UNIVERSITY OF BERGEN
Department of Administration and Organization Theory

Stairway to Heaven
Please Hold the Handrail!

A study on the organizational safety in Norske Shell

by

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Chapter 1 – Introduction.

"The party responsible shall encourage and promote a sound health, environment and safety culture comprising all activity areas and which contributes to achieving that everyone who takes part in petroleum activities takes on responsibility in relation to health, environment and safety, including also systematic development and improvement of health, environment and safety."[1]

The Norwegian oil and gas industry is one of risk, and one of massive institutional pressure for legitimacy. Dangerous operations are performed on a daily basis and the newest of technology is applied, all in the frames of the vicious North Sea. Accidents can occur, and there is potential for major disasters. Undoubtably, this calls for regulation.

The Norwegian framework regualtions hold the organization responsible for encouraging and promoting a sound health, safety, and environment (HSE) culture. The overall assumption is that such a culture will improve safety. Focusing on culture seems to be trendy in the industry these days, and it appears that the academics somewhat agree on the focus. This thesis will focus on the notion of culture – is it possible to enhance safety through culture? I will use this chapter to present the topic and introduce some difficulties that the industry faces.

1.1 Organizational safety in the Norwgian oil and gas industry

The Norwegian petroleum industry has been focusing on safety matters since the very beginning, but the focus seems to have changed quite a lot over the years. The focus appears to have evolved from hard science (technical reliability) to soft science (human reliability) – from the focus on how the technical equipment can be improved to enhance the safety, to how the behavior of the members of the organization can be enhanced to promote a safer work place. Patrick Hudson (2007) gives an explanation to the development of safety focus in the oil and gas industry. He explains how each new "wave" of safety focus reaches a plateau where, although the "wave" has contributed to a reduction of incidents and accidents, a new perspective/focus has to be implemented in order to further the reduction of incident rates. In his figure showing the development line (fig.1), he shows how the focus first went from

[1] Section 11 of the Norwegian framework regulations.

technology to systems. Although the technology never ceases to evolve, there has always been a technical integrity in the petroleum industry. So how does one continue to lower the incident rates after the focus on technology reaches it's plateau? The answer was to shift the focus toward the systems.

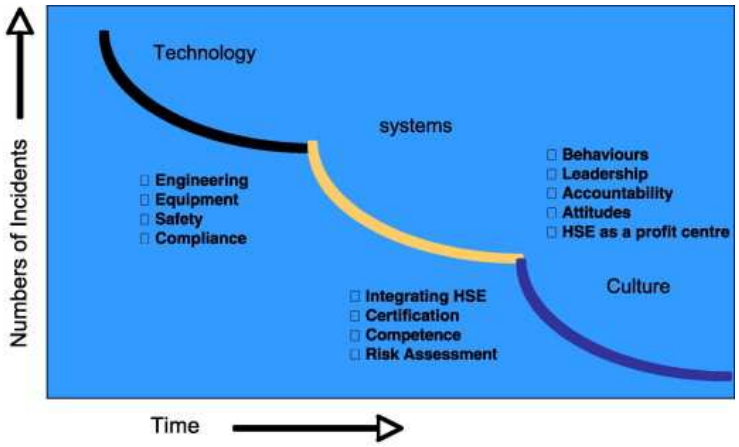

fig.1.1 – The developmental line, culture becomes the next wave after systems safety[2]. (Hudson 2007; 700)

The focus on systems developed, according to Hudson, after the Piper Alpha disaster[3] in 1988. The thought was to improve safety management by "*the use of safety management systems (SMS)*" (Hudson 2007; 699). This also led to the including of environmental and occupational health management, and the implementation of health, safety and environment management systems (HSE-MS). Also this focus led to a reduction of incident rates, but also this focus reached its plateau, and none of the rates[4] had been reduced to the goal of zero. It was now time to focus on the culture – time to focus on the people. This is where behavior based safety, safety culture and behavior modification become interesting and important.

It is now a common belief in the petroleum industry that, in order to reduce incident rates further and enhance the general safety, one must make sure that the employees act in the safest way possible. It has therefore become very interesting to analyze what lies behind the behavior – to find out why people act the way they do – so that the behavior easier can be

[2] Hudson's figure represents the change of focus on the safety work in the petroleum industry. Although it seems from the figure that the incident rates have declined, this is not necessarily representative to the factual incident statistics. Hudson's plateaus do not indicate increased safety, but merely a change in focus.

[3] A North Sea oil production platform which was destroyed in July 1988 by an explosion and the resulting fire, killing 167 men. To this day it is the biggest offshore oil disaster, in terms of lost lives. (www.wikipedia.org/wiki/piper_alpha)

[4] Fatal accident rate (FAR), Lost Time Injury Frequency (LTIF), Total Recordable Case Frequency (TRCF)

modified. This has led to the development and implementation of different "safe behavior" programs, encouraging the employees to step up to the responsibility and acknowledge their role in the safety work. The new focus is that accidents never happen, they are caused – a focus that indicates a human responsibility. This way of thinking can be recognized in for example Shell's "Goal Zero", Statoil's "zero philosophy", and BP's STOP-program.

1.1.1 What to make of the litterature on organizational safety?

When it comes to organizational safety the litterature and theories available seem to differ widely in their conclusions and suggestions for safety enhancement. Two theoretical schools prevail in the field, one based on Charles Perrow's Normal Accident Theory (NAT) (Perrow 1983) and the other based on the High Reliability Organization Theory (HROT). NAT's side of the story seems to be that accidents are unavoidable; we cannot prepare for what we do not know, and accidents are therefore inevitable. The HROT perspective is that accidents can be avoided through, amongst other organizational characteristics, a decentralized strategy that further is dependent on a strong and uniform organizational culture. Two questions arise; can we accept the first premise – that accidents are inevitable and unavoidable? If the answer is no, is it possible to create a uniform culture in the organizations operating in the oil and gas industry?

