and lack of incentives to come up with ideas to save time or money.

The following quote shows how, if you have a good idea and it's implemented, there aren't always incitements to inform the rest of the ward or hospital about these changes.

"...but it's not something I would like to tell the hospital management, or share in that way, because... I don't have the time to... don't have the time to bring it upwards, because I prioritize that things run where I am [...] I can feel that the way we have done things here can be an inspiration for others, but I don't think that the hospital as such... I think we have, it's a much used word, but we are busy with keeping things running where you are, make it succeed there, you don't have the time to promote it elsewhere, and allow myself to be used by others in this regard [...] that's how it is, but it's also problematic because we could learn a lot from each other, but the workload and time doesn't match" (Informant 35)

This suggests that in many cases ideas and improvements are not promoted towards the other units, wards or centers, or indeed the management of the hospital. Partly because sharing the idea potentially means an increased work load when promoting it and partly because working smarter and saving money usually means that your budget is cut next year.

If sharing ideas with other wards or the hospital in general means touring the hospital while promoting the idea, or being put in charge of supervising the implementation, then there is hardly any incitement for a lower level manager to promote successfully implemented ideas or other changes among his staff.

Similarly, if a new idea means that resources are spend more efficiently, and by that, the whole budget isn't used, then the annual budget is cut accordingly with the same amount, it is not going to motivate innovation, as there are no incitements to work more efficiently.

One informant stated that if an idea was put forward, and it was considered good, but too complicated or expensive to implement, then she would try to implement parts of the idea, if it made sense.

"Often it is... there are those who think that... it's so slow, and that is usually those who bring forward ideas that are huge, those huge things such as rebuilding the ward, why was that never done, huge ideas like that are very difficult to see through as you have to bring it up to the management level, and beg for money and then wait for eight years, and in the end it's never going to be implemented in its original form... I think that... you have to try to get creativity to flow through small cases, and by making them direct, when small improvements come along that it's possible to implement and that are not too expensive, so that you can find room in your own budget, then it works well to take those ideas and implement them. Then there is room for other great ideas so that it's no these huge changes, where... some employees want to change so much in one stroke, and it's not possible, so they are discouraged, but if you can pick out little things from this huge idea, and implement them well, then perhaps you don't put a stop to creativity. But of course it's hard" (Informant 26)

As it can be seen from the quote, the idea behind implementing the relevant parts of a good but complicated idea is actually making bottom-up change work, and by working with the idea showing that it's taken seriously which motivates the staff. If an idea owner is told that her idea is good, but it can't be implemented because of expenses and complexity, this might demotivate rather than motivate. Thus, implementing what it is possible and what makes sense to implement, rather than rejecting the idea as a whole or filing it and forgetting about it, seems a good strategy for promoting motivation and innovation.

Metal fatigue

Metal fatigue is a well known phenomenon, where metal that has been overworked or bent once too often loses its strength and breaks.

This is in many ways similar to what is stated in relation to top-down changes by many informants, as these examples show.

"Well, yes, I suppose it does... changes of procedures in relation to what we have to do... that are new... and usually that comes from the top, from the different managers of the different units, and of course our ward management, and that way new things come from the top to be implemented, changing the procedures from one thing and to that we have to do something else, yes" (Informant 11)

"Now, the last year, ideas and tasks are passed down from above, we have never had tasks before like this, and we have been very busy, but now it's starting to become 'you have to do this and this and this and this...' and that comes from the very top of the management and is then pushed all the way down [...] no, they come from above, they come from above, they won't... it's resistance, instead, you have to take care of, when it comes from above what you need to do, then there's always resistance that you have to overcome, on the shop floor" (Informant 10)

"But it's difficult, as I said; when they do things like moving us around, then you don't feel like having good ideas. Leave us alone! Really, we work... at the different units and the ward, we have a fantastic organization. For us, it's been working very well and it's... I think that... we're part of this big hospital, and that's a problem

because, sometimes it doesn't work there, but it works here, and we're supposed to be one big family, but in the end we... get it too... and then it's hard for us, even if it works well right here, then it's hard to do something good with what you have here, if all the time you hear that you have to cut expenses and do this and reorganize that... I think that... people... lose their motivation, they don't have any motivation and it's... about innovation, it's... I have a lot of good ideas, if I was just allowed to use them. If I just had a moment where I would sit down and feel completely OK. But when things like this happen all the time, and then you don't have any... I mean, it schizophrenic, one minute you're supposed to be part of the big family, and the next you risk being sacked. Seriously!" (Informant 5)

"It's like that if you've been employed at the same place for a long time, then it's always difficult to... try new things. But now we have tried so many new things that if something new comes along then we just go 'OK, let's try it like that', because it keeps changing all the time, and then all of a sudden everybody are moved around the hospitals, and you have to change to make it work. But at the same time I think... perhaps that... I... they just change and change, but sometimes you need to stop and evaluate the changes to see 'were this good?', 'does this work?', 'or do we have to change again to try another way', and I think that most people here think like this. Because you would think that at the end of the day it's the patients who come here that we have to help as best we can, and it doesn't help them if it's just a mass of changes all the time, and meeting frustrated people and... they are not supposed to feel any of this... but you can't keep changing... new, new, new, new, because it wears people down. You need some foundational pillars, these are fixed routines and that is how it is, and then you can try something new, but you need some fixed scaffolding, I think that is important" (Informant 2)

In relation to the discussion on motivation for innovation, the feeling of constant change pushed from above is clearly draining at least some members of the staff for motivation to further changes. This leaves neither incitements nor motivation to be creative nor to try to push ideas upwards in the organization as the quotes clearly state. This tendency isn't restricted to just one hospital or professional group, but can be identified among members of all groups and in all three countries visited. The trend can be found in other public organizations, as the study by Klitmøller, Lauring and Jonasson shows (Klitmøller, Lauring & Jonasson (2006).

What cause frustration are three different things according to the informants. The first is the push for change is political and not motivated by any identified need or analysis of the hospital and its problems. The second is that the changes are not evaluated to see if they had any effect. The third is that what is focused on one year is often forgotten within a year or two, where new ideas are pushed instead, and the resources spend on implementing these changes are wasted.

It is important to note that the focus here isn't if resources are wasted or if ideas are pushed to be forgotten the year after, but rather if this is what it looks like to some of the informants. Thus, this very real experience of changes often not being fully implemented or are changed again or discarded before they are properly tested is making it a difficult job to promote bottom-up change and employee-driven innovation to that same group of people.

Mistakes, errors and unforeseen events

In theories on innovation, it's a common statement that in order to innovate and create a culture of innovation, you have to accept that mistakes happen. An organization where mistakes are not tolerated will have a hard time being innovative, as acceptance of mistakes may happen will drive the staff on to test new ideas without fearing for consequences of possible failure, and thus increasing the confidence and motivation for innovation among employees, at least in theory (Bason (2007), pp. 196-201 & Koch, Cunningham, Schwabsky & Hauknes (2006), p. 33). By the very nature of the work done in hospitals, making errors are not recommended, as the consequences can be quite severe.

There is awareness among the informants that making errors should not be taboo in this day and age, but the opinion of whether the taboo has been lifted or not differs. While errors as such aren't the main focus of this study, there are some points that can be made from the data. Because of the link between accepting mistakes and innovation, the informants were asked if it was allowed to discuss mistakes made at work.

"Yes, yes you can... yes it is... we have to talk about it, no, well, of course it can be taboo, but yes, if an error happens, then we talk about it, and that is allowed... and we bring it up at the staff meeting" (Informant 28)

"We're not that good at reporting the unforeseen events, I'd say, that's... but we're good at talking about it, if something comes up, we don't hide [...] it's accepted that we're human, and that we all can do something unfortunate" (Informant 3)

"Yes, I'd say so... there's a large... from what I know... openness surrounding this, 'I accidently gave too much of...', or' I didn't examine [...] because of...' whatever, really, it can happen to anyone. No-one is going to hit you on the head" (Informant 31)

"It's explicit that you can, but actually, you're not allowed to, because you will be cut down if you do... it's said that mistakes is what you learn from, but that isn't how it is [...] what is looked at is... I don't know if there is a culture of mistakes, in the sense that instead of looking at the complete work as a whole, and say that overall it's really good, there was this little error here, but it doesn't matter

than much, it's OK, instead you look... here's an error, to try and find errors instead of letting them be. And in that way they get a more prominent role than they... than... than they really should [...] I think that if one error appears, then I think, that's OK, but the tendency is to say that we need some rules for this, and in that way the rules get to control... it becomes very rule based, and instead of saying 'yes, there was an error here, but in the ninety-nine other occasions, no error was made. Therefore we should expect that in the future, no errors will happen'. Because then we can become aware, but there is a difference between being more aware and creating a rule" (Informant 20)

"Rarely, I'd say, very rarely... that isn't something that... it isn't formulated in that way... and it's something that people here generally are bad at talking about. But everybody know that all people make mistakes, we all make mistakes and so on, but it isn't something that you would discuss" (Informant 21)

"Yes, we do... firstly, if you notice an error, then we have a system in the computer where we rapport it, or we write about it, and later we always get feedback, when the evaluation is done then the person who reported it get it back, what had happened, why did we do this, and we bring it up at the workplace where we discuss different things" (Informant 18)

"Yes, it's become better, but there has been no tradition, is my impression, that you talked about errors" (Informant 29)

"Yes, we're getting better and better at it, it's always hard, with criticism, but we try to talk about it, and on the... morning meetings... we're quite good at talking about if things could have been done in another way. Without trying to put down the involved" (informant 24)

"No...no... because... I think we've become better at it, actually... and we've managed to implement that if it's an error then it's an error of the system and even if that is great, then it becomes... you write checklists, and write this and write that, and then it's harder to differ from the checklists, and then you lose some creativity, you do [...] some do it [lose their motivation] those who are really creative do, I think" (Informant 30)

From the answers two different trends can be identified:

The quotes above show that, first of all, there has been an initiative at all three hospitals aimed at making errors less taboo. The quotes show almost similar statements made in all three countries, along the lines of "we have to talk about it". There have been made official procedures for where to report errors, and what is reported is looked through regularly by the management in order to see if there are procedures that should be changed and generally learning from them.

From an innovation standpoint it is generally considered that lack of tolerance of errors of any kind in an organization hinders innovation. The dilemma is that errors in this connection can mean loss of lives or limbs, and as such must be avoided. From the quotes above, however, it would seem that there is awareness that errors must be avoided, even when it comes to areas that don't involve the same level of risk, such as administrative routines. In order for employee-driven innovation to flourish, it would be recommended, based on the data at hand, that there need to be some knowledge of where and when it's acceptable or even recommended to be innovative, and when it's not.

Gatekeepers

The idea-owner as gatekeeper

From the data it is possible to identify several 'gates' an idea must pass through in order to be considered for implementation, and with each of these gates comes a gatekeeper. From these following quotes the case can be made that the first gatekeeper any idea will meet, is the person having the idea.

"I don't know, actually. I would think that people who don't say much when there are a lot of people present say something when less people are there? I don't know. I don't... well, yes... if you're someone who never say anything, then it's obvious that you don't contribute to anything, but if you're someone who is active, not necessarily 'very' active, but taking part and committed, then I think that... that you can be heard..." (Informant 21)

"But I think the possibility is always there, but it becomes dependant on what sort of person you are and if you're interested in new thoughts and in that way try to keep the possibilities you have. Some people always come up with new things, right?" (Informant 29)

"But it also depends on what sort of person you are. If you think that 'no, I don't have any good ideas, and no-one listen to me', then you never get to say what you think, or get it how you want it to be. Then it's better to try to argue your case, make others committed to it, and ask 'isn't this great? - Yes, it's great! Let's do it like that'" (Informant 2)

As it can be seen from these examples, it is argued that if you don't speak up, then you won't get your views heard, and no ideas implemented. It is related to personality here, but it also links to the pervious discussion about standing in the group. It takes self-confidence to speak up, as the first quote shows, and confidence that you're being listened to, or else, why bother? If you're fairly sure that nothing good will come of you bringing an idea forward, then there is no motivation for anyone to do so.

Time & economy

Previously, it has been discussed how the environment and the personality influences when an idea is brought forward or not. These arguments consider the more or less conscious decision of putting the idea forward, but there are other factors that influence if an idea is made explicit or not.

"Well I think it's because you are at work, you have so many things... ok, you come up with a good idea that can be used on many patients [...] but... where do I go... well... and then it comes to nothing" (Informant 28)

"Right now I think it's stopped by time and economy. It demands staff, and it demands time" (Informant 6)

"A lot is put on hold by time... by time and economy. Because we are a rather... cumbersome organization, it's a large hospital, and ... and...it's demanding to make changes, and health care is an area which is under economical pressure, right? We lack funds to do things, and that complicates things... time... I think if you had had more time then you would have had energy to examine new things during work hours, and then there would perhaps have been more of an environment to do so, too. Whereas here, we have more than enough just trying to get through the everyday work with caring for the patients and the women who come here to give birth, which is the main priority. But of course, in the long run, the women giving birth would benefit from us coming up with something new, and do new things, but we are stopped by time and money" (Informant 29)

As these quotes show, time is, in many ways, a very important factor when discussing innovation and creativity. Most, if not all, informants have at some point during the interviews stated that resources, mainly time and money, are the two main barriers to innovation. This duality is often identified as a main problem when it comes to innovation, but it raises two questions: Is this duality really the main barrier to innovation at hospitals? When, and in which way are time and money a problem for innovation? The overall aim of this rapport is to try to answer the first question, whereas the second will be discussed below.

According to the data provided by this group of informants, time has as an influence on innovation in more ways than just one. Of course, more time to discuss ideas is seen as something that would benefit the level of innovation at the ward as the quote from informant 29 states.

However, time does also influence directly on whether ideas are taken forward or not by the idea owner. This adds to the concept of the idea owner being the first gatekeeper, as an idea that pops up while the idea owner is very busy with her work is faced the risk of simply being forgotten before the idea owner has a chance to write it down or think it through.

The data show that lack of time is a barrier to innovation on the next levels as well. As the quotes presented in the chapter on strategies show, time is needed in order to prepare an idea properly, and to perhaps discuss it at a staff meeting.

Time also influences the flow of ideas when it comes to decision making, as more informants suggest that ideas are placed in growing piles of papers in their superiors' offices, because they lack the time to explore and evaluate them *("...and then it was sent to [superior], where it's been for [...] and it's likely sitting at the bottom of an ever growing pile of paper..." (Informant 31))*

The last instance, where time is show to be a barrier to innovation, is when the unit has no time to test new ideas, and they are put on the back burner and eventually forgotten about.

When it comes to the generating of new ideas, and the mentioned problem solving related creativity, lack of time, it can be argued from the data, represents a push for innovation, rather than a barrier to it.

This shows that time, or lack thereof, is not only a barrier but also a driver for innovation, depending on the situation. When it comes to promoting innovation at a hospital ward, this study would argue that it's important to be aware of the possible barriers to the bottom-up flow of ideas that lack of time represents, in order to make sure that as many ideas as possible reach a decision maker.

The immediate superior

Formal and informal hierarchy is discussed below, and so for now it will suffice to acknowledge their influence on the process.

On the next level, the immediate superior represents the first official gatekeeper. As stated above, for many informants, but to a larger extent for the nurses than the doctors, the immediate superior is a key figure in the process of putting forward ideas for evaluation. This of course leaves the process vulnerable to personal relations, as these quotes show:

Interviewer: *"Do some find it easier to be heard than others?"*
Informant: *"Yes, those who are similar to the superior"*
Interviewer: *"Similar? How?"*
Informant: *"Well, if you... well... it's a perhaps rather... if you are among the superiors favorites, then it gets done".*

"The immediate superiors' attitude, if she has the energy to promote the ideas that come from below, sometimes it is easier to just reject... 'yes, it sounds great, but'... because the employee can't do an awful lot, without... it has to be taken to the next level" (Informant 10)

"I think I have been employed in this position because I am a person who has visions and but that is possible because of a certain trust I have built up by being at this ward for [...] years, among my superiors and subordinates. (Informant 40)

Being a key figure and gatekeeper, a lot of responsibility for an effective bottom-up flow of ideas rests with the immediate superior. The data reveal that the daily running of the units and teams take most of the time available for the 'immediate superiors', who are often in charge of passing on the strategies of the hospital and that of the ward, as well as creating her own strategy for the unit, and implementing all these strategies and successful implementation of all these, and other, initiatives.