It is important to understand the significance and position of the oil and gas industry in Norway. Norway is one of very few countries in the world that can budget with a huge surplus, all because of the oil and gas industry. Oil and gas made up 48% of Norway's total export of goods and services in 2007 (www.ssb.no) and has helped build the Norwegian economy since the late 1960s. The industry gave work to approximately 32.000 people in 2006 (www.ssb.no). In 2007, the industry was accoutable for 31% of Norway's income through the taxes and direct ownership (ibid). There is a huge political and economical interest in the industry, and it consequently receives extensive focus from the media. There are many stakeholders in the industry. Numerous ministries have oil and gas policy[5], there are several employer confederations[6], and many workers' unions[7].

[5] Ministries of finance, fisheries and coastal affairs, trade and industry, petroleum and energy, environment, etc. Also many directorates have their own oil and gas policies.
[6] OLF, The Norwegian Shipowners' Association.
[7] OFS/SAFE, NOPEF.

The oil and gas industry is a somewhat controversial industry, where safety and environmental issues seem to be most controversial. The oil companies have a strong need to legitimize themselves and their operations in their surroundings, and accepting the premise that accidents are unavoidable is not a way to obtain such legitimacy. Not everyone would appreciate if companies declared that "there will probably be accidents during our operations, people will probably be hurt, and it is also likely that someone, sometime, will die". A company simply cannot make statements like that. "We cannot guarantee that our operations won't harm the environment" would not be accepted in the Norwegian society, especially in these "green" environmental times we have entered lately. It would not be legitimate. It would not be accepted. In other words, studying organizational safety in this industry implies suggesting and testing organizational characteristics that are thought to increase reliability. This study will focus on the second premise mentioned above; accidents can be avoided through a decentralized organizational strategy that is dependent on a strong uniform culture, and the question that needs to be focused on is whether or not creating such a culture is possible.

The culture of the Norwegian oil and gas industry

To illustrate the difficulties related to creating a strong and uniform culture, let me introduce the cultural story of the Norwegian oil and gas industry. The diversity and multinationalism involved indicate only some of the challenges when trying to obtain unifomity.

The early 1960s were the beginning of a new industrial era in Norway. Big international companies opened their eyes to the Norwegian continental shelf (NCS) and became interested in becoming a part of the development here. The first concessions were distributed in 1965, to nine different oil companies, and the first oil was found in 1969 (Smith-Solbakken 1997; 28). Ever since the very start of the Norwegian oil and gas adventure a certain culture has evolved in the industry, a culture characterized firstly by somewhat of a cultural clash between the experienced Americans and the inexperienced Norwegians, and secondly by a highly international working environment. This specific industrial culture is important in this context as it helps us understand the distinctive quality of the industry.

Smith-Solbakken (1997) divides the history of the Norwegian oil and gas industry in two different encounters; the "regional encounter" from 1966 to 1977, and the "industrial

encounter" from 1978 to 1986. The regional encounter was the encounter between the cowboys from Texas and the farmers from Jæren. The Americans entered the NCS and recruited Norwegian farmers with little industrial background. The American leadership style was new to the Norwegians and broke with the pietistic traditions from the Norwegian west coast. A drastic change happened in 1973, when the semi-submersible rigs were defined by the authorities as ships and maritime crews were demanded. Norwegian captains became the top authority on board and the drilling manager, who until then had been in charge, became degraded and subordinate to the captain. This change brought with it a change of mentality; a "Norwegianization" of the industrial culture and leadership style. What first was an authoritarian and somewhat arbitrary American way of leading evolved into a Norwegian bureaucratic and union-friendly regime based on the wish for involvement in all hierarchical levels. (Ibid)

The 70s represented a new and booming phase of the Norwegian oil industry. The development of Ekofisk, Frigg, and Statfjord was to be completed from the mid 70s, and the competency required for the job was varied, specialized, and substantial. As the labour market was tight manpower was called for from abroad, and soon the NCS was filled with workers from Southern Europe and South, Central, and North America. The North Sea became a cultural melting pot, and Norway was introduced to many foreign languages and customs. Stavanger had become an arena for international business. This is what Smith-Solbakken refers to as the industrial encounter, and this period is characterized by immense industrial development. (Ibid)

The NCS's historical development comes with certain implications; the Americans were first in charge, and brought along their old customs and workplace culture. Workers from all over the world came to work on the industrial expansion before the Norwegians took over and modified the social rules and norms. The Norwegian oil and gas industry is, in other words, characterized by a cultural diversity, and the culture found in the workplaces in the industry is thus not necessarily identical to the Norwegian national culture in general.

1.2 The purpose and intentions of this study

I have chosen to study organizational safety in the oil and gas industry for several reasons. Firstly, it is an industry with a high potential for accidents and where risk elimination is

practically impossible. Secondly, it is an industry where the premise of the inevitability of accidents cannot be accepted – safety is expected to be enhanced. Thirdly, the oil and gas industry is highly international, including some of the biggest multinational companies in the world.

The purpose of this study is to test the premise of cultural uniformity being a possible savior to the everlasting safety problem. The idea is that such a culture will lead to safe decision-making in all levels of the organization. I include universal theories on decision-making processes in organizations, in addition to theories on organizational safety. The main contribution of this study lies, however, in the including of cultural theory and the concept of identity. How these fields are related and what they imply for one another are topics that hopefully will be answered along the way.

1.3 The case

The case of this study is Norske Shell, and I find it highly suitable to the project. Norske Shell has undergone an organizational change towards international centralization and standardization, which creates very difficult conditions for cultural universalism. In addition, the organization has what they consider a universal and culturally independent safety practice, the Golden Rules. The internationalism and cultural diversity taken into consideration, it seems highly appropriate to study universal tools, to further be able to discuss their effects. This Golden Rules practice is the main study object of this project, as it is seen as a universal creator of a uniform culture.

The question of research is related to whether or not it is possible to create an organizational design that will make accidents avoidable. My contribution to the field is related to culture, and I will test the HRO theorists belief that a strong and uniform culture creates reliability and enhances safety. I will expose the theory to what may be considered very difficult conditions; a supposable universal practice in a newly internationalized organization. Taking these conditions into consideration, the case of this study provides a good basis for showing how a culture can spread out in an organization and become universal.