They are there for the ad hoc decision making, in some instances for planning activities, in charge of their own budgets and the short and long term coordination with the other professional groups. As such, making decision over potential ideas is a very minor part of their tasks, and as it isn't important here and now, the danger is that it isn't prioritized.

When looking at both the motivational factors and the strategies chosen by the nurses, and to some extent the midwives, the immediate superior plays a key part in both. With the immediate superior as one of the main gatekeepers for ideas, a lot of the process of employee-driven innovation, especially when it comes to nurses, hinges on her making the right decision.

The organization

From the perspective of the informants, the next gatekeeper is the organization seen as one. Many informants share the view that ideas that are passed upwards in the organization very rarely come back down. At best, ideas are processed and implemented higher up in the organization, but at a slow pace which frustrates the idea owners.

"... or you can push it on, try to get it approved by the person responsible... you can bring up most things like that ... or take it further up... to [...] who is the one responsible for [...], you can talk to, and... and the head of the unit also... and they can take it further... and sometimes things happen... and sometimes... nothing... it also depends on what the matter is..." (Informant 15)

"If there are things that we would like to change, then it's sometimes hard to find out if it is stopped at the level of our unit management, or at the next management level. And you'll get different answers depending on who you ask. It's very annoying! It's very annoying that it's not transparent where things end up, and it's hard to figure out who comes out on top in this system, it's more safe for us if things are processed with no fuzz" (Informant 6)

"It was nice to experience that they were quick to pick this up and say... ok, let's have a look at that. And I think that sometimes it's... I think that sometimes that is what... if you have small ideas for something or are annoyed by something that doesn't work, then ... you think what can we do to solve this, and even if you have an idea then I think... this past experience that... it doesn't really matter, it won't change anything anyway, it will take years, or something, that blocks for a lot of things, creativity and... innovative thinking" (Informant 7)

It seems that the slow process and lack of progress, seen from the shop floor at least, is accepted as a built-in part of the ward, and, the data suggest, the hospital or hospitals in general. Considering the frustration mentioned as a barrier for innovation, it can also at times be a driver to bypass the system as shown below.

"This is just such an example of... that if you had to go... the way you normally use the management or the administration it just takes forever! So what I did was..." (Informant 39)

To sum up, the three main gatekeepers found are the idea-owner herself, the immediate superior, and the organization viewed as a whole by the informants. These are the main gatekeepers identified by the informants. The first are of course related to the last two, as it rests on expectations of how the idea is likely to be received and fare in the organization after perhaps being accepted. The organization as such is seen as not being transparent, it's not clear what happens in the other parts and the higher echelons, which explains why the administration and the higher management are seen as part of a whole and part of the same gate. Lack of resources is discussed by the informants, but as it is a driver rather than a barrier to be innovative in some situations. Therefore, lack of time and economy is a factor that influences the mentioned gatekeepers, but not gates in their own right.

Strategies for promoting ideas

When asking the informants about bottom-up flow of ideas it was clear that neither of the three wards have a procedure for dealing with this, at least not an official procedure.

It should be noted, however, that it was made explicit that the ward on Sahlgrenska University Hospital does have a procedure for how to process and evaluate ideas for new work processes.

When asked what, in their view, would be the normal procedure if someone had an idea for something that could be improved, the answers differed somewhat, but overall four main strategies can be identified:

The idea is often taken to one's immediate superior:
"There is no official procedure. An employee will discuss it [an idea] with the charge nurse, and if she thinks that it's a good idea [...] if it concerns that unit only then she'll deal with it..." (Informant 33)

"If you have a good idea, then... you take it upwards, to the management of the unit and ask what they think of it" (Informant 17)

"..then you go to your superior.. and.. explain the idea... and then... we can try it if it's interesting..." (Informant 14)

"If you get an idea, you'll go and see your immediate superior, and ask her what she thinks" (Informant 23)

It's discussed amongst colleagues:

"It depends on how big or small it is. If it's... something small... something... not so important where you think that this could ease the amount of papers in one corner of the office, and we'd like it moved to the other corner of the office... then we discuss it among those who use the office, and decide that it's better if it sits there, and we can just make that decision" (Informant 22)

"If I had an idea, where I thought, this is something I need to bring forward, then I'd start off with talking to my colleagues in the unit, and ask them, if I say so and also, what is your opinion? Because I'd certainly have to test it first, among equals" (Informant 25)

Or the owner of the idea pushes the idea forward herself:

"Just this morning we talked about a surgical technique ... and because I used to be [...] I had some suggestion as to what could be incorporated, and it sounded to me like it was something that would be considered... that is something innovative from this morning... and now I will have to keep pushing for it to be implemented" (Informant 21)

"Yes, I think so. If you've come up with something then you'd say that by the way, I had this patient the other day, and then I did this and that, and I thought that helped me a lot, I think we're quite good at telling each other things like that" (Informant 11)

"I'd say... when I had an idea myself, and took it forward... that... you do more often than you'd think, but... where I took it all the way, and got it down on paper, was that I [...] and on the basis of that I took responsibility for creating an instruction on [...]" (Informant 16)

Often ideas can be presented and discussed at staff meetings:

"It depends on what it is. If it's something that... is about routines or smaller things, then we bring it up at unit meetings... and... or... there are other meetings, there are midwives meetings, assistant nurse meetings for these professional categories, and then there is the unit meeting for all of the unit, and then there is ATP meetings, for the whole of the ward, and in any of these forums you can bring up things, ideas or questions, and if it is something we can decide on ourselves, and we think it's good, then we can... discuss it and implement it or change things at the ward" (Informant 15)

In most cases, the answer would be a mixture of these strategies as shown below.

"Then you go... you talk to a couple of your colleagues, and then you go to [...], our charge nurse, and say, listen, what about this? And then she'll say yes, you can do that"
(Informant 31)

"Yes, well, then... perhaps they talk to each other during a break, and then we have our APT, as it's called, where we meet every week with our superior, and then we discuss it with her" (Informant 5)

The last option would be not bringing the idea forward at all, and this option will be dealt with later on. When studying the answers in detail it appears that both job position and profession plays a role in what approach a particular staff member chooses when having an idea. Analysis of the

data shows that the further up the informants are in the official hierarchy, the more they are in a position to actually implement their idea themselves, or at least they will know where to go with the idea in order to be allowed to try it out.

The analysis also shows that members of three main professions interviewed (nurses, doctors and midwives) would generally opt for different strategies when having an idea. An analysis of the differences between the professional groups and their implications for innovation will be discussed elsewhere, but from the data it is clear that a member of each of these groups are likely to follow slightly different paths when promoting an idea, and choose certain strategies for different reasons.

Nurses

Of the nurses interviewed, some are basic nurses, some are specialized, and some have a managerial or administrative position. Of the basic nurses, most have a certain added function or area of responsibility. Another group is the specialized nurses, such as surgical nurses, and yet another is the nurses who now are employed in a management or administration role.

The data suggests that at nurse, who works as such, will be likely to discuss an idea with her colleagues, and if they are positive, she will then report the idea to her superior. There are deviants of this, of course, such as not discussing the idea with colleagues before reporting to her superior, but it stands out that most of the interviewed nurses would discuss an idea with their colleagues before presenting it to their superior, and that they would very rarely go to anyone else than their immediate superior, as the following quotes testifies to.

"Then you go... you talk to a couple of your colleagues, and then you go to [...], our charge nurse, and say, listen, what about this? And then she'll say yes, you can do that" (Informant 31)

The nurses in administrative positions give the impression that, knowing the administrative routines, they would know what would and would not be possible to implement, and this would determine if they took an idea forward or not. They would typically take an idea to the appropriate superior, being the one who could take action on this particular idea.

Staff meetings are often mentioned as forums where ideas can be shared. However, in the case of the nurses interviewed, the opinion on the effectiveness of using this strategy is divided to say the least.

"My own experience is that... I might have gone to my charge nurse and told her that this could be a good idea, and she would have said yes, it is, and we would then propose it at a meeting, and then... it comes to nothing, that's my experience. Because... sometime we are thirty people who have to know about it, but the dissemination from the one who has the idea to the other twenty-nine... often it's done in the way that the one who has the idea writes it down on a piece of paper, after which you note that twenty-three of the others are not interested, that's.. that's my experience [...] I've seen so many times that at the next staff meeting, we are going to bring this and that up, and then there's a crowd of twenty-odd people at the staff meeting, and someone puts the problem forward, but then she isn't supported by any of the other staff members there [...] I don't know what it is, but it's really, really unpleasant to be left alone to try to explain the issue, if the explanation raises questions then you're completely on your own, and I would say that a lot of things are not taken forward for that reason, because who would want to propose something at the next meeting?" (Informant 20)

This quote shows how bringing ideas up at meetings can be a bad strategy as the idea might lack support, and one can potentially feel isolated and overruled. For someone who has tried this herself, or witnessed it, there is little motivation to bring something up at a meeting that might not be supported by neither management nor colleagues. In this light, the strategy of having an informal discussion with colleagues, as exemplified below, would be a more risk free and efficient way of promoting one's idea.

"But I think that it's about, this 'having ideas', that you feel that you can and that it is all right to bring up new ideas, it's about personality, and about... you need to talk to everybody, that everybody get to have a say, though discussion you always get to... perhaps you thought... 'Triangle' at first, but after a lot of discussion it became 'rectangle' and it ended up with 'square' with which everybody is happy." (Informant 2)

This relates to two other points, that of seeking the support of someone who is higher up in the official hierarchy when promoting an idea, and that of the fear of losing status amongst colleagues, both of which are discussed in detail later on. In the case of the nurses there seem to be fewer options for seeking support higher up in the organizational hierarchy, apart from gaining the support of one's immediate superior. The data show that professional standing inside the group one belongs to is rated as important. The data collected only show this among the nurses and the doctors, where as it is not prominent in the interviews with the midwives. Standing in the group determines for a large part if your ideas are listened to or not, as developed on later in detail, but this explains why being abandoned by ones colleagues at a staff meeting means more than not getting the idea implemented: It means a loss of status and stan-

ding inside the group. As such, promoting ideas without the support of the group can be a risk, and this way of promoting ideas is mainly described by nurses in administrative or management positions as a possibility, whereas the basic and specialized nurses mention the other strategies described above when asked about *"what you do if you have an idea"*.

To sum up, the nurses interviewed indicate that all but the smallest ideas will be taken to the immediate superior for evaluation, typically after having been discussed amongst colleagues. Ideas can be put forward at different staff meetings as well, but this involves the risk of potentially being isolated at the meeting, which could lead to loss of internal professional standing. As such, the data show that in many cases it is important to get other staff members view on the idea before it is brought forward in a more public setting.

Developing-nurses

A particular type of nurse is the developing nurses, which is a Scandinavian phenomenon. They are responsible for, in very general terms, aiding the development, helping nurses with starting and describing development projects etc. For this reason they have been detached from the normal operating of the ward, and are referring higher up in the hierarchy, directly to the ward management. The data suggests that in certain situations, this position does put the development nurses in somewhat of a limbo when it comes to putting ideas forward, or sharing them, as they lack someone to spar with when it comes to ideas. This exemplified in the following quote:

"It's hard to be able to react, it's sometimes annoying […] I'm not able to actually act on things like I am suppose to, the only way I can get anything through to them is by asking questions" (Developing nurse)

From the data it appears that part of the problem the development-nurses face is that although the intention is there for development, the daily work takes priority, and development projects, seminars and lectures will have to wait until there is time for it.

In relation to ideas, this shows two things. First, it highlights that even if the will to develop and to be innovative is there, it is often deprioritized compared to the daily running of the ward and units. Secondly, the developing-nurses, who could potentially be guiding the process of innovation and development among the nurses, are often left in a limbo where they lack the ability to get their points through as often as they would like to.

Midwives

The working procedure of the interviewed midwives differ somewhat. Mainly the midwife works alone, or with an assistant, when in the delivery room. The rest of the organizational setup differs. The midwives have their main function at the maternity ward, being in charge of the delivery. In Denmark they also have shifts at the patient hotel, guiding families with newborns. The midwives interviewed in Denmark thus relates to the maternity ward and the patient hotel. In Aalborg, the midwives do not work together with nurses, as social and health care assistants have the role of assisting the midwives.

"No, no it's social and health care assistants who assist at the delivery" (Informant 7)

The midwives interviewed in Oslo work in different environments, where one works in an ABC unit (Alternative Birth Care), which basically means that the women there give birth with no artificial help and no technological gadgets. Here, the assistants had been dismissed some years ago, and replaced by midwives.

"I remember a few years ago, we had a large reorganization here, and they dismissed a lot of the assistant nurses, and employed midwives instead. We thought it was horrible for the assistants and for ourselves, but afterwards we realized that it was great because now we can be two midwives present at a delivery, instead of a midwife and an assistant nurse, and we are able to help each other if a situation arises where it's needed." (Informant 27)

The other midwife who was interviewed has administrative position at the ordinary maternity ward, where all the modern technology is available. At Sahlgrenska in Gothenburg the interviewed midwives all had administrative or semi-administrative positions, either at the maternity ward or the gynecological emergency reception.

As the midwives interviewed are part of different settings with different colleagues, this is bound to influence their work situation and thus with whom they discuss ideas. Being part the gynecological emergency reception there are colleagues with different professional backgrounds working together, whereas the midwives who work at the maternity ward in the delivery rooms are more isolated, both literally and professionally.

The differences mean that there are different strategies for how to bring an idea forward, even if there are similarities. Typically, a midwife will either discuss an idea with colleagues, if there are any, or with her immediate superior.

"If I had an idea, where I thought, this is something I need to bring forward, then I'd start off by talking to my colleagues in the unit, and ask them, if I say so and so, what do you say to that? Because I'd certainly have to test it first, among equals" (Informant 25)

The interviewed midwives mainly related to ideas concerning their own group, even if there were differences between the hospitals. The data indicate that midwives might discuss their ideas among themselves as stated above, but in all instances it was noted that they would take a new idea to their superior.

The option of bypassing the immediate superior is mentioned, but only as a potential. However, in this the midwives differ from the nurses, who would without exception take their idea to their charge nurse.

As it will be discussed later, midwives see themselves as having a different perspective from the nurses and the doctors, and they rate themselves, and are rated by others, as rather individualistic, especially compared to the nurses. As such it's less of a surprise that the ideas brought forward by the midwives are mainly related to their profession only, not least because being in charge of deliveries is a very specific function that bears little resemblance to the procedures aimed at patients who are actually 'ill'.

Thus, summing up, the midwives are less structured in their choice of strategies. Overall they will bring their idea to a superior, but it can potentially be someone else than their immediate superior. Often ideas will be discussed with colleagues before being presented to the superior.

Doctors

When it comes to the group that is the doctors, the data shows that, as with the midwives, it depends on the scale of the idea, what procedure is taken. In this, the balance between the official written procedures and the individual freedom of the doctor to solve a situation in which manner is deemed best for the patient, plays a part in what will normally happen.

The data reveal several strategies for promoting ideas by doctors. Much the same as for the nurses and the midwives, these strategies are as follows. An idea can be brought up at a doctors' morning meeting, it can be taken to a superior or pushed by the idea-owner.