This study is as much a study on implementation processes as it is on organizational safety. How a practice is presented and implemented is thought to have implications on its effects.

The study will also show how an organization's safety work does not differ very much from other organizational elements, and the findings are therefore thought to be somewhat generalizable in and across organizations.

Two research questions will be addressed:

- *Can organizational safety be enhanced through cultural uniformity?*
- *Is it possible to create a uniform culture in a multinational organization?*

Organizational safety is, in this thesis, understood as the safety that can be altered, modified, and affected by the organization, through organizational designs and characteristics. The organizational designs and characteristics are further thought to affect decision-making processes in all levels of the organization, leading to safe decision-making and increased safety. The term includes all decisions made in the organization that has an effect on the risk level in the organization.

Cultural uniformity is understood as a homogeneous pattern of basic assumptions which are shared by members of an organization and which operate unconsciously (Shein 1987), consequently affecting the decisions made.

1.4 Thesis outline

This chapter has functioned as an introduction to the topic and emirical field, and as a brief presentation of case and research questions. In chapter 2 I will present the theoretical foundation of this study; including universal theories on organizations, the concept of identity and cultural theory, as well as theories on organizational safety. I will in this chapter show how the theories on organizations correspond with those on organizational safety – the logics behind the theories are pretty much the same. I will also present an important topic regarding risk understanding. Chapter 3 will present the research design of the study, including a more detailed presentation of the case and a presentation of the methodology chosen. Chapter 4 has an empirical focus and presents the organizational change mentioned above. Chapter 5 gives an in-depth presentation of the Golden Rules, and the practice is exposed to an analysis that further enables a discussion on its universalism. Chapter 6 works as a bridge between chapter 4 and 5, and it is here discussed whether or not Shell has managed to create a universal practice that further creates a uniform culture leading to enhanced organizational safety.

Chapter 7 addresses the risk understanding in the industry, which can be seen as the main issue in the field. The findings of the study are summarized in chapter 8, leading to the conclusions of the thesis.

Chapter 2. Theoretical foundation

"It still isn't gonna protect us from the thing we haven't thought of."[8]

2.1 Different perspectives on organizations

Organization theory is a field of study which includes vast theoretical diversity. I choose to limit my thesis to include two different perspectives on organizations which can be used on businesses in the private sector: the rational and the institutional organizational perspectives (Olsen 1992; March & Olsen 1989). Both perspectives are considered universal when studying the decision-making processes in organizations. The rational perspective has traditionally been the dominating perspective, but it has been criticized for ignoring that organizations in fact are institutions with an autonomous ability to affect its member's behavior (Powell & DiMaggio 1991:3). Although the institutional perspective can be seen as a reaction to the rational perspective, the two perspectives can be interpreted as complementary to each other, instead of mutually excluding (Christensen & Lægreid 2001:25; Olsen 1992). Both perspectives will be included in the theoretical discussions of this thesis.

The discussion on rationality in organizations has become a controversy within the organizational theoretical and management fields (Thomas 2003). The concept of rationality is one of the most important sources when studying human action and a lot of research has been conducted on rationality with the objective of establishing the most efficient managerial techniques. There are many nuances in the two perspectives on rationality in organizations, and there is a fine line between the most rationalistic institutionalists and the most institutionalistic rationalists. The placing of some of the theorists into institutional or rational categories can thus be quite controversial. As Thomas (1993) notes, "*it is important to realize that assumptions about rationality do not fall into either objectively rational or objectively irrational categories*[9]*. We are dealing with a continuum so that various intermediate positions may be adopted.*" (Thomas 1993; 28). I will therefore proceed to present the

[8] President Josiah Bartlet, The West Wing, season 3 episode 17.
[9] Thomas (1993) labels his categories differently from what is done in this thesis. The basic assumptions are however quite similar.

different perspectives as a continuum, starting with the rational perspective and ending with the institutional perspective.

2.1.1 The rational perspective on organizations

The rational perspective on organizations sees the organization as a homogenous actor, and as a tool for the management (Røvik 1998). This is based on the idea that the formal structure controls the organization's behavior and strategy choices. The formulation of superior strategies is the responsibility of the management, and a successful adaptation to the demands occurring outside the organization requires a clear strategy and good timing. The management acts based on a clear means-ends way of thinking, which is based on expected consequences. This is what March and Olsen (1989) call "the logic of consequences". The scholars within this perspective assume that the management always acts rationally and calculates which solution will be most fitting, always in accordance to the organization's goals and interests. This implies that the formal organization and its structure control the organization's behavior. Organization maps, job instructions, and internal control documents, and also possible changes in one or more of these, have strong affects on the decision making structures and how tasks are accomplished. This presupposes a belief that formal structure in fact determines behavior. By making changes within the formal structures in the organization, the management can also change and determine behavior. The rational perspective is interesting in this context since companies often have hierarchical ways of organizing, with distinct governance systems.

Almost all economic theory, as well as big parts of the other social sciences, is based on the thought that "*human action is the result of human choice and that human choice is intendedly rational*" (March 1999; 14). Rational choice theory focuses on how the human always will seek to protect and promote its own interests, and at the same time try to maximize its own utility. History and culture are basically irrelevant to understanding behavior for rational choice theorists, instead it is sufficient to know the actors' interests and to assume that they pursue them rationally. Four different factors form the basis of this perspective on decision making; firstly that there is a knowledge of alternatives, secondly that there is a knowledge of the consequences of the alternative actions, thirdly that there is a consistent preference ordering by which the different alternatives can be compared, and lastly that there is a decision rule (March 1991; 97).

2.1.2 Bounded rationality – closing up on the institutional perspective.

Somewhere in between the rational and the institutional perspectives lie the thoughts of Herbert Simon. Although considered a rationalist by most scholars, Simon is probably one of the most important figures within the field of institutional theory. His theory on administrative behavior was developed to correct and counteract the traditional economic theories on rational choice, and he was among the first to acknowledge the limits of human cognitive capacity and to link this with the features of organizational structure (Scott 2001). The classical rational choice perspective was counteracted by Simon when he introduced the concept of "bounded rationality". This concept acknowledges human limitations and opens for other factors than profit maximizing and interest promotion and protection in decision making processes. The bounded rationality introduced by Simon relaxes the assumptions regarding full knowledge of alternatives and consequences, but hangs on to the supposition that the actors seek "*to do the best they can to satisfy whatever their wants might be*" (Abell 1995; 7, in Scott 2001; 66). According to Simon, the human being can only act rationally when organized; "*The behavior patterns which we call organizations are fundamental, then, to the achievement of human rationality in any broad sense. The rational individual is, and must be, an organized and institutionalized individual. If the severe limits imposed by human psychology upon deliberation are to be relaxed, the individual must in his decisions be subject to the influence of the organized group in which he participates. His decisions must not only be the product of his own mental processes, but also reflect the broader considerations to which it is the function of the organized group to give effect.*" (Simon [1945] 1997; 111).

Even when organized, there are limitations to the human rationality. These limitations can be informational and computational (March 1999; 16), as humans "*are unable to see clearly or interpret accurately the decision situations in which they find themselves*" (Ibid; 16). Thus, when a satisfactory alternative emerges, it is selected. In his classic "Administrative Behavior", originally published in 1945, Simon describes how organizational structures work to compensate for the human lack of rationality, "*allowing them to achieve higher levels of consistent and "boundedly rational" behavior than would otherwise be possible*" (Scott 2001; 27).

2.1.2 The institutional perspective on organizations

The institutional perspective on organizations is a very wide concept which includes several different theoretical perspectives. In few words, this perspective can be explained through the belief that internal dynamics, informal structure, culture, identity, norms, and traditions are explanatory factors when studying organizations' behavior (Olsen 1989; Powell & DiMaggio 1991). This perspective sees organizations as institutions, as something more than just an administrative and instrumental tool for the management. The organization is seen as a source for identity and personal progress, which gives it an intrinsic value for the employees. The organization as an institution evolves gradually and is filled with informal norms and values which gives it a distinctive character and regulates what is considered appropriate behavior (Selznick 1997). This is a behavior logic which March and Olsen (1989) call "the logic of appropriateness" – stating that the members of an organization/institution will act according to what is considered normal, or appropriate, in a given situation. The established norms and routines are considered as influential on the organization's choices as rational calculation. Internal dynamics are created, which makes changes difficult due to the intrinsic value it has for the members of the organization (March & Olsen 1989). Thus, behavior and change can result from the relationships between the members, or the different departments of the organization independent of the formal structures and control documents. In an institutional study on companies, Galaskiewics (1991:309) concludes that "*Organizational behavior is not only premised on strict cost-benefit calculi and individual firm rationality*". In a similar study, Fligstein (1991) points out how key persons[10], based on their positions in the company, can articulate and have the power to implement new strategies. Individuals, also outside the company's management, can, therefore, influence choices and decisions that are made.

Herbert Simon's concept of bounded rationality has already been presented as a major contribution to the institutional perspective on organizations. Though Simon is, by most people, considered to belong to the rational category, his theory does indeed differ from classical rational theory by including the limitations and boundaries of human rationality. Another perspective that is important to include in this context is that of Philip Selznick. This perspective is safer to label as institutionalistic. Selznick is one of the early figures in the institutional analysis of organizations. He was a student of Merton's at Columbia, and is

[10] A key person in this context is not necessarily a leader or a member of the management.

considered one of the founders of institutional theory. Already in his early works[11] Selznick made a clear distinction between the organization as "*the structural expression of rational action*" (Selznick 1948; 25) and the organization as "*an adaptive organic system, affected by the social characteristics of its participants as well as by the varied pressures imposed by its environment*" (Scott 2001; 23). Over time organizations are transformed into institutions, they are "*infused with value*" (Selznick 1957; 17) and become institutionalized.

When an organization becomes institutionalized, it is no longer merely a tool or an instrument used to reach a specific goal. It becomes rather an establishment in which its members wish to see protected. Values, goals, and social rules develop, and the organization evolves from being an instrumental matter to something that the participants fight for to keep alive. In other words, the organizations original goal which was something instrumental, changes when the organization becomes an institution and the organizational procedures become valued as ends in themselves. Selznick has also treated the institutionalization process as a variable, and concludes that "*organizations with more precisely defined goals or with better developed technologies are less subject to institutionalization than those with diffuse goals and weak technologies*" (Scott 2001; 24).

Selznick's approach sees the natural history of an organization as an important factor, and treats the organization as an organic system. They develop over time, and so do their procedures, structures and capabilities. Selznick himself studied the Tennessee Valley Authority (TVA)[12], which was established in the late 1930s to control flooding, manufacture fertilizer, increase the utility of waterways, build dams, and produce power. The TVA was also meant to develop new recreation areas, preserve forests, and to help farmers, particularly the poor ones. Selznick's study focused on the organization and its development, and showed how its original goals and structures changed according to the level of commitment of its members and the requirements stated by its environment (Selznick 1949). The study is still considered a milestone in institutional and organizational theory, as it empirically showed that "*its doctrine of grass-roots involvement and control in the recreation, forestation, and farming programs led to powerful local and national interests achieving control of the agency and subverting these goals*" (Perrow [1972] 1986; 160).

[11] Selznick, Philip 1948, "Foundations of the Theory of Organization.". American Sociological Review 13:25-35.
[12] Selznick 1949, *TVA and the Grass Roots.*

2.2 The concept of identity

The institutional perspective sees the organization as a source for identity, and the logic of appropriateness is related to how it is expected and considered appropriate for someone of a certain identity to behave in a certain situation. Identity can in this context be defined as "*people's source of meaning and experience*" (Castells 2004; 6), or a "*conception of self organized into rules for matching action to situations*" (March 1994; 61). The pursuit of appropriateness can, however, be difficult when considering the possibility of multiple identities. March (1994) sums this up quite comprehensively when saying that "*A decision maker is a parent as well as a police officer, a friend as well as a physician, a lover as well as a woman. (…) An individual is likely to have sets of diverse self-images, which shift and alter as the context shifts.*" (Ibid; 68/69).