Ideas are potentially shared at the daily morning meeting, as the following quotes relate to:

"Just this morning we talked about a surgical technique ... and because I used to be [...] and because of that I had some suggestion as to what could be done, and it sounded to me like it was something that would be considered... that is something innovative from this morning... and now I will have to keep pushing for it to be implemented" (Infomant 21)

"I was presented to [...] and I thought, I have to tell about this, at the morning meeting... where it's cut short by a 'we're out of time'. That is really something that can make you... it all comes crumbling down, and you think I've spend so much energy on this, and I know that this presentation, I won't ever get a chance to finish it." (Informant 16)

These quotes show that the strategy of taking suggestion for changes and ideas forward at the morning meeting is possible, but at the same time it is a bit of a gamble, as it can be rejected or hushed and forgotten about as in the second quote.

Another strategy is taking the idea to your superior:

"...and beside that, I go and see [immediate superior] about different things, there are different channels, depending on what it is you've come up with" (Informant 11)

"The doctors have a tendency to stick to themselves... they go to their own superior, and then they would talk to their colleagues and try to push it though" (Informant 30)

As this last quote suggests, the last strategy is pushing the idea onwards yourself, by gaining the support of others.

"I... if you push the ideas through yourself, I'd say... it's very hard to have good ideas if other people need to pick them up and see to that they are implemented. There are those who say that influence isn't something you have, it's something you take yourself... and I think it's like that in most places. If you take the initiative and get an idea implemented yourself, then there is room for it, because... of course if somebody comes up with something stupid then there would be somebody who would say stop at some point, and say this won't work, but ...I'd certainly think that if you come up with something, an idea, and you see it implemented yourself, then it's more likely to be functioning, even if you were to leave the ward." (Informant 21)

From the quotes above it is clear that strategies are mixed, more individualistic and less clear cut, compared to the nurses. The doctors have a variety of strategies open to them, to promote their ideas, and they can push the idea down more than one path at the time, such as discussing it with their colleagues, their superior and as the following quote show, they have.

"Well... if I have something on my mind, and it's about [...]... something where I'd think that it might be a good idea if we did this and that because new research suggests this and that, then we discuss it internally in the [...] group, and we have meetings, things like that and in that way, you could say, we do it in a small group of people, and then if we decide that it should be a new regulation, that we

should follow from now on, then the rest of the ward is informed about what and how... if it is about education then I'll talk to the senior consultants in charge of education, and of course I'll talk to the students too, and... and beside that, I go and see [immediate superior] about different things, there are different channels, depending on what it is you've come up with" (Informant 11)

Not only do the doctors see more options, but the data shows that seniority and position in the hierarchy influences how ideas are taken forward too. If a junior doctor has an idea she'd want to put forward, she might push it herself if she's confident enough, and certain she's got a case she can prove, as described in the quote above by informant 21.

She might decide to go to a senior doctor, or a consultant, whom she thinks will support her case, or who is someone with a standing in the group, someone who the others listen to.

"I don't know where you should go. I think you need one or some of the consultants to support it, one of those with clout ... yes... you need some ... allies... who... when you're sitting at the morning meeting... that someone asks 'weren't we supposed to'... 'oh, yes, that's right'... " (Informant 16)

The point the quote above is making is that an alliance is sometimes needed not only to get an idea accepted, but equally importantly to make sure it's not forgotten about or hushed, depending on the viewpoint. This, in turn, shows that there is an internal hierarchy when it comes to who has the authority to implement and not least hush inside a group of doctors. There are examples of ideas that are brought forward that are just hushed, as the staff members with the power to force though, or at least back the idea, fail to support it but don't explain why.

"But I have tried, since I was employed here [...] years ago, to implement [...] But... I won't get it implemented [...] It is both the nurses and the doctors who need to be in on this, and... I don't know! I must admit that now I've not spoken about it for some time. I don't bother any more. I found every needed and all agree, also the decision makers, that it should be implemented, I don't have the authority to do something like that. 'No, it's not expensive, we see that, and not it's not...'. It's just..." (Informant 34)

This is said to be rather damming for the motivation to bring on new ideas, because of the relation to the internal standing in the group. Both among the nursing staff and the doctors, the data backs that there is some sort of non-explicit standing in the group one belongs to, that determines how much weight your words have in the group. This also goes for ideas brought forward, as the following quotes testifies to.

"Because... you're not scared of bringing it up, because you know that it is evaluated by some sensible people who listen to what you say, and that is very important, that you're taken serious, and ... that is showing each other respect... [...] and if you ask me, then I think it works very well [...] Well, I don't know [if everybody is respected in the same way] ... now, I have been working here for a long time, and I... I know the doctors and... we do ... we have been working together a lot... and that means that it's 'if [informant 2] said so, then that is how it is!', it's not something I make up, they know it's real, and it's like that... and it's not all 'how do you know' and 'is there a reason for this'... because I... am the sort of person who writes things down and think them over to see if we can do things differently, if this and that looks good, even if you shouldn't make changes just for the sake of changing things..." (Informant 2)

The data is clear that it is important to be seen as professionally capable, serious and in line with the values of the professional group you belong to as discussed in a following chapter. Thus, putting forward ideas that are not well thought through or are too far off the traditional ways of doing things might damage a professional reputation and by that, standing in the group.

"There has been little will to develop yourself professionally, as having to expose yourself as.... not completely professionally capable... you can't get anyone to do that, just like that. People here fear this. And... I know that usually you don't develop a lot professionally from the moment you finished your education" (Informant 20)

"I think I was appointed in this position because I am a person, who has ideas and visions and put them into practice. It isn't just talk, but I take concrete ideas and do something with them. But that is only possible because of a trust that I have built up by being at this ward for [...] years, among superiors and subordinates. Because of that I personally think it is relatively easy for me to bring forward new ideas" (Informant 40)

This would explain why some ideas are tested among a smaller group of well known colleagues, before being put forward. The potential loss in professional standing seem to act like a restrictive evaluation tool, in the sense that only ideas that are likely to be accepted and are not too much in contrast with current procedures and in coherence with the accepted view on 'how things are' that are promoted. This relates to the theories of Everett Rogers on diffusion of innovation, where Rogers explains how first of all an innovation will diffuse more easily if it is compatible with the organization it is being implemented in. If an idea is pushed that is not compatible and seem farfetched or unprofessional, the risk is that the owner of the idea is no longer seen as less of an opinion leader, and more of a change agent, which results in a loss of credibility (Rogers, (2003))

Personality

Clearly, many informants believe that when it comes to getting ideas and being creative in all manners, personality has a large impact. There are two extremes in the lines of thought that can be identified in the data, one being that if you bring up ideas and push them forward, then that is down to your personality, and the other being that opportunity and environment is what makes staff members creative.

"It's more individually based, than on types of doctors... […] ... Yes I think so, age and sex doesn't play a part... specialty doesn't play that much of a part either... it's the individual..." (Informant 24)

"Let me put it like this, I think that if you have good ideas, then in an advanced age then I think you would have been a person who have had ideas from the beginning, it's more about type of person […] Either you're an inventor, or you aren't. Some maybe have a late debut, but somewhere there must have been ... somebody who had this thing, who could access new knowledge... and they had it in them all the time, but then later enter an environment where it can blossom, I don't know, but I think it depends on the type of person... or personality" (Informant 21)

"...I'm sure you can get permission [to bring forward an idea], but it isn't something, it's somehow, it is not negative... I am sure you can get permission, but there is just very little room for it, it's a very busy... everyday schedule ... if you come up with something new then you have to first have the time to develop it, and sit down and work with it, and things like that. There isn't a lot of... I think!" (Informant 19)

"It's not the most creative ward, when it comes to […] but it's become better... it's been ... focused on ... that we can do things better, simpler... we can... more focus on the profession... has contributed to that we have changed things." (Informant 34)

As these examples show, personality is seen to have an influence on if someone gets ideas or not, and similarly, other informants do not discuss personality but focus on how the work environment either inhibit or encourage getting and promoting good ideas. It would also seem that the division here relates to two different things that were brought up in the same context. It relates to getting ideas, and to bringing them forward. Where the first is concerned, the definition of 'idea' in the context of this study is very broad. I would argue that in this definition, ideas that center on how things can be done differently, be they large or small, are being had by more or less everybody. However, this discussion is beyond the scope of this study.

The experiences brought forward by the informants suggest that there is truth in both views, and the division can be bridged by theory. According to the theory on social construction by Berger and Luckmann, and the theory on habitus by Bourdieu (See chapter on 'Methodology and Theory'), there are clear links between socialization processes, past experience and personality, in which case the either-or division put forward above can be abandoned.

Both these theories have it that there is a constant interaction between surroundings and self, which affects how things are viewed, not least when it comes to seeing opportunities (Bourdieu) and creating new habits and norms (Berger and Luckmann). In the case of creativity and ideas this would mean that a person who has been socialized into pushing forward ideas and believing in them will to some extent keep doing so if working as a nurse, midwife, doctor or something completely different.

On the other hand, environment and experiences do play a part. Therefore the socialization that takes places when one is studying to become a nurse, midwife or doctor plays a role, as well as the actual experience of working as such in the particular setting that is this ward, or this section. To exemplify, a doctor who has been socialized to bring forward ideas will do so to a lesser extend if socialization at university or at the ward at which he works teaches him that this is, for whatever reason, a bad idea.

In connection to the discussion on standing amongst colleagues, these theories can explain why internal standing among colleagues has an impact on how ideas are valued, and why that in order not to lose one's standing, one has to refrain from putting forward ideas that differ too much from the values and norms present.

The point would be that, according to the theories of Pierre Bourdieu, in what Bourdieu refers to as the social space, which can be represented as a grid, there are different forms of capital, and the amount of accumulated capital, of all sorts, will result in a certain standing or position in social space. As will be discussed later in the chapter dedicated to the relations between the professional groups, the staff members of higher official rank have accumulated capital, and thus have more of what is referred to as symbolic capital. Symbolic capital is the amount of capital that is relevant in a certain setting, such as in a work environment. Thus, the staff-members who have more symbolic capital are able to define what is at stake, what is seen as right or wrong in a group. This relates to the concept of field, which will be explain in brief in the chapter on group differences and their influence on the flow of ideas.

In relation to the flow of ideas and pushing them though the potential gates, an interesting point emerged.

"My impression is that if you have an idea, and want to implement it yourself, then you're welcome to do so, and it's accepted, but if you have an idea, and then tell the ward management 'this could be a great idea' and then... move on... ." (Informant 21)

"You can take your idea forward, to the boss, and then maybe she will set up a group who can work with the idea, or she says 'this is so small that you can do it yourself'" (Informant 18)

"Yes, those who have thought the idea over a bit more thorough, and who are more thorough when they... those who take responsibility for their idea" (Informant 38)

"It is rare that ideas that are really well worked through are brought forward... [...] well, sometimes you do that [as them to present a packaged solution instead of a problem], you can try doing that, when a staff member have come to me and asked could we [...] I would answer that yes, that would be great, but if you can contact those involved and create a proposal for a change, but it's very rarely effective" (Informant 24)

According to these quotes from basic nurses, doctors and middle managers alike, it is often important for the idea owner to push the idea himself. As the examples above show, this can mean different things. In many cases an ideas will be taken to the immediate superior, as stated above. However, the immediate superior is often very busy, as will be developed on below, and thus the best strategy, according to the data, is to present her with a well thought through idea, a complete "package". This strategy will allow her to make a decision on the basis of already gathered information, and not having to find that information herself.
Secondly, the data show that if the owner of the idea goes to her immediate superior with the idea, and expects her to "take it from there", then it is more likely to not pass through the "gate" represented by the immediate superior, which will be discussed in the part on 'Gatekeepers'. If, however, the idea owner presents the well thought through idea with the aim to keep working on implementing it himself, then this is more likely to be approved.

Thus, it can be stated that the data reveal that the more passionate and the more active the idea owner, and the more work the idea owner is willing to put into promoting the idea, the more likely it is to be approved by the immediate superior. It's important to keep pushing the idea and to keep it on the agenda, to make implementation possible. It should be noted that it's generally assumed that the hours put in the idea are extra hours in accordance to normal work hours.

It can be concluded that when it comes to strategies for promoting an idea, the informants resort to the same basic strategies, but compared to the nurses the midwives and especially the doctors have more options and more flexibility in the way they promote their ideas. Ideas are more likely to be accepted and implemented if they are well thought through before being presented, and if the idea-owner is willing to push the idea herself. Lastly, internal standing plays a part in which ideas are accepted or rejected or simply hushed. In order to not lose your standing amongst colleagues, you refrain from promoting ideas that are too farfetched or stray too much from the consensus at the ward.

Complex ideas

The data show that the ideas that originate from the employees can be sorted into different levels: Small ideas that only affect the person, who has the idea, or an independent team of a few staff members. Relatively small ideas that affect only one professional group or one unit, and larger ideas that span more than one unit or more than one professional group. These three main types of ideas represent different possibilities and different flows, as the data will show.

Small ideas

Where the smallest ideas are concerned, those that only concern the idea owner, or a very limited number of colleagues, they are rather easy to implement as the quotes below show.

"That depends on how big or small it is. If it's... something small... something... not so important where you think that this could ease the amount of papers in one corner of the office, and we'd like it moved to the other corner of the office... then we discuss it among those who use the office, and decide that it's better if it sits there, and we can just make that decision" (Informant 22)

"Some ideas [are hard to get through], and others are not so hard. It depends on how time consuming and expensive it is. On [...] it was a much smaller unit, and everybody thought innovative, it was very easy there" (Informant 34)

What is needed to implement ideas of this sort, according to the data presented here and in the section on strategies for promoting ideas, is first of all to make sure that it is in cohesion with the accepted procedures and practices, and secondly, that there is a consensus among the small group of colleagues that this is something they will try out.

The interviews show that small ideas like this are promoted and implemented all the time at all three wards. There are no examples of radical changes of this type, but small and steady incremental improvements to procedures are done in this way (For definitions of incremental vs. radical

innovation see Bason (2007), p. 52 and Koch & Hauknes (2005), p. 8, among others). In principle, it can be everything from changes to routines, services and minor adjustments to products already present. In the data there were no concrete examples of this, but overall agreement that this happens all the time.

Larger ideas

Moving on to the somewhat larger ideas that only concern a single team, unit or professional group, bottom-up ideas for changes are less common according to the informants, but the quotes below show that some of the informants could come up with examples of this level of ideas.

"We had this [...] last Monday, and I went into the 'acute room'... I do not deal with patients anymore, I only deal with staff... and we had a look at the suctions that we have in there. I was going to put them on, and I didn't know what to do, and I understood that the new nurses who come here don't know what to do either. It was a little tricky, because you had to open up three taps before you could start the suctions, and we decided that from now on we do it like this, we open all three taps so you just have to open the last little valve, so it's just one action and not one two three stage action" (Informant 26)

"Just this morning we talked about a surgical technique ... and because I used to be [...] and because of that I had some suggestion as to what could be done, and it sounded to me like it was something that would be considered... that is something innovative from this morning... and now I will have to keep pushing for it to be implemented" (Informant 21)

"...From... for instance... when you need to have spinal anesthesia, it is practical that you're not wearing a normal shirt but one with buttons under the sleeves because there are so many tubes that can't be fitted with a normal shirt. And that was something we very often forgot... to do... before... because of all the other things we needed to remember. Then we talked it over and decided that we would but it on the 'memo', so that there is always a shirt like that, with buttons under the arms, on the table we bring in" (Informant 25)

From the quotes it can be seen that these ideas have something in common, they all mainly concern one fixed group of people with a clear decision making hierarchy. This can be a team that relates to a fixed superior, it can be a unit where the nursing decisions are taken by the charge nurse, it can be all the nurses employed at the ward, who have a fixed hierarchy with a management nurse at the top. It can be the midwives of the maternity ward, and it can be the doctors specialized in obstetrics, or sub specialized in gynecological oncology. The point of it is that there is a clear decision making hierarchy with the power to evaluate and implement, and potentially resources to back the idea if it is seen as a potential investment.