What is not address is how these multiple identities are formed and enacted. Nor is it specified how these identities can cause tension in organizations and, in the specific context of this study, to safety work. The notion of available self-images shifting and altering according to the context is a key argument; what happens when two or more identities can be enacted in the same context? This is an aspect already identified by March: "*If every situation evoked one and only one identity and every idetity evoked one and only one rule, rule-based decision making would be more routine than it is. Situations often evoke several identities or several rules. Sometimes there is clear conflict between the demands of alternative identities. When national interest conflict with class interests, a worker may have a problem. When the demands of work roles conflict with the demands of family roles, a family member may have a problem.*" (Ibid;74)

Furthermore, what happens when one's surroundings change? A normal assumption within the field of organizational theory is that structural changes affects identity and behavior. This assumption seems to belong in a rationalistic perspective, where one could expect identities changing according to the surroundings. If the identities and behavior do not change in accordance with the structure, one can assume that the premises for the structural change were unsatisfying. From a more institutionalistic perspective, one can imagine the surroundings and identities having a mutual effect on each other, and that changes in surroundings are effected by, and have an effect on, the available identities: "*The idea that individuals, institutions, and*

their environments adapt to each other is central to many modern theories of behavior." (Ibid; 77).

This study is on organizational safety in multinational organizations operating in the oil and gas industry in Norway. Basically, we are interested in what it is that makes some behavior appropriate and some inappropriate, or some behavior rational and some irrational in this context, to further formulate expectations to the challenges of safety work in multinational organizations. The first challenge is to identify the possible identities in the specific organization, to subsequently develop an understanding of the different conceptions of appropriateness available in the organization.

Three different possible identities are important to include in the discussion. Firstly, this is an organizational study, and it is the appropriateness available in a specific organization that is interesting. The organizational identity, being a member of the specific organization, is thus the main focus of this study. There are, however, other identities that can be thought to be in effect within the organization and have an influence on the conceptions of appropriateness. The multinationality of the context of this study makes the concept of nationality highly relevant. Does being a Norwegian (or an American or a German) affect those decisions related to safety? If so, the nationality in this sense has to be discussed further in relation with the specific industry. The rise and development of the Norwegian oil and gas industry has since the early 1960s been quite a social adventure. From the very start, this industry has been influenced by multinationality, new technology, and an enormous growth, and a special industrial culture has emerged. When studying organizational identities in the Norwegian oil and gas industry the industrial culture is an important contribution, and it must be included to obtain a satisfactory understanding of the social patterns in the industry. If the national identity does play a role in decision-making processes, how "Norwegian" can we expect these identities to be, considering the multinationality within the industry?

2.2.1 The concept of culture

Culture is a widely discussed topic within organizational theory, and the concept is an important contribution when studying organizational behavior. It is often assumed that culture affects behavior, and subsequently it becomes attractive for the organization to participate in creating and shaping the culture. Ever since the Chernobyl accident in 1986 the term "safety

culture" has been used to explain the part of the social interaction patterns which has an effect on the level of risk in the organization, and it is believed that a "healthy safety culture" is important to obtain and maintain the safety in an organization[13]. This presupposes that the organization can affect the culture that subsequently affects the behavior of the organization's members. In the context of this study, culture is seen as having an affect on human behavior through being a molder of identity and a definer of appropriateness. Remembering the concept of bounded rationality, we must keep in mind that culture is not the only factor affecting behavior. Managing to control the culture in an organization does not imply that all actions, and the consequences of these, can be predicted. One is merely one step closer to a goal far, far away.

Including culture in the discussions can help understand those factors that are not possible to operationalize on an organizational level, and to better comprehend the societal and cultural influences on human action. It can thus contribute in the discussions on rationality; the institutional logic of appropriateness and the rational concept of utility are both subject to cultural influence. The cultural dimension can further contribute in the discussions on the limits of safety work, and to illustrate the boundaries of behavior modification. Culture will in this section be related to identities, and three different identities have already been suggested as important contributors when studying safety in this context; the organizational, national, and industrial identities.

Edgar Schein's definition of organizational culture is probably the most cited. He defines it as a pattern of basic assumptions which are shared by members of an organization and which operate unconsciously. These patterns of assumptions are taken for granted and are based on the organization's view of itself and its environment (Shein 1987). Organizational culture is in other words a very wide concept which, in this context, is important to include when analyzing the premises for human behavior. When becoming a member of an organization one takes on a new identity; being hired by Norske Shell means becoming a "Shell person". With that identity come new social rules for behavior and new considerations of appropriateness. One becomes part of an enormous whole and subordinate to a culture that has developed and evolved since the very start of the organization's history. A special characteristic of the major oil companies is the degree of multinationality that exists within

[13] The term "safety culture" was first introduced by the International Nuclear Safety Advisory Group (INSAG) following the Chernobyl meltdown.

the same organization. National identity and culture is a widely debated topic in the discussions on decision-making in organizations. The context of this study makes national culture and identity highly relevant and an important contribution to the discussions.

National culture can be defined as those basic values, norms and perceptions of realities which are learned early in one's childhood, and which separates one group of people from another. Hofstede (2005) sees national culture as *the software of the mind*, like some kind of mental programming[14] (Hofstede 2005; 3). National culture shapes the day-to-day life and sets the definition of what is considered "normal", not unlike the institutional concept of considering something "appropriate". Several studies show that not only do differences between national cultures exist; they can also some times become challenging obstacles when there is human interaction across cultures (Schuler & Rogovsky 1998).