When it comes to the large ideas the ones that span more than one unit or professional group, it becomes both complicated and hard to find examples of ideas that originate from non-management employees that have been implemented.

As the quotes below show, very few of the informants could come up with examples of ideas by colleagues that were implemented on this scale.

"But I think that perhaps it is most efficient when we meet, all my doctors at my ward, then... there are many who have suggestions as to how you can make changes [...] If you need to changes something small to a doctors' group, then it is quite easy. But as soon as it affects the other professional groups, then it's harder and you will have to have some communication. At our ward we are quite good at communicating, and we meet... we try to meet at lunch once every month, there we raise problems that affects the whole ward, and we have small processes which we have worked with..." (Informant 24)

"I think there's a difference between what you think you can get through... when you have a smaller unit compared to a larger unit. If you as an individual at a smaller unit have a good idea, then you can say this is a good idea, it works well and perhaps there is a lower threshold for pushing to get it implemented, for instance how many patients who need treatment and where the treatment needs to be changed, how much more time it will cost, those parameters are not that big, so the activation energy for pushing the ideas is not so high, but the impact isn't so great and so the change won't be that big either. But to have a small idea in a small unit, then you think at first, if it's a small idea that won't change much, then you think... perhaps that it is worth less, because at a big ward there are so many other things you need to be taken into account, that you don't... that it isn't all that important. Small things can seem very important at a smaller ward, but they tend to drown a bit at a bigger ward, where you know that the process and resources needed to see through small changes are really big. [...] if it's a big change, then it suddenly gets very hard! [...] Many... some have wished to implement this [...] system here, but the argument has been that we are so many midwives, so many doctors who have to be taught this new system, and so much we need to invest in that even if it [...] that there are so much work that it, it dies. The idea dies because too big things and too big changes are needed, it would be logistically very difficult, so this idea... is... killed... and then you have... if you talk small ideas, then it will demand a lot of resources, it will demand a lot of resources if we talk about changing things for a thousand patients. And again you'd say that this small idea is it so important? Would the result match the recourses that are put in, couldn't we use those for other things? So it's never easy. Right, so both small ideas and larger ideas are hard to... implement. I think it's to do with ownership. If you are a health care worker at a large ward, then you have... I think you feel less ownership of... the working conditions. You are more a small piece in a big game instead of an individual with personality, an individual

who has a decisive influence" (Informant 39)

The data show how the informants state that implementing large ideas is very complicated. The quote by informant 39 mainly relates to the organizational hierarchy. The costs of the potential idea are high, and the decision making process and possible evaluation of costs and benefits difficult, as the implementation would span more medical specialties with different budgets and different strategies for what sort of treatment is prioritized. This should be contrasted to the smaller scale ideas mentioned above, where there was a clear hierarchy of decision makers within one medical specialty.
The data gives evidence to that the ideas that span more than one unit will often run into the problem of the different decision makers having to agree on implementation. This can be difficult, as different units have different subspecialties and have different procedures.

As the quotes show, the units are very autonomous and tend to function as a point of reference for the nurses and assistants employed there, as shown previously. That the units are both very specialized and that the personnel affiliate with them would explain both why few large scale ideas are shared, and why the idea of sharing might not occur. This last issue will be dealt with, when discussing sharing ideas between different medical specialties below.

Large ideas and hierarchies

When it comes to implementing large ideas that concern more of the professions at the ward, the different hierarchies can become a barrier for potentially agreeing on implementation. The hierarchies between the groups and the internal hierarchies in them have already been discussed, and both types of hierarchies can be a barrier to employee-driven innovation.

By applying the theories of groups and hierarchies by Pierre Bourdieu and Mary Douglas in combination, it is possible to explain the influences of hierarchies on the bottom-up flow of ideas that can be found in the data. The argument will be further developed in the part on 'Hierachies between the professional groups'.

The following quotes show how what the interviewed nurses think when asked about if the different professional groups could bring ideas forward and get them evaluated with equal ease.

"Yes, I'd say so. Doctors are like... if they want it this way, then that is how it will be. While us nurses often don't have all that much of a say" (Informant 14)

"There is no doubt that... well... the work the doctors do is highly rated, and you can... bring forward a research project as a doctor that demands a lot of extra work, and a lot of extra work without them actually being there, for instance that we have to do things differently... both registration or extra procedures or... extra blood samples or that they are part of it themselves and have to do extra things that make work drag out for everybody involved, and that... is how it is. But if nurses have focus on something, then... it can't interfere with the running of the ward" (Informant 34)

These next quotes are by midwives asked the same question:

"Well...it...it's hard to say if the examples I can remember, if... those priorities were about getting your views through or if they were about serious and sober considerations. But on a general level, I can't imagine that if our managing consultant say that... this sort of machine, we need to have that... that it's voted against in favor of something more... something that can enhance the experience more" (Informant 7)

The following quotes are by the doctors on this same subject:

"I should think so. I think that we as doctors are able to apply more pressure than other professional categories. I think so. I think that we are able to leave a bigger footprint than the other professional categories. And it's not fair, but that is how it is [...] we have a leading position in the teams and when working with the patients, it is the doctors who have the right to make the final decisions. I think it is based on that. There is respect for our competences, education and for that what we say and think usually counts for more. And it's far from always right, but that is how it works" (Informant 8)

"Yes, it is, if it's about big changes. The small things at the units I think it can be easy for the nurses, but they... don't reach the doctors, and it's a little bit like this that as long as they do their little changes and they don't have a really good channel to us, then it can be hard. We keep working as we have always done, anyway" (Informant 24)

"I can say that at our unit there is no hierarchy, we have respect for each other, and it's very obvious at a surgical ward like ours that the doctor operates and it's very important that the surgery is as good as possible, the nurses take care of [...] and the assistants take care of [...] so I think that there... but I have understood that there can be hierarchy inside the groups. The assistants, for example" (Informant 13)

The quotes show first of all that in the relation between nurses and doctors, seen on group level, informants from both groups largely agree that in most cases, a doctor will be able to get an idea through to evaluation easier than a nurse would. In the responses it is visible that the reasons for this are mainly that doctors simply are seen as above the

nurses in the hierarchy, that doctors are better connected to the decision makers, and that the doctors are trained in putting forward a scientific argument. Moreover, there are doctors that points at their superior overview of the ward, which was discussed earlier, as an important parameter in being able to think an idea through to make sure it is applicable to the entire ward before putting it forward.

Before introducing the importance of concept of "evidence based" for ideas being accepted to the discussion it would be useful to return to the previously discussed gates and barriers for the bottom-up flow of ideas, as this will help understanding why the doctors are seen as being in a better position for successfully putting forward ideas.

When it comes to promoting your own idea, and presenting it as a package, the consensus is that the doctors are better at promoting their ideas and at presenting them in the right terms. Moreover, as they are still seen as ranking higher than the nurses, they have a shorter distance to the critical decision makers on a ward level. As discussed, the base nurses have one immediate superior, who is a gatekeeper when it comes to promoting the bottom-up flow of ideas. The data support the view that the doctors are less orientated towards an immediate superior, and to a higher extent are free to take the idea to whom they think is the right person to promote the idea.

In the data there are examples like the following, where the power relations between the nurses and the doctors in general are touched on.

"I don't really know what the others come up with, the other professional groups, so I don't think I can answer that. I could say something that would be how I thought it was, but nothing that I would have any reason to know that it was like that. Because I don't know what the nurses, for instance, what they talk about, what kind of ideas they have and what they start up, I would imagine that you're in different professional worlds, and that is the one you work inside, but... what the others are up to, I really don't know" (Informant 21)

This quote, and the ones above would suggest that basically, the doctors operate on another level, and do not have to concern themselves with 'nurse matters', in general terms, whereas the nurses have to practice their profession within the framework given by the doctors. This may be somewhat controversial, but there is a large degree of consent that a hospital can't be run without a hierarchy. With this in mind it is less surprising that the data show a large degree of consensus on that doctors have a better chance of getting their ideas through to evaluation and potential implementation.

Once again it's important to note that this relation concerns the groups as wholes, and in general terms. The data support the notion that the hierarchies are very much in place, but at the same time that this doesn't have to influence they working relations between nurses, midwives and doctors, nor does it mean that they do not speak as equals or generally respect each other's professions.

Summing up, the complexity of an idea is important for its potential implementation. It's not only that ideas that span more units, wards and/or professional groups are hard to implement because of the simple calculation of how many resources need to be allocated to it versus the potential output. The data show that communication and decision-making is also an issue, as well as ownership. Ownership, because at a bigger ward it's easy to feel as just a small part of a big machine, and thus the incitement to push forward ideas is lacking, as well as the overview that would allow an individual to evaluate the possible consequences of an idea. Communication and decision-making seem to be affecting the implementation of ideas as well, as basically the organizations seem more ready for vertical decision making than horizontal, meaning that decision-making between managers at compatible levels in the organization, but at different units, wards or between the professional groups, is seen by the informants as a potential stumbling block.

Part II
CULTURAL INFLUENCES ON INNOVATION

This second part of the research paper deals with the cultural aspects of the data and how they influence innovation. Some of these aspects will be related to the points made in the first part, and as was the case there, each chapter will end with a conclusion on the main points, which in turn will be used in the overall conclusion, where a list of recommendations based on the conclusions can be found.

The theories that are used in the analyses are outlined in brief in the chapter on Methodology and Theory. As it is explained there, a main reason to study the cultural aspects of employee-driven innovation at the hospitals wards, and not just the practices, was that other literature suggests that there are cultural differences internal between the different groups who together constitute the staff at a hospital. Another reason was simply that the research took place in three different countries, which made it sensible to look for cultural differences. To study these possible differences, inspiration was found in the theories of Hofstede (Hofstede & Hofstede (2005), who have a set of different parameters where cultural differences can be measured. These parameters have been integrated into the interview guide.

However, it soon became clear that the differences between the countries were minimal compared to the differences between the professional groups, in all cultural relations. Therefore the differences between the countries were not prioritized, as the differences between the professional groups were seen to have more of an influence on employee-driven innovation.

Because the three hospitals were different, and each consists of more hospitals which have their own cultures according to the informants, it is hard to pin point what is national differences and what is down to the culture and history of the hospitals. If a difference had to be pointed out, it would seem that it is more accepted to stray from the official hierarchy when it comes to promoting ideas upwards in the system at the ward in Oslo and Aalborg compared to the one in Gothenburg. But as an informant concluded that in her experience there is less hierarchy in Sweden, nothing can be concluded with certainty. An interesting point is the differences between the different hospitals, which together constitute Sahlgrenska Universitetssjukhuset, Oslo Universitetssykehus and Aalborg Sygehus, but it was left out because it didn't add to the overall point. It might well be an offset for further reports or articles based on this set of data.

As the main objective of this study is to establish drivers and barriers to employee-driven innovation at the three wards, the focus has shifted from potential cultural differences between the countries and to the differences between the professional groups. The theories which are applied in the analysis have been chosen because they can explain some of the overall dynamics of these cultural differences.

Hierarchies between the professional groups

The following quotes show that there is still an official hierarchy between the groups.

"It's the doctor who is in charge, mostly. I can complain but... but it isn't always heard" (Informant 3)

"I think the doctor, he... is interested in surgery, his interest is in surgery, that's his thing, and then of course he comes and checks how well we take care of the patients [...] Yes, I think there is, I think that the doctors... but they are the ones who are responsible of course, for the patient, during surgery and after it, that the different wounds are not infected with anything, yes, I think... really... it's a little... there are a lot of discipline still, not that we have to stand... but... it's still like that, that... when the doctor comes, then we must be here and be ready!" (Informant 28)

"And I really experience that nursing is exposed, they don't get anything, but we happily buy new appliances for monitoring, for surgery and intensive care and whatever else, but when they try to get something for nursing [...] nursing isn't prioritized at all, compared to... well, compared to... " (Informant 20)

"I don't really know what the others come up with, the other professional groups, so I don't think I can answer that. I could say something which would be how I thought it was, but nothing that I would have any reason to know that it was like that. Because I don't know what the nurses, for instance, what they talk about, what kind of ideas they have and what they start up, I would imagine that you're in different professional worlds, and that is the one you work within, but... what the others are up to, I really don't know" (Informant 21)

"In some ways they have set themselves outside the organization, they have seen that they are more important, you can't do anything without the doctors. They do their own schedule, and everybody else has to adapt to that. And that is hard because it arrives late, and they... are different, and they think so themselves... and it's part of the socializing process, that you.... Have to adapt to the group, really, everywhere" (Informant 10)

"I should think so. I think that we as doctors are able to apply more pressure than other professional categories. I think so. I think that we are able to leave a bigger footprint than the other professional categories. And it's not fair, but that is how it is [...] we have a leading position in the teams and when working with the patients, it is the doctors who have the right to make the final decisions. I think it is based on that. There is respect surrounding our competences, education and for that reason, what we say and think usually counts for more. And it's far from always right, but that is how it works" (Informant 8)

"Doctors are a bit more... they... if they want it this way then that is usually how it will be, whereas nurses don't really have a say" (Informant 14)

The data clearly show that doctors are considered to be higher in the internal hierarchy, compared to especially nurses. As for the midwives, they are considered to be between the other two groups, but are not as often referred to in this relation. Historically, doctors were in charge of running the hospitals and superior to the nurses, but over the last fifty years this has changed, not least with the introduction of New Public Management to the health care system (Kragh Jespersen (2005)). However, even as the hierarchy has changed over time, the data shows that it's still considered the natural order of things, even if there are changes, as these quotes clearly show.

The data here suggest that the hierarchies are not always compatible, and that this at time complicated the communication between the professional groups.

"It depends on who your opposite is, in the other group, when you plan, and how well he controls the things. What are his conditions and what are the frames that he must stay within... at times, this is a problem, yes. [...] yes, that and that they don't know what is happening in the same way as we do in the group of nurses, and that they need to seek the acceptance in the group of doctors, of the things, because they are not always bestowed with the competence to make the decisions themselves. We have a unit management, right, but it's not always the unit manager I have discussions with has the competence to say yes or no [...] he can be overruled later on by the others" (Informant 3)

As this shows, the charge nurses feel they lack doctor who fills a similar position, with whom they can plan and discuss procedures and strategy. In some instances there are doctors, who function as a unit coordinator of sorts, but they do not have the mandate to negotiate, and ideas and potential decisions have to be discussed among the doctors, in which case the coordinator can't be sure to get a majority behind the suggestions.

The data shows how, very often, the professional groups, as groups, communicate by taking an issue right to the top and let the management of the nurses and the doctors decide on the issue, after which the decision is brought back to those concerned.

It should be noted that this is the case on bigger issues, whereas smaller issues are normally solved between the staff members concerned. Usually, personal relations breach most professional and organizational boundaries, as many of the quotes in this study also show.

However, as in the example with the charge nurse above, the informants often point to how one of the main difficulties in promoting ideas that span more than one professional group is the lack of points of interaction in the lower parts of the hierarchy.

This means that ideas are usually taken upwards and not sideward in the hierarchies. The higher up you get in the hierarchy, the more interaction there is, and this is where ideas that overlap more groups are possible shared at weekly meetings.

Midwives

As for the midwives, they hold a very specific position. The midwives at the maternity wards are rarely in contact with nurses, and they have their own professional line of work, in which they are in charge, as long as things go to plan. They understand themselves as craftswomen, who work with 'healthy people' as the following quotes explain:

"No, I don't think so, because the doctors... we assume people to be well, whereas the doctors assume they are sick. They think illness, and we think... the opposite because we work with people who are well, they work with people who are ill, that is the difference. We see the healthy and the normal, at least here, we think that... that... a person who is well and not ill actually give birth normally, pregnancy isn't an illness, before it becomes an illness... while I think that the doctors demand to find something ill in something that really is well, it is their culture. That is how I think, how it is for me. [...] but we are craftswomen! This is a craft, it stems from the hands, it stems from knowledge and it stems from the spine, to be a midwife" (Informant 27)

"But I think it... I think it's a little different in that way, at least that is what I think in relation to nurses, especially, who are the ones we can compare ourselves to when it comes to education and things like that... then I think that... we work mainly with healthy people. Really, the childbearing woman is something of the healthiest in this society, right? On average... and I think that... is a difference. And that is also what we hear if there are sometimes a bit of discussion, that you always think everything is so healthy and normal, and we are the opposite, you are always so focused on finding the sick and the pathological, the deviant, right? But we are not raised in a world of illness, are we? Of course there are pregnancies that develop into illness, and births that develop into illness and we are educated to deal with that, but it doesn't meant that we think that is how everything will end, does it? Our basis is that... this is completely normal until something else has been proven. And we do not examine from head to toe for something abnormal, we believe in the normal, and... if it then shows that now it's not normal then... ok... then we examine what might be the problem but... we don't do a lot of examinations and blood samples to see if there could be a small abnormality, that is, at least in my head, how you would think of... doctors and nurses" (Informant 7)

Midwives seem to understand themselves as dealing with the mother, and the child, and the father, in the sense that the two people entering the delivery room will exit it as a family. Thus the approach is holistic; it is broad and not focused on just the process of the woman giving birth, or on the child and its health.

"Yes, yes, where it's the final result that counts, where we... and this is very generalized... because that isn't how it is, really, but... and we're also seeing a new generation of doctors who themselves... now a whole lot of our doctors are women, and they have children themselves, they have some experiences, because previously it was really mainly men who were here, and they couldn't, in the same way, understand what the experience means to you, while a lot of out female doctors are very... they can. And of course they know that that means something, right? But in very general terms, then the difference is that we think of... because it is true, a doctor would say that, why should I give thought to the father? Hello!? It's the mother who is giving birth to this child, where we are educated to think that a birth is not just about a birth and a child that comes out, it's also about creating a family, and in that the father is an important piece, so in that way, we have different... we see things in different contexts, right? And that is what makes us have a different idea of what we need" (Informant 7)

In the eyes of the nurses, the midwives as a group are seen as more individualistic compared to themselves, as discussed previously. However, the quotes below show that the midwives are also considered to be conservative and not keen on changes. This is especially the case where technology is concerned as these examples show.

"If we are presented new things, if it's something... technological, or more documenting, then I think they experience us midwives as a bit rigid, not easy to lure into doing a whole lot of new things. Purely... technical [...] Perhaps because we are craftswomen? " (Informant 25)

The midwives can be seen to set themselves apart from the other groups, as midwives work with healthy people and are not 'obsessed' with illness. They are very specialized and to a lesser extent part of the daily routines where nurses and doctors interact. They are 'craftswomen', which again relates to that it is not about academic knowledge but rather about the knowledge of the hand and experience.

Hierarchies internally in the professional groups

The informants were divided on this matter, perhaps because they had a different idea of what was meant by it. The following quotes describe some of the understandings of how the internal hierarchies function:

"There are two things here. Internally among the doctors it's rarely [a problem to communicate across the internal hierarchy] at times it can result in a bit of mudslinging between matching levels when the consultants fight a bit, or get annoyed with something, or are never seen at work, or whatever, some are less driven than others, but vertically, the result is a calming influence, and common sense, because the junior doctors do what they are able to, and if they can't do it, then they ask the next in the hierarchy, who then do what they can, and then ask the next, and everybody knows this. And you know if you're last in line and someone comes asking then you better think and come up with something. The result is a certain level of common sense and safety, that you can test things and develop but that you can't do just anything without someone looking over your shoulder. This supervision, you can say, is sensible" (Informant 12)

"No, and us doctors do not have any prestige between each other. The patients are so severely ill that you need the support of the others" (Informant 13)

"It is my impression that they have... how can I put it... they have a hierarchy within the hierarchy, in relation to ideas. No green, young doctor shall come forward with an idea he would like to test. No, no! That is my impression. I am not in that group. But seen from the outside... it can be hard to push forward something. But you can say that some succeed, because there are some research projects" (Informant 31)

"We are a fairly harmonic unit. But yes, there can easily be that, there can easily be, and I think it's primarily the larger units, that those who have been there for a long time have more of a say than the ones who have not been there for so long, and the distributing is decided by that. I don't think we have a lot of that at this unit" (Informant 6)

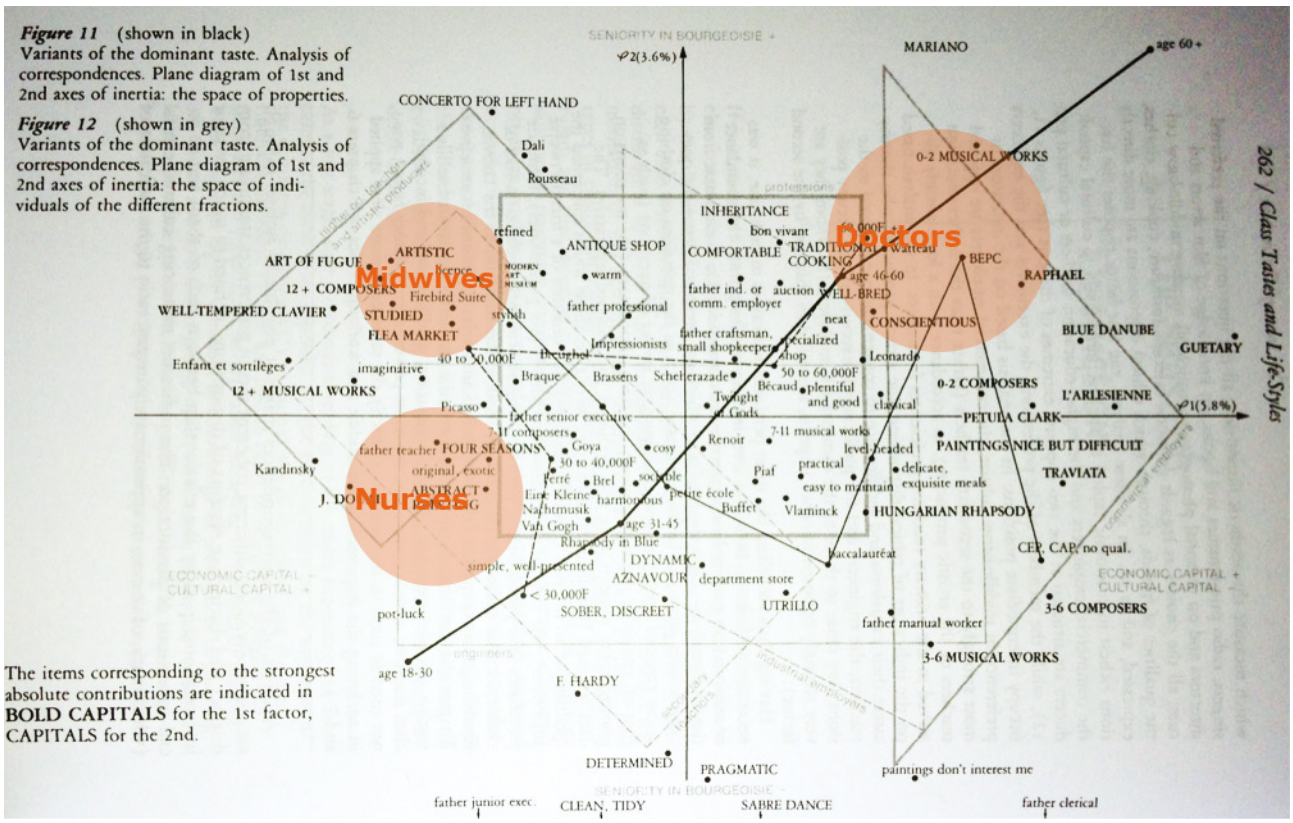
"To get an idea implemented, you have to... you have to at some point talk to a superior. But... there are those... perhaps myself included... I feel I'm free to go to the superior I feel is relevant to the thing I find it important to discuss. And that is not necessarily the superior who is above me as a midwife, but... there aren't that many who are in this position I think, some, perhaps, but not very many. And of course some of my colleagues see that I get my ideas implemented, who then come to me and ask if I can help promote things for them. If you have to go the official way through the management here, then... not for small things but perhaps for bigger things, then you have to... to... sell the idea to your immediate superior, who then has to sell your idea to the next in line, who then takes it further, to the management of the ward, and then... after that, perhaps it can crumble away a bit, sometimes, I suppose it can" (Informant 38)

The points here address both the official and the unofficial hierarchies within the professional groups, and how these relate to employee-driven innovation. There is little doubt that there are official hierarchies in the professional groups. The midwives, doctors and nurses each have their official decision-making system, which can be more or less flat depending on the unit and the persons in question. However, it would seem that there are in some places unofficial hierarchies, where some, for whatever reason, have a bigger say than others, even though they are not officially decision-makers. As the data suggest, these persons can also function as gatekeepers for innovative ideas. This adds another dimension to the discussion on both 'Gatekeepers' and 'Strategies for promoting ideas', as ideas are often discussed with colleagues before being taken forward. If, in some places, the inofficial hierarchy means that there are gatekeepers amongst the colleagues, it can be a further barrier to promoting ideas. It would seem that seniority does play a part when it comes to who can put forward what, and once again personality and drive seem to play a part.

Social space and capital

If the theories are applied to the data, it becomes clear that they can explain some of the differences between the professional groups. First of all, the three professional groups who are the focus of this study can be said to have different types and amounts of capitals which means that they have different positions in Bourdieus model of social space. Economically, the doctors earn more than the two other groups, which place the doctors to the right in the grid. With the level of cultural capital gained by the length and accessibility of the education, the midwives have more cultural capital compared to the nurses, and can be placed in the top left quadrant, while the nurses can be placed below, and it can be argued that basic nurses would traditionally be placed in the bottom left quadrant, but rather close to the horizontal axis.

Of course the different specialized, administrative and managerial positions internally in the groups will add capital, as cultures have no natural boundaries, but only experienced ones. To state that midwives have more cultural capital than nurses is based mainly on the argument that they have



a longer education. In Norway and Sweden the midwives are originally nurses, who then chose to educate themselves to become midwives on top of their previous education. In Denmark it is a completely separate education, but it's been one of the hardest educations to be accepted at for many years, which adds to the level of cultural capital the education provides.

Along with the level of capital, a persons' habitus is responsible for guiding thoughts and actions, as it structures the mind so to say. As habitus is related to socialization, mainly primary but also secondary socialization, it determines both the nature and number of the options an individual see in different circumstances. The theories are outlined in the chapter on 'Methodology and theory'.

Viewed as a field, the doctors hold the highest amount of capital, and are thus able to define what is accepted as symbolic capital in the field. This logic explains not only the hierarchies that seem to prevail but also how they influence on the bottom-up flow of ideas. The data show how the doctors are generally seen to find it easier to promote their ideas, compared to the nurses and the midwives. As they are in a position to define what is right and wrong in the field, they have a better knowledge of what ideas will be accepted as they match the current belief of what is 'right' in the field. Doctors, as many informants testify to, do not have to bother themselves with what the other groups say or do, as they usually are able to force their ideas forward. In a cultural sense, their position in the field makes this possible.

The internal hierarchies can be viewed in much the same way, as those with more symbolic capital gained through education, seniority and position, who have more of a say in the decisions. Similarly, those internally in an otherwise supposedly homogenous group, who have acquired more capital through network, seniority, skills or other means, are in a position to be at the top of the internal hierarchies, which are described by many informants.

As mentioned above, habitus does play a part in determining which options are seen as available to an individual at any given time. The more capital, the more options are available, which explains why the doctors seem to have more options for promoting their ideas compared to the nurses.

Summing up, the data show that there are clear hierarchies at the hospitals, with the doctors at the top and the midwives and nurses above, in that order. This influences the bottom-up flow of ideas, as it is difficult for the nurses to promote ideas outside their own group, as discussed in the part on 'complex ideas' and it makes it difficult to share ideas between the professional groups. This hierarchy is based on historical and cultural differences, which are not easily changed. Knowledge and awareness of the official and unofficial hierarchies, and their importance for the bottom-up flow of ideas, and their implementation, is important in order to facilitate employee-driven innovation.

Gender

One thing that is striking when listening to the interviews is the gender related to each of the professional groups. Quite obviously, looking at the groups in a historical perspective, midwives and the nursing staff were female and doctors were male. This isn't the place for a historical review, but it would seem that an ever increasing number of female doctors graduate from the universities, and at least since 1996 a larger number of women than men were accepted as medical students at the universities in Denmark (http://www.kot.dk/KOT/statistik_xls.html), which should mean that at the hospitals quite a lot of the younger doctors were women too, as are indeed confirmed by the informants. However, it would seem from the language used that the gender roles are still to some extent stuck in the old stereotypes. This is visible from the following quotes, related to the groups:

"I think that the doctor, he [...]" (Informant 28)

"Often their superiors are aware of them [creative midwives and nurses], and say that this is a candidate for a leadership program, or we can use her for this and that..." (Informant 30)

"[a creative nurse is] ...someone who knows what she is doing but can go outside the given frames" (Informant 3)

"No green, young doctor shall come forward with an idea he would like to test" (Informant 31)

"It's a bit because... because... you think that 'she is just a nurse'" (Informant 40)

These are many examples which show that nurses and assistants are seen as women, which makes sense to the extent that most nurses at the wards visited are women. Midwives are also seen as female when generalized, and once more this does make sense on all levels as the midwives interviewed, encountered and discussed at all three hospitals are indeed women. However, the doctors are similarly seen as male by many when generalizing, which is interesting as quite a lot of the doctors at the gynecological wards are women. In case of the doctors the generalized stereotype represents a paradox.

When history is considered, it should be noted once more that there are only very few male nurses employed at these three wards. Of the midwives, all were female, but of the doctors an ever increasing number were female. As this movement seem to have started years ago, as there are at least some female senior doctors at all three wards, history and habit is likely to explain a lot in this regard.

A curiosity is that a male and a female doctor are treated differently in certain situations, as the following quotes explain:

"...but I know that if you enter a unit, there are certain things that you are asked to do as a female doctor, which are taken for granted... and it's not because I have to take the bedpan out, it is not a problem for me to take the bedpan out with me, but somehow I think... there are so many things that are part of my field of competence which I would not be able to ask a nurse to do, why the... should I then take the bedpan out? And they would never ask that of a male doctor. There's this a bit old fashioned... not just in my line of work... but there are just things you don't ask a man to do, or perhaps they are better at saying 'you know what, that's not part of my job'?" (Female doctor)

"And it is also a gender related question. I, as a male doctor, I am met differently compared to if I had been a female doctor. That is also how it is. I think" (Male doctor)

This suggests that the matter is more about roles and expectations in relation to cultures than it is about actual gender differences. When looking at what characterizes the three different professions according to the informants, the nurses are more holistic in their views; they deal with feelings and with 'soft values' and they work as a group, also when it comes to making decisions. Midwives are also holistic, but are 'craftswomen' and they mainly work alone. The doctors also work alone, and they are focused on the illness at hand and they tend to like gadgets and technology.

These are obviously traditional female and male values, attached to the roles of the professions. In a social construction frame, it makes perfect sense if roles are attached to internalized experiences over time. Nurses used to be females, as are and were midwives; and doctors used to be male.

The quotes show how female doctors experience at least some trouble with being a female in a role that is traditionally masculine. As concluded previously in first part of this study, gender doesn't really play much of a part when it comes to employee-driven innovation. However, it has also been showed that profession does play some part in how

easy it is to promote and potentially implement ideas, for different reasons.