National culture and its impact on organizations is, as already mentioned, a widely debated topic within the organization theoretical field. The national level within the cultural field is considered to influence "lower" cultural levels, e.g. organizational culture, and is thus considered very important in this context. The national culture debate is enormous, and some restrictions have to be made. I have chosen to base my discussions on national culture on what probably is the most empirical and applicable study, namely the one conducted by Geert Hofstede[15]. Hofstede collected and analyzed data from over 100,000 individuals within the IBM organization, from more than 50 different countries. Hofstede's massive sample size makes his study a rarity in international business research. From this study Hofstede has identified and developed four[16] different dimensions to differentiate cultures: individualism (the degree of interpersonal, social connectedness), power distance (the degree to which differences in wealth and status are accepted and expected), femininity (the degree to which achievement and aggression are valued), and uncertainty avoidance (the degree of comfort

[14] He specifically differs between the human being from the computer, by stating that even though the person is "programmed" to have certain basic assumptions of reality, he still has the ability to act differently than what is expected.
[15] There is a clear methodological challenge when using Hofstede's data in a study like this; Hofstede's theory is a comparative theory, based on a large survey sample from more than 50 countries. Only a small number of countries are relevant to this study, but Hofstede's frameworks are still relevant and desirable to include. Hofstede's comparative theory is thus to be transformed into a process theory, which can be used as an additional mechanism to understand those cultural differences that are relevant in the case of this study and to formulate expectations about the case at hand.
[16] Hofstede later added a fifth dimension regarding time orientation.

with the unknown)[17] (Hofstede 2005). Hofstede's data can contribute in making some assumptions about the degree to which different national identities can be found and be thought to create tension in an organization.

Hofstede's study has several features that have been widely criticized. What needs to be addressed in this context is how he keeps his variables constant and how his study only captures one organization in one industry. I promote a more dynamic cultural concept than that. Also, Hofstede's concept of national culture can be compared with what I promote as an industrial culture, as something that exists within the national culture and that can has a mutual effectual relation with national culture.

The data Hofstede's has collected shows the Norwegian national culture as characterized by low power distance, medium individuality, a very high degree of femininity, and medium uncertainty avoidance. A question evolves regarding to which degree the oil and gas industry and the culture, morals, values, and social rules found there correspond with those found in the elsewhere in the Norwegian society. The history of the Norwegian oil and gas industry has been briefly presented in chapter 1, and there is reason to consider and acknowledge a modified version of the "Norwegian" culture when only studying the specific industry. Industrial culture is far from as popular and debated a topic as organizational and national culture, but the very special story of the growth of a new industry in Norway does stand out as a major contribution when analyzing the organizational cultures within this industry. Industrial culture is in this context defined as a culture that is specific within an industry.

The historical development of the Norwegian continental shelf comes with certain implications; the Americans were first in charge and brought along their old customs and workplace culture, in what Smith-Solbakken (1997) refers to as the regional encounter. The Norwegians over the leading positions, and modified the social rules and norms. Then, in what Smith-Solbakken calls the industrial encounter, workers from all over the world came to work on the industrial expansion. The Norwegian oil and gas industry is in other words characterized by a cultural diversity, along with a gradual long-term "Norwegianization", and

[17] The choice of words is in this context pretty unfortunate. The uncertainty and risk that Hofstede deals are not linked to the safety context, but to a cultural context describing how people handle situations in which they are not certain.

the culture found in the workplaces in the industry is thus not necessarily identical to the Norwegian national culture in general.

The industrial culture depicted here is in many ways similar to Hofstede's cultural concept, as he only focuses on one organization in one industry. However, since Hofstede's study captures the differences across national borders, the concepts can be treated differently. The industrial culture can be treated as as something underlying the national culture, but at the same time as something that influences the national culture. The Norwegian oil and gas industry has such a special history and has developed under such unique circumstances that the Norwegian national culture just does not suffice when studying the culture that exists in organizations operating in this industry. The industrial culture is thus applied here to modify those aspects of the national culture that are thought to influence the organizational culture, by moderating the Norwegian characteristics and including the multinational, especially the American, influence on the industry. The Norwegian culture is still considered Norwegian, but the Norwegian oil and gas industry has never been (and probably will never be) entirely Norwegian. The Norwegian people, including those working in the oil and gas industry, are however still Norwegian, and the Norwegian national culture as depicted by Hofstede is still considered important in this context. In the same way, the cultural origins of the multinational organizations become important; although the organizations are multinational and operate at a global level, one can still assume that the organization is influenced by its origin, as well as the geographical location of its headquarters. Hofstede's data are, therefore, considered applicable and relevant. The cultural concept of this study is treated as a hybrid between organizational, national, and industrial culture, where all three cultural aspects are seen as having an influence on the others.

The concepts of identity and culture must be treated as pluralistic and dynamic concepts. There are no rights and wrongs, nor are there recipes for handling the concepts at an operational level. The national level is, in this context, seen as the superior level, but is not at all sufficient when explaining behavior and choices. This is better seen when introducing the industrial level; a brain surgeon in Japan might have more in common with a brain surgeon from Denmark than he would with a teacher from his own country. Likewise, if industrial identities and cultures can exist within the national level, we must presume that sub-levels can exist with the industrial level. A roughneck from Shell will probably have more in common with a roughneck from ConocoPhillips than a financial manager from his own organization.

In other words, the cultural concept and the concept of identity must be treated dynamically and pluralistically, and should not be seen as the only effectual factors to predicting and shaping behavior.

2.3 Theories on organizational safety

"*Organizations cannot train for unimagined, highly dangerous, or politically unpalatable operations.*" (Sagan 1993; 46)

In the world of safety in the highly complex industry of oil and gas, and in immense organizations consisting of a tightly coupled system involving enormous numbers of individuals, the presence of a discussion on competing perspectives on organizational safety is necessary. Regarding the topic of safety practices, safety regulations, and behavioral specifications, this is highly relevant. Why do these practices actually exist? What kind of thoughts and assumptions are they based on? Do they actually work? And maybe the most interesting question of them all, do the organizations actually believe that their own practices will rise to the occasion and solve their safety problems?

I will below present two opposing theories on accidents and organizational safety; the Normal Accidents Theory and the theory on High Reliability Organizations. Whereas the previously discussed perspectives on organizations are universal theories, focusing on the general decision-making processes and managerial sides of the organization, these theories on organizational safety discuss a much more specified and narrow side of the organization. We are no longer discussing general decision-making and managerial techniques, but those decision-making processes and techniques that are related to safety. We will however see similarities between the logics behind the two different theoretical fields. The two theories on organizational safety will be presented before a discussion on the different aspects is appropriate.