From this it can be concluded that even if gender does not play a part in innovation in this context, it seems that generalized gender roles does, as they are tied to the professions. The conclusion would be that as doctors are seen to be able to get their ideas through with more ease, and that the males are seen to be better at selling ideas in general, which then would mean that the combination of the position as doctor and that of being male is expected to find it easier to promote ideas, according to the data. It would be very interesting to have interviewed male nurses to be able to contrast their experiences and their female colleagues' expectations to them in this relation.

Individualism

When asked about group differences, the data show that it's widely accepted that there are differences between then groups in terms of individualism.

"...no, not necessarily, because as nurses we are raised in a community... I think... and all the time, we have had the opportunity to go out and ask for supervision by each other... where doctors and midwives are very much raised to take care of things alone, and they have the final decision too, and it's hard to look up to get help because... because the has not been any tradition for that, but they have become better at it... and when you're in a delivery room, as a midwife, then you can't just run off to ask about something, you have to know what it's about... the midwives who work with the nurses they are people who like to work in a community" (Informant 3)

The statement above is made by a nurse and it suggests two things in relation to individualism: Nurses work in a community, which mean that nurses are rarely alone in a work setting, and that they share decision-making, responsibility and workload.

The quote also explains that nurses consider themselves to be less individually and more socially orientated, which makes sense considering the nature of their work.

When the midwives were asked their opinion on the nurses, this quote exemplifies the typical answers:

"I think it's the type of nurse who likes to take responsibility herself... here the nurses are below the doctors, so we have our own... we are responsible for what we do ourselves. There are no doctors involved in a birth, if all goes to plan... if we think it's not safe anymore then we have to call for a doctor, who then comes and finds what is unhealthy. So I think it's a person who... likes to, who chooses responsibility, to take responsibility" (Informant 27)

Because of the nature of their work, and how the wards are organized, it differs from ward to ward how much contact there is between the nurses and the midwives. As the quotes show, more often than not, the midwives have very limited contact with nurses, and make a point of not knowing how they work and function as a group.

Lastly, the doctors interviewed were also asked about their impressions of the nurses as a group, and the following quotes are examples of how they view the differences between doctors and nurses.

"I think... I think that as... as... a doctor, you're different to a nurse... firstly, you have a longer education, and... we... our approach to new things are very different than the nurses [...] they need a lot of supervision when they learn a new procedure, whereas doctors are quick to 'see one, do one, teach one' in reality, right? Perhaps it's too soon we try to do new things, perhaps we should see them more times, but in this way were are quicker to pick up new things, new procedures, because we have always been used to that, which the nurses aren't" (Doctor)

"Yes, there is... we are more individualistic and the nurses are more a group and they work more equally and more standardized... they don't take the same kind of decisions, they have certain jobs they have to do that day, and they do them" (Doctor)

The doctors mirror the nurses own views on them being more socially minded compared to the doctors. They are seen to be more group orientated, and not having the same sort of decisions to make.

"Doctors are much more individualistic than nurses, because... doctors work alone and nurses work in groups most of the time, right? So in that sense it's two very different worlds. Doctors... well, nurses are usually good at organizing themselves, about anything! From parties to unions to complaining by ganging up, they are much better at that, and they interact much more internally during the day" (Informant 21)

"Yes, why is it like that? They are individuals more than a group. I mean, they are grouped with themselves, but not with the ward or unit. They are their own group and come to the different units as consultants. And they want to decide for themselves. It is part of the work as a doctor to be able to do that... it is the most difficult group if you want to implement changes. That is the doctors. They have been allowed to do what they thought were best... [...] It is very difficult and takes a long time, but the young doctors are very different to the old ones. They have more team spirit and know we work together... it is a lot simpler [...] there a lot of lonely doctors. During their education they get lonely. They one lowest in the hierarchy at the whole hospital is the medical student. The assistants can kick them a bit while they study so when they become doctors they never really have become part of the group" (Informant 26)

It shows that these views are often related to experiences of the nursing staff 'ganging up' on the doctors, or to decisions having been dragged on because the nurses needed to discuss the matter among themselves.

Moving on to the midwives, the following quotes give an impression of their work and their individuality.

"You look at them in the way that they are not nurses any more, they only work with assisting births and not much else […] they are between [nurses and doctors… […] midwives are used to working very individually, and don't need help from doctors very often, things like that. We control our own stuff, I think… I didn't think about it in the beginning when I talked about hierarchy but… we… perhaps we see them as a little difficult to work with, because… because they are so preoccupied with their profession, and don't see very much outside this" (Midwife)

And from the previous page:

"I think it's the type of nurse who likes to take responsibility herself… here the nurses are below the doctors, so we have our own… we are responsible for what we do ourselves. There are no doctors involved in a birth, if all goes to plan… if we think it's not safe anymore then we have to call for a doctor, who then comes and finds what is unhealthy. So I think it's a person who… likes to, who chooses responsibility, to take responsibility" (Informant 27)

The midwives generally work alone most of the time, and therefore they don't mention being part of a community in the same way as nurses. Rather, they specify that they are alone and make decisions themselves. However, the data show that they still have a strong group identity as midwives. In Norway and Sweden it's required that you are an educated nurse to become a midwife, which isn't the case in Denmark, where it's a different education all together. Therefore it's interesting how the midwives differentiate themselves from nurses.

As the quotes from the midwives in this section show, they are keen to point out that they are no longer nurses, in the sense that they have moved on and are now dealing with completely different task.

Asking the nurses how they view the midwives produced similar points to those made by the midwives themselves, such as informant 3 on the previous page. The midwives are seen as more individually minded, and the reason given is that they work alone most of the time, and that they are in charge of births themselves.

The following quotes show some of the doctors' responses to how the midwives could be characterized as a group.

"Well, the midwives are a bit like nurses, and yet they are very different from nurses… right… because they are more like… like the doctors… because they are very independent and handle things on their own which a nurse doesn't" (Doctor)

"The midwives wouldn't listen to her, because they can… or feel they can… assist in giving birth better than the doctors because they are educated in assisting births as midwives, while doctors are doctors and teach ourselves about deliveries, and so she didn't manage to implement this innovative idea, a new way of assisting deliveries, to the midwives, they said 'no', they have… they promised to say no, they promised to refuse, and as they are allowed to under the laws to decide themselves on anything that is normal deliveries, that is their complete responsibility and the doctors can't interfere. So in that situation it didn't work" (Doctor)

From these quotes it's possible to see that the doctors generally agree that the midwives are somewhat in between the nurses and doctors when it comes to being individually minded. The quotes also show that the working relation between midwives and doctors is influenced by that when the two meet in a work situation, it's normally because the midwife needed help because a birth didn't go as planned.

The quotes show how there is a general consensus that midwives are different from nurses as they don't work in groups and as they are more individualistic and make their decisions on their own. In this sense they are more like the doctors, but they only have a right to make decision when it comes to normal deliveries and as the quote above shows, this is a right that is exercised at times.

From the statements made above it is also clear how the doctors view themselves in relation to nurses and midwives. The statements show that the doctors very much agree that they work individually, and that they take pride in doing so. As is the case with midwives, doctors very much work alone, as the quotes suggest, but not in the same way. Data shows that when doctors claim to work alone, they are referring to not working together with other doctors, where the midwives typically are alone in the delivery room. As will be discussed in detail later, the doctors move from section to section, and from one group of nurses and assistants to the next, and the next, during a day, which means that they are alone in the sense that they are not with the same group of persons all day.

The nurses interviewed generally view the doctors as rather individualistic, following their own head, both in relation to what the other professional groups might want, and in relation to how other doctors would solve the same problem, as the quote from informant 3 at the beginning at this section, and the following quote show:

"The ideas the doctors bring forward are perhaps on a higher level, they involve more people, perhaps, and it's on a higher level. Our ideas are perhaps more restricted to the unit [...] doctors, perhaps, think more about what is satisfactory to them and not on the consequences, more 'it would be nice if I had it so and so' and not on the consequences for others, while the nurses... I don't know... perhaps we think a bit more about the patients?" (Informant 14)

Not only this, but the doctors are also seen to be alone, especially during their education, and is not seen by the nurses as a homogenous group, but a group with an internal hierarchy and pecking order that is often enforced, as the examples above and below show.

"It's more the doctors who talk amongst themselves, we only get a word every now and again [....] yes, yes certainly, yes, there is a hierarchy [among the doctors]" (Informant 28)

As the data provided by the midwives show, they conceive of the doctors as being individually minded, much like themselves. Overall, the midwives rate themselves rather a lot like the doctors, in the sense that they view the two groups as fairly similar when it comes to individualism.

The concepts of group relation and individuality can be explained by the theoretical framework. By applying the theories of Mary Douglas to the four quadrants of Bourdieus model of social space, as explained in the chapter on 'Methodology and theory', a so called cultural bias can be attached to each of the four quadrants, which would place the doctors as individualists, the midwives as enclavists and the nurses as hierarchists. Each cultural bias has different values, norms and so on, which also means both different outlooks and different behavior.

In the context of employee-driven innovation this confirms that the different professional groups have different group related behavior, and therefore will have different strategies for how to push ideas forward as seen in the chapter on 'Strategies for promoting ideas'.

To sum up, there are among all the professional groups an agreement that where individualism is concerned, then the nurses are the least individualistic, and the doctors the most individualistic, with the midwives being somewhere between the other two professional groups. The level of individualism is related to the bottom-up flow of ideas directly, as the cultural behavior is part of the explanation of why the different professional groups pick different strategies when they promote their ideas, as explained elsewhere.

Affiliation

The data show that because of the differences in the work they do, the different professional groups perceive themselves differently in relation to their work place. The following examples show how the nurses affiliate themselves.

"The ward [...] I know and that's about... that is what we can see. I... no, I don't know. I don't think you can feel a part of the entire hospital, that is the place I work, but it's the ward in which I actually am [...] yes, yes it is our area, area [...], in this case that you can know" (Informant 18)

"Their world is the unit" (Informant 20)

As it has been touched on before, the data show that the nurses are relating to the team or section they work at. They work at this particular corridor in the ward, and they relate to the other staff there. The data show that as much as the nurses are aware of what hospital and which ward they work for, they are not always sure exactly what the organization looks like, and how their team or corridor fits in with the rest, nor if the corridor next to theirs is part of the same unit or section as theirs, or not.

On the same topic, the data on the doctors' views are different, once again related to their work practices. The quotes below show how doctors are viewed and view themselves in this regard.

"Well, it is like that, we are so many different places and we are also aware of it has to work, it isn't any good if it only works are the unit, when the patient that needs surgery at intensive care and has severe pain in the stomach is depended upon that it works. All the way around, all over the ward. But it's very hard to influence outside my group, my unit, to know what has happened, but as soon as you need to go outside the ward, then it is very hard" (Informant 24)

"Sometimes I get the feeling that as a doctor, it can be a little easier to get... to have a bigger perspective, because I don't just work at the unit, I don't just work at the surgical ward, I don't just work at the maternity ward, I am also at place where the patients arrive, I move around a lot, and it's obvious that then you pick up a lot of impressions and see what works in different places, and... the nurses are perhaps more situated at their unit. If you should generalize in any way, which is always a bit risky, because I don't know if it's true, but possibly it can be more detail questions when it comes from the nurses, and possibly has a bigger scope when it comes from us" (Informant 8)

From the data it is clear that the doctors move around a lot, during the day. They might start off with being in the ambulatories, and after that they will be operating on checking on their patients at the different sections on the ward. Even as they are employed in certain positions, which means they will be more likely to move around the whole of the ward. The quotes above show that the doctors relate more to the ward than to the subunits of this, which makes sense because of their moving around more. In addition, this can be an advantage in relation to idea evaluation, as the quotes suggest.

The idea that doctors by moving around more and talking to more people, know more about the procedures at different units and sections of the ward, compared to nurses that stay in the same subunit all day, does make some sense and could be investigated further. The counterclaim, as stated by Informant 8, could be that the nurses know the details of their particular section very well, and that the doctors are generally only aware of the more superficial procedures, and the ones that concern them.

The last of the professional groups that are discussed here is the midwives. In this connection, they are put last as they stand out from the two other main groups. As the midwives fulfill very specialized functions, they are less likely to move around. This differs from hospital to hospital, as some midwives also have shifts at the patient hotel, and others work with pregnancies alongside nurses in smaller teams.

In a cultural perspective, the affiliation can be seen as being an expression of practices which also has become part of the culture, as there have been organizational reasons for why doctors move around while nurses and midwives are tied to a unit. In a cultural sense affiliation can be related to the differences in capitals and cultural bias. Apart from the practical and job related differences in affiliation, the differences in affiliation can be seen as differences in cultural bias, where the doctors are more mobile and less limited by the social order. The nurses are more group based and stick to their position, both organizationally and physically, as hierarchists. Midwives, as enclavists are less limited by social order but still group affiliation. This is not to say that doctors do not identify with being doctors, but as the quotes show, they do not act like a group, which the midwives and nurses tend to do. The mentioned limitations by the

social order as well as group affinity can explain part of why the different professional groups choose different strategies for promoting ideas.

Overall, the nurses generally affiliate with their unit or team to a much higher degree than the doctors do. This can also influence the type of ideas that is promoted from each group, as the nurses know their unit in detail, but they know less of the other units, where as the doctors know about more units in general terms. Thus they are able be inspired by getting inputs from more units during the day, and are to promote ideas that take into account all the units, whereas the nurses will be able to promote ideas based on their own unit. These strategies are in part dependent on the cultural bias of the different professional groups.

Loyalty

The question of individualism also relates to another concept, that of loyalty. The data suggest that loyalty and group belonging will have an influence on the flow of ideas.

The quotes below show how these nurses would discuss an idea with their immediate superior, and ask them before taking the idea elsewhere. In this context, elsewhere would be an innovation unit, such as the ones present at Aalborg and Ullevål hospitals, which is part of the hospital and present on the actual grounds. This raises the thought that perhaps loyalty to one's unit prevents taking immediate contact with such a unit, without the approval of a superior.

"There is no official procedure. An employee will discuss it [an idea] with the charge nurse, and if she thinks that it's a good idea [...] if it concerns that unit only then she'll deal with it..." (Informant 33)

"..then you go to your superior.. and.. explain what it is... and then... we can try it if it's interesting..." (Informant 14)

"Then you go... you talk to a couple of your colleagues, and then you go to [...], our charge nurse, and say, listen, what about this? And then she'll say yes, you can do that"
(Informant 31)

The midwives, as stated earlier, would also typically discuss an idea with their superior, and are interested in the innovation units, but doesn't comment on them beyond that. Where the doctors are concerned, they can be divided into the junior and senior doctors where this is concerned. These quotes are typical of the younger doctors on this topic.

"I don't know where you should go. I think you need one or some of the consultants to support it, one of those with clout ... yes... you need some ... allies... who... when you're sitting at the morning meeting... that someone asks 'weren't we supposed to'... 'oh, yes, that's right'... " (Informant 16)

"I... if you push the ideas through yourself, I'd say... it's very hard to have good ideas if other people need to pick them up and see to that they are implemented. There are those who say that influence isn't something you have, it's something you take yourself... and I think it's like that in most places. If you take the initiative and get an idea implemented yourself, then there is room for it, because... of course if somebody comes up with something stupid then there would be somebody who would say stop at some point, and say this won't work, but ...I'd certainly think that if you come up with something, an idea, and you see it implemented yourself, then it's more likely to be functioning, even if you were to leave the ward." (Informant 21)

Depending on the idea, the younger doctors will typically try to secure some sort of support from a senior doctor, before attempting to push for implementation of a process or service, or before perhaps contacting an innovation unit or an external company (or starting their own company) if the idea is product related. The reason for this could be twofold. First the younger doctors need someone of standing to guarantee the quality of the idea. Secondly, they need someone with more experience for a better evaluation of the product or process, as suggested by informant 40.

"They have different roles. The older doctors are the ones with standing and clout in the system and are able to... to... say that they have been working with this for a long time, and they are professionally very competent, and if you ask them a concrete question then you get a concrete answer, and that is their role... but at the same time, the younger doctors wish that the ward should be better overall, better at aiding by deliveries, better communication at the clinic, we are much more 'we need to do something with the system here, and that is our part in innovation, whereas their part is to... be consultants, be the ones who can tell this is how it is and this is how it's done, in a medical context, they are less innovation when it comes to the running of the ward" (Informant 40)

The senior doctors are more likely to push the idea themselves, and contact an innovation unit or an external company according to the data. However, the data also suggest that they too would more likely than not contact their superior before taking an idea outside the ward.

In all cases it seems from the data that even if the professional groups can be shown to be more or less individually minded, this doesn't affect their actions when it comes to taking ideas to an innovation unit or going external. An overarching reason is that nobody wants to be seen as being disloyal to their respective professional group, but beside this, there are different reasons in the different groups.

The analysis show that the main differences are that typically nurses act as a group and are loyal to each other and their superior, whereas the midwives are less of an actual group but are loyal to their profession, and to their imme-

diate superior in the cases recorded here. This means that whereas the nurses wouldn't take an idea outside the section or team without approval because they need to remain good team players and be part of the professional group in that sense, the midwives will be loyal to their identity as midwives, but usually not to a 'team', perhaps with the exception of the ABC unit at Ullevål in Oslo. The midwives are loyal to their profession and usually to their superior with whom they work tightly, and the data show why it would be natural for them to discuss any idea with their superior before taking it elsewhere, not because of a pecking order as much as because most work related things are discussed in this manner.

"...the doctors don't do that [get indignant if someone talks to an innovation unit without consulting their superior first]. You can talk to the other doctors and say 'I've been thinking so and so' and if people think it sounds sensible, then of course you can... I know... if I have been thinking of something and have talked to a few others, and then talked a bit with my superior, then he'd say 'oh, hm, yeah, maybe' and I'd say 'I'll try and ask the innovation unit' and he'll go 'great idea', exactly!" (Informant 12)

The doctors are less reluctant to take an idea elsewhere. Depending on their seniority (and personality), they are likely to either look for a mentor among the seniors, or push the idea themselves. As there are few concrete cases of actual ideas being pushed, the ones that were presented suggest that doctors will take their ideas outside the ward if needed. Loyalty to their professional group will not stop them from taking ideas outside, but the quality of an idea would need to be high enough to not potentially lose face among colleagues.

The differences in loyalty can also be related to the differences in culture, as loyalty is related to the differences in group/grid, and in individualism. It is clear from the data that loyalty is important, but it would seem that for nurses, loyalty to their group and immediate superior gives the nurses fewer possibilities for promoting ideas, compared to midwives or doctors, who have more possibilities to promote ideas in different ways without being seen as disloyal.

The conclusion here would be that loyalty plays a part when strategies of promoting ideas are chosen by the informants. Loyalty relates to individualism in the sense that nurses are more reluctant to take ideas outside the unit if they have not been discussed with a superior, whereas the more individually minded doctors will do that if needed, as long as they don't lose face professionally by doing so.

Evidence based

One of the words most frequently used by the informants was "evidence-based". As the quotes below show, this means that whatever is proposed must be back up with scientific evidence.

"Yes, it's a lot if…it's something where the measurable facts and data are visibly improved and can see something measureable instantly in it" (Informant 35)

The data would suggest that this has grown to become a mantra within the health care professions within the last 20-30 years, which concurs with the views presented by Kragh-Jespersen and by Schøtz (Kragh-Jespersen (2005) & Schøtz (2003)).

The quotes above show how this has limited the creative freedom of the doctors, making it more difficult for them to test hypothesis and ideas without a solid reason based on either research done elsewhere or at the very least an assumption based on scientific facts.

"I think that then we have to try it. And among other things we have very clear routines for how we test innovations; sometimes it has to be done as research if it involves patients" (Informant 30)

It would seem that the process of setting up official procedures based on research and scientific evidence has pushed the individual freedom of the doctor to pick and choose his own routines and ways of working. However, the data support the view that the doctors have embraced this rhetoric as this quote exemplifies:

"What is… complicated these days, with being innovative, if it's things which cost money. It's very strict, economically… and evidence based of course! It has to be good for the patient and scientifically proven…" (Informant 13)

Examined closely, the data allows the assumption that even if the focus on evidence based decreases individual freedom, it has at the same time raised the professional profile of the medical profession, in the sense that it allows for increased coherency and a solid base of knowledge that procedures can rest upon. The following quote relates to this.

"…but if you change some procedures, then you can either do it as research so that you contribute to the research and evidence yourself, or you need reasonable evidence that this can be an advantage for the patient. That was much easier twenty, thirty years ago when everything wasn't so… but I think that the development has been more good than bad, that there is something so we can't just… come up with whatever… without it having to benefit the patients" (Informant 13)

A more solid and commonly recognized knowledge base, it can be argued, is useful for producing solid arguments for how hospital and health care work in general should be conducted.

In all three countries it was explained, especially by the nurses, that the nursing education has changed over the last ten years, to become university based, and educated nurses now hold an academic degree. As the following quotes show, this means that the nurses are now better suited to both understand and perform research themselves.

"…but it is the way forward if you think about that I'm only educated though an apprenticeship, but that it is nurses with bachelor degrees who are coming and thus they have at least a different opportunity of being able to think research and things like that compared to the group of nurses I belong to have been able to, and hopefully it can inspire some other processes than we have been able to" (Informant 31)

This increased focus on the evidence based procedures and on research has somewhat changed the nursing profession, it could be argued from the quotes below.

"That is something we are very much aware of! Experience is one thing, knowledge is something else. We can't build everything on experience… you need to know what… what the theories say and what knowledge there is in a field, pain treatment for example, it's no good that the old nurse say that I know that when I do this, then… then it helps, it's not enough these days. We need… what research is there in this field, what background knowledge dictate that we do what we do, otherwise we can't document what it is we do. And that is important. […] Yes, it can be a little hard sometimes when… then we come up with instructions that say that the treatment, for example pain treatment, it is, and we are working with the doctors when we do this, it is like this and this and this, and if that doesn't help, then you have to change to this product, it takes a bit of time because… 'I'm used to…'… but that is how it is, and it's been decided that this is the way we do it, and if you don't do it this way, then you have to document why you didn't do it this way" (Informant 33)

It would seem that the focus has changed somewhat for the nurses, from it being more of a craft in which learning by the experienced personnel played a key part in becoming a good nurse, to an academically based profession, where research and evidence based procedures play a much bigger part.

As stated previously, all procedures must be evidence based, and this focus on evidence and research. The previous quotes also relate this to innovation, and show how employee-driven innovation in some cases faces the test of having to be recognized as evidence based, for it to be considered for implementation. This relates to all ideas that influence with procedures and less so to the administrative related ideas. One solution can be that if evidence is lacking or not present at all that the idea can be turned into a research project, as part of being a university hospital is to generate new knowledge through research.

Doing research on the idea is one way of testing it to gain evidence that it works and is up to standards. In most cases, when an idea is presented it is up to the idea owner to convince gate keepers and decision makers that it conforms to the standards and is sufficiently evidence based.

On a cultural level, the concept of 'evidence-based' can be viewed as a way of controlling what is valid capital in the field. It has become a mantra for practical reasons, as it has been part of homogenizing procedures, but at the same time the data show how it has also been used as a way of stopping unwanted ideas. Mainly in examples where the doctors were stopping ideas generated by the nurses. It would make sense in a cultural context to link the increased importance of research in the education of nurses to adjusting to a change of what is valid capital in the field. However, this can only be suggested from the data here, and would demand research in its own right, which is beyond this study.

This relates to the argument presented in the chapter on 'Hierarchies between the professional groups' of how standing and being recognized as being serious have an influence on how easy it is to promote one's ideas. This links well with seriousness and being a knowledgeable professional being able to master the rhetoric associated with research and "evidence based". Thus, if you are able to present your ideas in scientific terms and you're regarded as being a good professional, who subscribes to the overall values and norms of the profession, then you will find it easier to have your ideas accepted for evaluation and potential implementation.

The procedure described above also explains why it would be easier for doctors to promote their ideas, as they have both a higher standing and master the rhetoric of science needed to promote ideas.

The term evidence-based was frequently used by the informants. It becomes important for employee-driven innovation when it becomes a barrier for the ideas proposed, when all ideas on all levels have t live up to being 'evidence-based'. One way to counter this is to differentiate between ideas where it is relevant to have evidence and those where it is not relevant. This often translates into if the ideas involve the concrete work with patients or not. In some situations it is possible to set up a research project based on the idea, to obtain the evidence. Finally, the paradigm that all things must be evidence-based is also in some cases experienced by the informants as a mechanism of control, whereby unwanted ideas can be rejected solemnly because of this.

CONCLUSIONS

The following sum the main conclusions of the study. Each title refers to a chapter or part in the report, but the titles don't match the structure of the report as such, as the aim of this conclusion has been to both assemble the conclusion but also to show how many of the conclusions relate to each other, and together form a bigger picture. These arguments will be presented below, and a list of recommendations follows at the end of this conclusion.

The concept of 'innovation'

The data showed how the term innovation was not well known outside the administration and management levels. It was clear that despite not knowing the term, ideas are being continuously promoted and implemented, primarily on a smaller scale. It can be concluded that lack of knowledge of the term 'Innovation' doesn't mean that ideas are not being promoted. It is important to make sure that eventual strategies which involve innovation are linked to the practices where ideas are being promoted.

Cultural aspects

Practices and culture are related, and therefore there is a clear link between the practices and the cultural elements related to employee-driven innovation in this context. The data clearly showed that hierarchies exist, both between the professional groups, and within the groups. These hierarchies diffuse into the field of employee-driven innovation, as doctors are expected and experienced to find it easier to promote their ideas compared to nurses and midwives.
The differences found in gender roles, affiliation, loyalty and individualism all derive from different cultures arisen from different practices that have been institutionalized over time.

Strategies for promoting ideas

The cultural differences translate into the strategies for promoting ideas, where basically the same strategies were used. These strategies were:

- Promoting an idea yourself without handing it over, perhaps with the help of an ally higher in the hierarchy.
- Taking the idea to your immediate superior, perhaps after discussing it with colleagues.

However, the higher you are in the internal or official hierarchy, the more options you have for promoting your ideas, such as picking someone else than your immediate superior to present the idea to, or pursue more strategies at the same time.

Complex ideas need a lot of resources to implement, and a lot of will. The data show how horizontal communication and decision making seem to make it difficult to implement ideas that span more units or professional groups.

The concept of 'Evidence-based'

When promoting ideas it is a potential barrier that the concept of evidence-based is the ruling professional paradigm, because in a power-relation, it can be a way to block off unwanted ideas, and it can lead to that even small ideas for improvements need to be weighed on these scales. A potential solution is to set up relevant ideas as research projects, to be able to find the evidence yourself.

Gatekeepers

The primary gatekeepers for employee-driven innovation found in the data are the immediate superior, who plays a large part in this process, the motivation by the person having the idea to promote it, and the experienced complexity of the organization. Thus, it is important to have clear cut processes for the bottom-up flow of ideas, as well as being aware of the role of the immediate superior, and both giving them the tools to evaluate ideas properly and to make sure they are themselves aware that ideas are prioritized. Lack of resources is not seen as simply a barrier to innovation but can also be a driver.

Motivation for innovation

Motivation has the potential to be both a driver and barrier to employee-driven innovation. The data show that what motivates is to be taken seriously when taking an idea to your superior and to be able to promote ideas without potentially losing the important internal professional standing. The constant political changes, where changes are implemented top-down, are not an incentive to promote yet more changes. Being a hospital, making errors is not encouraged, but to motivate to innovation, more knowledge of when it is accepted to be innovative (and potentially make mistakes) and when it isn't would increase motivation. On a managerial level, the data shows how there are few incentives to be innovative, as all resources saved disappear into a 'black hole'.

Recommendations

Based on the conclusions a list of recommendations as to how the barriers and drivers presented above can be taken into account has been created. The list is primarily aimed at managers and administrative staff at hospitals whishing to enhance the level of employee-driven innovation. But can also be used generally as a source of inspiration for all who are interested in employee-driven innovation at hospitals or other complex organizations:

- It is important to make sure that eventual strategies which involve innovation are linked to the practices where ideas are being promoted.
- It is important to have clear cut processes for the bottom-up flow of ideas
- The role of the immediate superior in employee-driven innovation should be noted, to make sure they have the right tools and mindset to be able to play their part in the process
- Be aware of the role the hierarchies play in how ideas are promoted or not promoted
- Personality is currently a main driver in the bottom-up innovation process. If an organization is tuned to make personality less important, it should be aware to not stop the personality driven ideas in the process
- To make ideas evidence-based it is possible to test relevant ideas as research projects, to be able to find the evidence
- To increase motivation, clear lines should be drawn as to where it is not tolerated to be innovative and where it is accepted to be innovative and potentially make mistakes
- Increasing incentives for units and wards to use innovation as a tool to work better and more efficient would increase motivation to encourage innovation

METHODOLOGY & THEORY

As stated in the introduction, this is a qualitative study aimed at researching employee-driven innovation in health care. More specifically, the research took place at the gynecological wards at three different hospitals in three different Scandinavian countries. These hospitals were Sahlgresnska Universitetssjukhuset in Gothenburg, Sweden; Ullevål Universitetssykehus, now part of Oslo Universitetssykehus in Olso, Norway, and Aalborg Sygehus, Århus Universitetshospital in Aalborg, Denmark.

The blueprint

The research was generated by way of a number of interviews, observations, attending staff and managerial meetings as well as informal conversations with members of the staff, and studying written material at the ward and online descriptions of the ward. Most of this data have been studied to establish the context and background for the conclusions drawn from the research, to secure as much information on how the wards functioned both in regards to work and to the staff as possible. Therefore, a large amount of data has not been used directly in this rapport, but the aim is to utilize unused material in later articles, and the collected data has made it possible to contextualize the conclusions drawn in a way that would not have been possible with less data.

The main source of data is the forty interviews that were conducted at the three wards from June 2010 to May 2011. The persons interviewed, the informants, were mainly picked from one of the three main professional groups present at the wards, nurses, midwives and doctors, and from the three main groups, the informants hold different positions. As a result of this, nurses, doctors and midwives in managerial and administrative positions were interviewed as well as some who were employed in the more traditional and basic roles of their profession. This was done deliberately to secure that the study addressed the issues in relation to employee-driven innovation on all levels at the units and wards visited. Both the view from the floor or the management was important, as well as how the views matched or didn't match.

Employee-driven Innovation

Employee-driven innovation is a key concept of this study. A review of the concept of innovation is beyond the scope of this study, as is a review of the different sorts of innovation defined on all possible levels. This study deals with how the informants perceive innovation, ideas and creativity at their workplace, and doesn't discuss actual ideas. Where relevant concepts will be used and explained. There are many definitions of innovation. A few that are useful in this context are quoted by Aagard:

"Innovation is the 'succesful implementation of ideas'"
(Brazeal & Herbert in Aagard (2011), p. 23-24)

"Creativity is getting the idea, and innovation is making it happen"
(Gamache in Aagard (2011), p. 24)

The last quote underlines the relationship between creativity, ideas and innovation which is also promoted in this research.