2.3.1 Normal Accidents Theory (NAT)

Charles Perrow published his book *Normal Accidents, Living With High-Risk Technologies* in 1984. This book presented what has subsequently come to be known as the Normal Accident Theory. Some would say that this theory breaks with the more traditional rational way to

understand accidents, by being based on a more institutional view on organizations. NAT is basically a very pessimistic theory, or at least its conclusions seem pessimistic, stating that "*the belief that intelligent design and management will result in complex organizations that are capable of safely operating hazardous technology is an illusion*" (Sagan 1993; 28). Accidents are seen as inevitable and, although they occur rarely, they will, nevertheless, occur. NAT can be seen as an institutional theory because it states that not all human actions are based on rational choices. Or, even more precisely, that not all human action can be explained by human rationality. NAT addresses the possibility of human failure. The consequences of these failures are, however, dependent on the surroundings.

Perrow's classification of surroundings leads to a paradoxical result. He makes two basic structural differentiations; firstly between complex and linear systems, and secondly between tight and loose couplings.

A system's complexity is a measure of the manner in which its parts are connected and interact or, as stated by Perrow, "*complex interactions are those of unfamiliar sequences, or unplanned and unexpected sequences, and either not visible or not immediately comprehensible*" (Perrow 1999; 78). Complex systems meet their opposites in linear systems, which are "*those in expected and familiar production or maintenance sequence, and those that are quite visible even if unplanned*" (Ibid; 78). Complexity in a system is thought to produce bizarre and unanticipated failures.

Whereas a system's complexity increases the chances of unusual and dangerous incidents, Perrow's second structural category of tight vs. loose coupling will influence whether or not the incident will escalate into an accident. A tightly coupled system decreases the organization's "*ability to recover from small-scale failures before they cascade into larger problems*" (Sagan 1993; 34).

Further, Perrow states that tightly coupled systems should be centralized, to obtain "*unquestioned obedience and immediate response*" (Perrow 1999; 332). For loosely couple systems, decentralization is preferable, as it "*allows people to devise indigenous substitutions and alternative paths*" (Ibid). Linear systems are most compatible with centralization, since interactions are visible and surprises rarely happen. Complex systems should be decentralized, "*to cope with unplanned interactions of failures (careful slow search by those closest to*

subsystems)" (Ibid). This means that there are two categories which are incompatible; linear systems with loose coupling, and complex systems with tight coupling. The first (linear system with loose coupling) is not the one to focus on, as in this category both centralization and decentralization is possible. The last category (complex system with tight coupling) is the main concern of NAT. This category has two opposing demands. In complex and tightly coupled systems, regular human mistakes and failures can evolve to create major accidents. In order to reduce the probability for an accident to happen one needs to decrease the complexity, the coupling, or even both. Oil companies would fall under this category[18].

2.3.2 High Reliability Organizations Theory (HROT)

HROT is an opposing theory to NAT, with much more positive conclusions. HROT scholars "*are in essential agreement with the professional risk analysts and engineers who build these systems: serious accidents with hazardous technologies can be prevented through intelligent organizational design and management*" (Sagan 1993; 14). The intelligent organizational design and management includes several specific characteristics. These have been split into four different categories by Scott Sagan. This categorization is probably one of the most comprehendible and will therefore be used here. A discussion on the different aspects of the theory will follow after it is presented.

Leadership safety objectives is the first category. This addresses the notion that a high reliability organization needs to hold extreme reliability and safety as a top priority. Not only does this include the organization's management, but also political leaders. Safety requires huge resources, also economically, and it is not an organizational aspect which can compete with other organizational goals and priorities.

Secondly, the HROs have a need for redundancy, this meaning that there are elements in the organization which are repeated or duplicated, so that if one part fails, another takes over. Human beings are not perfectly rational robots, and thus redundancy is needed. Redundancy

[18] This is dependent on the perspective chosen when considering the oil company. What happens onshore is not comparable with the offshore operations, and the offshore parts of the oil company are obviously more complex, tightly coupled, and more exposed and vulnerable to risk. The offshore operations are however connected to the onshore activities, and what happens in the office buildings in Stavanger does in fact affect the work offshore. When stating that oil companies fall under Perrow's category of tight coupling and high interactive complexity I have chosen to consider the oil company as a whole.

is needed not only in personnel, but also in the systems and technologies. The combination of multiple and independent paths of decision-making, communication, and implementation can create a system which is highly reliable.

The third category focuses on three aspects; decentralization, culture, and continuity. One can choose to label the category differently – e.g. "operational management systems", or one can choose to treat the three parts individually. In any event, the three aspects do need to be seen somewhat together. HROT implies that decision-making authority should be decentralized. This is to permit the individuals closest to the problems at hand to respond rapidly and appropriately when dangers occur. As dangers often occur where there is no organizational or procedural rules and regulations, a strong organizational culture becomes vital. The organization culture should emphasize reliability and safety, thus ensuring that lower-level personnel behave according to the wishes of the organization and of the management. A strong culture should thereby ensure that all personnel, even when acting independently, make operational decisions which are met with approval. Maintaining continuous operations and training is the third element of the operational management factors which can contribute to success in high risk organizations. The combination of routine procedures, stability, lack of variety and challenges can all lead an organization into a state of relaxation. This situation can then cause careless behavior. Therefore, a continuous process of on-the-job training improvements and frequent and realistic simulations of dangerous incidents should help contribute to safety.

The last category deals with organizational learning. An HRO needs to have a strong capability to learn. Some activities promote safety, and some do not. It is therefore important that the organization manages to learn from its processes, and that it adjusts its routines and procedures over time. Simulation and anticipation are often used as a supplement to the organizational learning processes. (Sagan 1993)

2.4 Linking rationality and safety – institutions and accidents

When the theories on organizational safety and the institutional theory are revised, it should be possible to connect the different theoretical directions. Institutional theory becomes important in this context as it explains different perspectives on what lies behind human

action, and because the theories on organizational safety take the general logics behind the universal theories on rationality down to a specified organizational field.