Christian Bason offers another but related definition of innovation:

"Innovation is a new creative idea, which, when implemented, adds value" (Bason (2007), p. 27)

In relation to employee-driven innovation, the aim of this according to Christian Bason is the involvement of the employees in the development process promotes the power of development in both public and private organizations (Bason (2007), p. 31). As such, employee-driven innovation is, in a definition by the Danish labor organization, LO: "Employee-driven innovation refers to that the staff in a broader sense contributes actively and systematic to the innovation process" (LO (2006))

Hence signifying that innovation, in the definition above, is promoted in a bottom-up fashion, and by the employees themselves, as opposed to that promoting all sorts of novelties being executed by experts, such as an R&D department, the management or HR department where technological and organizational development is involved, respectively. In short, employee-driven innovation is allowing staff at all levels of the organization to bring forward ideas for changes and improvements, and to do it actively and systematically, as the definition outlines.

To obtain the relevant data on the topic through the interviews, an interview guide was constructed. The guide was changed over time, to utilize new insight and knowledge obtained in the process, but the overall structure of the guide remained intact throughout. As the research dealt with different hospitals, different countries and different groups of professionals, the guide was constructed to deal with both the practical and cultural aspects of the topic of the study. The main hypothesis was that both the practical and cultural aspects influence the bottom-up flow of ideas that constitutes employee-driven innovation as it is defined above.

The methodology

There are identified cultural differences between the professions at hospitals, which is described by many theorists, and in this context Kragh Jespersens work of 2005 is used as reference as it relates directly one of the three hospitals which were the objects of this research, namely Aalborg Sygehus. These cultural differences were seen as possibly being a factor in the flow of employee-driven innovation at hospitals and were thus added as a parameter in the research.

To deal with the practical and the cultural aspect of employee-driven innovation, the interview guide were constructed to facilitate the use of what the German Profession Uwe Flick has labeled "The Episodic Interview". This form of interview deals with two types of knowledge, the episodic knowledge and the semantic knowledge which together constitute how experiences and knowledge are stored in memory. The episodic knowledge relates to situation and contexts, it is stored as experience, whereas the semantic knowledge is generalized knowledge that is acquired from actual situations, but is stored rather as abstract concepts and relations. According to this method, the interview guide must be made up by a mix of what Flick refers to as "narratives of situations" and the informants' subjective definitions and abstract relations. In other words, during the interview both the abstract and the more concrete knowledge of the informants are subject to the question, in order to obtain knowledge of both the habits, the norms, the values and the attitudes of the informant in relation to his or her work environment, and of course in relation to employee-driven innovation (Flick (2006) p. 181-187).

The theories

The data were collected through the methodology outlined above. As any methodological choice will both limit and shape the selection of theories that can be used to explain the data, so does this. The theories used are chosen as they first of all match the methodology as they operate with both a cultural and a practical aspect, and the interaction of the two. Secondly, these theories were chosen because they were able to explain certain important findings in the data at hand, which were culturally related.

Social construction of reality

The idea of reality being socially constructed is part of the foundation of the approach taken in this study. The theory and book of the same name was promoted in 1966 by Berger and Luckmann (Berger & Luckmann (1966)), and the points relevant to this rapport will be presented in short, to explain the approach and the role it plays in the analysis of the data.

To Berger and Luckmann, reality is socially constructed through a constant process of externalisation and internalisation, that is to say that what is expressed by others is learned, and then expressed, and then picked up by others, which over time make habits, and habits are in turn made into norms and standards for behaviour. In this way habits and norms are passed on, as well as continuously changed, from generation to generation, where new ideas and new technology redefines the practices and habits, and thereby, over time, the norms. The process is limited by the physical conditions of the society, in the sense that environment and available technology determines what practices are both useful and possible. In the process institutions arise from the practices, and over time as the practices change, the institutions will have to legitimise themselves.

The legitimising is an ongoing process in which an individual by knowing the society, and where he fits in, allow the institutions to become meaningful. These processes are important to the subject of this rapport as the legitimisation gives a higher meaning to everyday life, which means that through the values and norms of a society, a series of events is made meaningful by the individuals. Moreover, because the knowledge of one's place in society is part of the process of making sense of reality, there are roles associated with this position that one must live up to. And because the norms of the society are guiding what actions an individual can choose from in a given situation, these generalised roles determine what actions are appropriate according to the role. The socially constructed reality of a society is internalised through socialisation processes, where especially during childhood much is learned about how the world "is", which is referred to as primary socialisation. The so called secondary socialisation takes place when the individual is faced with new situations, which can result in adapting a new role whereby the previous understanding of the world is replaced by a new one. The more the new understanding of the world differs from the previous and the more exposed the individual is to it, the more likely the individual is to adapt the new world view completely or in parts. However, as the process of legitimising behaviour needs to be continuous, the previous actions need to be legitimised according to the new understanding of the world.

Culture as praxis

As only parts of the theories of Pierre Bourdieu are relevant to this study, only this will be presented below, as they are used in the discussions on cultural differences. In this context, the most important concepts are those of "habitus", "field" and "capital".

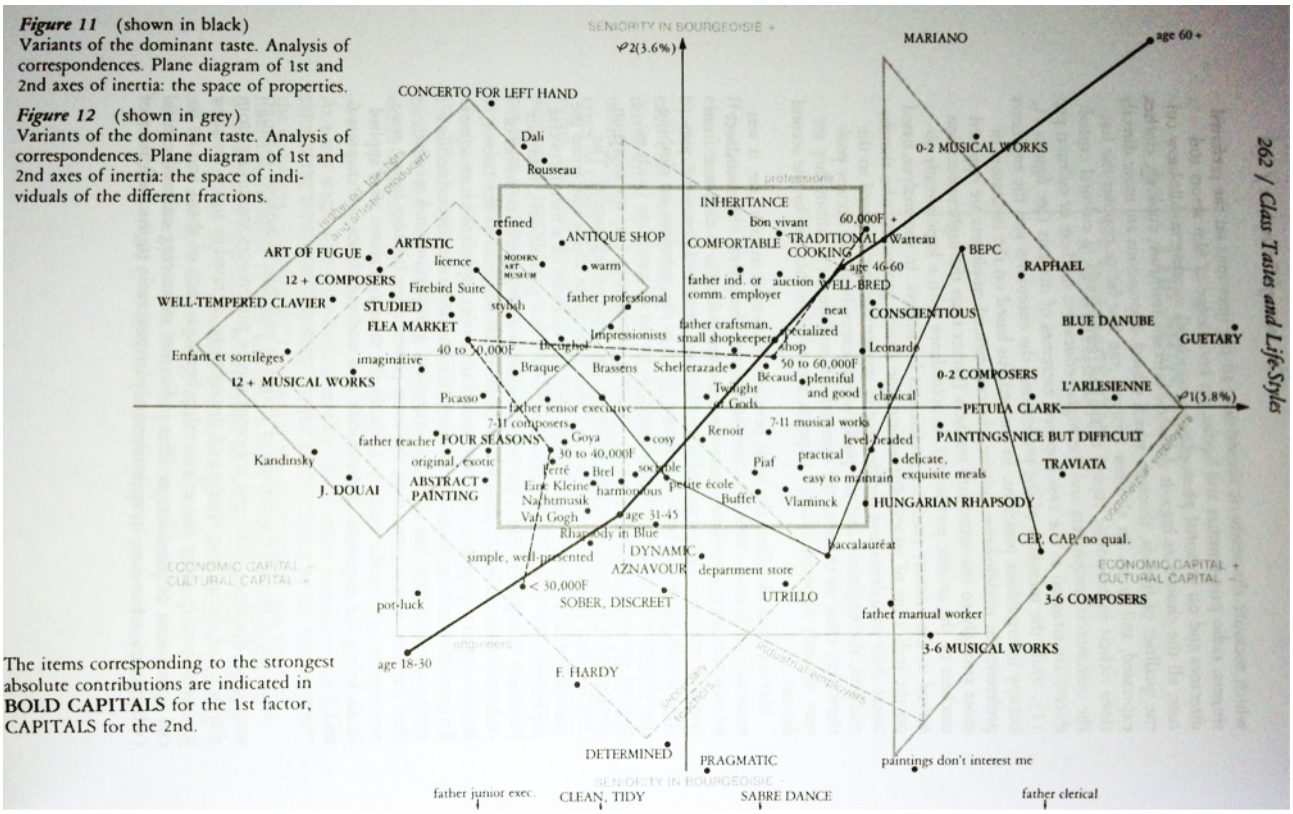
The concept of habitus is not out of line with the thoughts behind the social construction of reality, as it is equally dynamic in its view on socialisation. Habitus is what develops through an individual's socialisation, and is, simplified, a structuring mechanism for actions and thoughts, determined by the socialisation, the background, experiences and upbringing of an individual. The habitus changes over time with new experiences, but change can only come on the basis of what is already there. As it dictates what thoughts and actions are possible in certain situations, the habitus can be seen to tie these possibilities to background and upbringing, and thus there is a link between the norms and values of the individual and that of its parents and the context in which it grew up (Bourdieu (1980), pp. 91-92 and Wilken (2006), pp. 43-45).

The last two concepts, that of field and that of capital are tied to each other, as different forms of capitals are what allows access to, and determines the positions in a field. Fields can be understood as "networks of positions", meaning first of all that in any field there are certain positions to be held by groups and individuals. A certain type of capital will allow access to a certain field, and the more relevant capital you have, the higher you are positioned in this field as an individual or a group. The higher you are in a field, the more of a say you have over what capitals are relevant in the field. Capital in this connection can be certain professional skills and experiences. Bourdieu operates with a few basic types of capital, which not only make up the capitals in fields, but determine how individuals, groups and indeed fields can be positioned against each other. The main capitals are economic capital understood generally as wealth. It is cultural capital, which is education, background, cultural knowledge and language skills. Social capital relates to "name" and network, how well you are connected and to whom. Lastly, symbolic capital is what the combination of the three types of capital provides in a certain field (Bourdieu (1986), (1984), p. 28, Wacquant & Bourdieu (1992), p. 97.

As for how capitals and fields translate into society in general, Bourdieu constructed a so called model of social space, which is basically a grid, where type of capital constitutes the horizontal axis and amount of capital constitutes the vertical axis. In this connection the capitals are cultural capital on one side, left, and on the other side, right, economical capital. The third dimension is time, which means that the positions are changed over time. In this way, any group or individual can be plotted onto the grid, and relations explained according to differences in capitals. The same applies to fields, where groups and individuals can also be positioned relative to each other in a similar grid. Culture, in this understanding, is individual, but there are cultural similarities dependent on amount and type of capital, which makes it possible to talk about cultural differences between not only individuals but also groups (Bourdieu (1984), p. 114). The theories of Bourdieu are used in the analysis to explain the cultural aspects found in the data, along with and combined with the theories of Mary Douglas.

Different cultural biases

To Mary Douglas there are four different cultural biases, which made up by their different positions in a group/grid diagram. Here, very basically put, the horizontal axis determines level of group behaviour, whereas the vertical axis determines how important a collective system of classification is (Douglas (1970) pp. 57-71). What this means is basically that the horizontal axis measures the 'group' affinity and awareness, while the vertical axis measures importance of



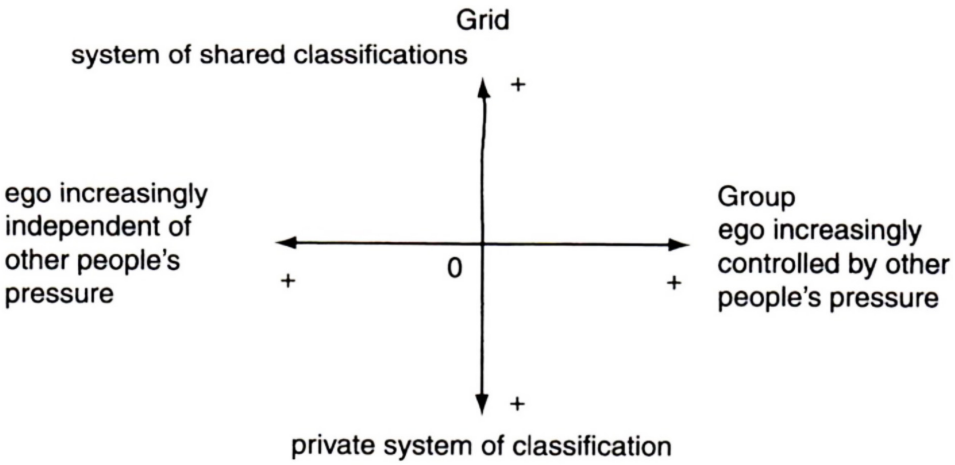
Bordieus model of Social Space (Bourdieu (1984), p. 262)

social order. A person or group can be plotted into the grip/group diagram on basis of these measures.

Each of the four quadrants in the diagram is labelled differently by Douglas, as being plotted in a certain quadrant equals a certain cultural bias. These cultural biases are labelled isolationist, hierarchist, individualist and enclavist.

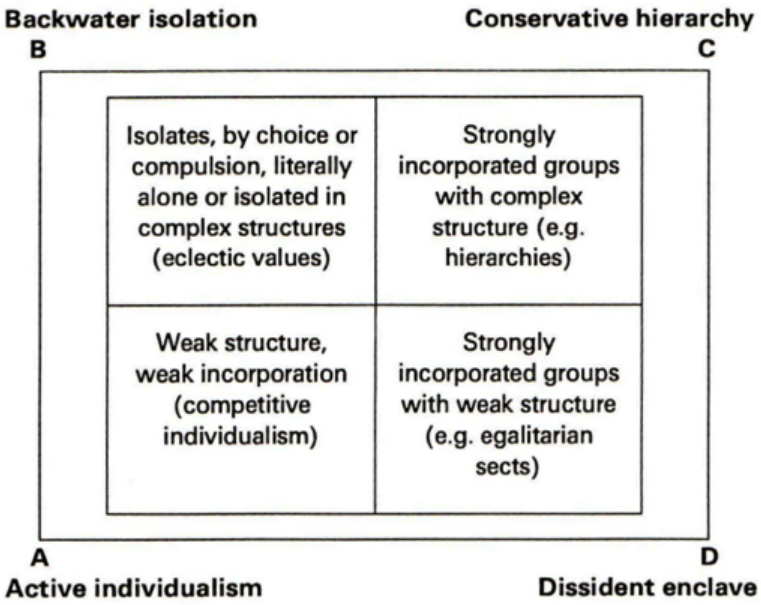
In this context it will do to describe cultural bias as a certain cultural disposition for actions and thoughts.

The different cultural biases thus indicate different mindsets and behaviour, which of course again is related to the two parameters of group behaviour and importance of a social order. The isolationsist are the ones with low group



(Douglas (1970), p. 64)

The choice between gross and spiritual



(Douglas (1996), p. 43)

affinity but with high awareness of a social order. They are called individualists because of the low group relation but that they are not able to escape the given social order. Hierarchists are those with both high group awareness and high awareness of the social order. Unlike the isolationists they are socially minded and work within the rules of the social order. The last two quadrants are those who pay less importance to the social order and rules. The individualists are those with low group affinity, thus acting individually without being tied down by the limitations of a social order. Lastly the enclavists are those who are also not restrained by the social order, but with high group affinity. They tend

to be the dissidents and reformists as they tend to be in opposition to both the social order and the individualists (Douglas (1996) pp. 40-43).

Mary Douglas herself made the connection to Bourdieu's model of social space (Douglas (1996), pp, 29-31), and indeed the two theories can match each other on certain points which allows theories and conclusions to be made as to the connection between experienced cultural values, norms and position in the combined grid that is the grid/group diagram matched with the model of social space. Here the horizontal axis that specifies type of capital also specifies level of group affinity, in the sense that economical capital equals low group affinity and cultural capital equals higher group affinity. Similarly, the vertical axis defines level of capital as well as degree of limitation by the social order, where much capital equals being less constrained by social order and vice versa. This matches Bourdieu's thoughts well, as a larger amount of capital equals a larger say in what is recognised as symbolic capital in the field, and thus, more power. From the culturally related behaviour, norms, attitudes and values found in the data, this combination was seen to offer valuable conclusions as to the relation between these cultural parameters and employee-driven innovation.

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