Both the NAT and HROT perspectives acknowledge the inevitability of human error, and the major difference between the two different schools lies in the expected capabilities of the organization; while Perrow says that the organization cannot train for unexpected situations and therefore cannot compensate for the errors made, the HROT scholars state that the organization can prevent accidents through intelligent systems and designs. This can be compared with the differences between Selznick's and Simon's views on the organization; while the organization in Simon's perspective makes its participants more rational and compensates for their errors, Selznick sees the organization as a natural system with an organic evolution which not always can be predicted and anticipated. Selznick's view is therefore similar to that of Perrow in his theory on normal accidents, while Simon's perspective can be compared to the HROT scholars' view. The main difference still lies in the capabilities of the organization.

I would like to make two different distinctions in both the institutional theories and the theories on organizational safety. First of all, I would like to promote that a clear distinction is made between the rational and institutional view on organizations. Within the institutional view are Simon's and Selznick's perspectives. Simon is, as mentioned earlier, usually placed in the rational category, but as his theory acknowledges that not all human action is based on calculated choice, he is in this context placed on the institutional side of the continuum. Within the rational view are the rational choice theorists, who are content with the perspectives on all action as rational and calculative. In the same manner, I would like to make a distinction in the row of organizational safety theories, where the first distinction is to be made between those who do and those who do not acknowledge that human errors are inevitable. NAT and HROT are placed on the same side of the fracture (for now), as they both do acknowledge and, to some degree, expect human error. James Reason (2000) makes a distinction between the person approach and the system approach; where "*[t]he person approach focuses on the errors of individuals, blaming them for forgetfulness, inattention, or moral weakness*" (Reason 2000; 768) and the system approach "*concentrates on the conditions under which individuals work and tries to build defences to avert errors or mitigate their effects*" (Ibid; 768). The person approach seeks to eliminate the unsafe acts, while the system approach rather focuses on the frames of which actions take place. Safety

climate theorists[19] can probably successfully be placed on the person approach side of the distinction, on the same side as the rational choice theorists, as these cling to the belief that human action can be altered to eliminate the possibility of error. The uncertainty factor is hard to explain in this perspective, as everything can potentially be planned. Innovation and technological development should, therefore, not be discussed quite yet.

On the systems side of the distinction we can find HROT and NAT, and all other organizational safety theories that acknowledge the human fallibility. Before discussing this side in relation with safety practices, another distinction must be made. This distinction is the one briefly mentioned above, the one separating NAT from HROT and Selznick from Simon. This distinction is on the capabilities of the organization. The HRO theorists and Simon have in common the belief that the organization can compensate for the flawed human. These can be categorized as the *rational institutionalists*. Safety culture theorists can also be placed in this category[20]. Perrow's NAT and Selznick are placed on the other side of this fracture, and can be labelled as the *institutionalists*. They both have an evolutionary view on the organization, and argue that since the organization and its surroundings is subject to continuous change, it can never be certain that it compensates for its participants' shortcomings. Redundant mechanisms, smart organizational designs, and uniform organization cultures are not necessarily solutions, and one can, therefore, never guarantee that an operation is "safe".

Here we have three different categories within institutional theory and theory on organizational safety. All categories have their challenges when seen in connection with behavioral safety work. The first category, which can be labelled as the *rationalists*, includes the rational choice theorists and the safety climate theorists. These theorists promote the human rationality and calculative actions. The person will pursue which ever option he sees most effective in maximizing his own utility, and the organization can use this notion to its own advantage. As Dov Zohar discusses in his article "The Effects of Leadership Dimensions, Safety Climate, and Assigned Priorities on Minor Injuries in Work Groups", it is important to identify the needs and wishes of the employees in order to create a reward system that is beneficial to the safety climate in the organization. "*Constructive leadership (i.e., the contingent-reward dimension) implies an intermediate level of concern for members' welfare*

[19] See D.R. Denison 1996, D. Zohar 2002.
[20] See J. Reason 1997, D. Vaughan 1996, K. Haukelid 2001.

because, although it is hierarchically-based (i.e., reward-for-effort exchanges), leaders must identify needs, desires, and individual capabilities in order to offer motivationally relevant rewards" (Bass, 1990 and Yukl, 1998, in Zohar 2002; 4). This argument shows the management as super-rational, while the workers are followers in need of being organized. The rational limitations are in this perspective reserved for the workers, and seemingly the management is rational enough to both identify those factors that motivate the workers to act in a certain way, and also to identify areas of risk and the appropriate behavior that helps eliminate the risk. Zohar concludes with a similar argument; "*This implies a supervision-based safety model whose basic proposition is that behavioral safety depends on performance reliability, engendered by close monitoring and provision of contingent consequences (i.e., reward/punishment)"* (Ibid; 89). If the organization's leaders manage to identify the needs and desires of their employees and use these in the development of a reward/punishment system, it is thought to result in a positive safety climate.

The scholars in the second category, the rational institutionalists, believe that the organization can compensate for the human fallibility, and that accidents can be prevented through intelligent organizational design. As opposed to the first category, the scholars in this category do not present the leadership as more rational than the other workers. The organization is not a tool for the management to lead the workers. The organization is seen more as a means in which all members together can act more rationally. In the perspective of the rational institutionalists the behavioral safety practices seem logical; they reduce the potentiality of errors by giving behavioral guidelines. The system (the organization) creates the frames (guidelines) for human behavior, and thus decreases the potential for unsafe acts. The practices are part of the intelligent organizational design, and the behavioral rules are there to compensate for the human's lack of knowledge. By creating a massive set of procedural guidelines and behavioral rules the organization is thought to create a uniform culture that helps the members behave in a manner which is according to the management's wishes, and that promotes safety and reliability. Something is indeed super-rational in this perspective also; the organization is thought to identify and create appropriate behavioral guidelines and thus reduce the potential for unsafe acts. The management is considered as limited as the rest of the workers (in the rationality sense, at least), and the super-rationality now belongs with the organization[21].

[21] Again I must comment on the categorization of Simon as a rational institutionalist. He is, by many, considered to belong on the rational side of the continuum, and many see his super-rationality placed

The scholars in the third category, the institutionalists, are not as hopeful towards the organization's capabilities to cover for its members' imperfections. In an extreme version of the institutionalistic perspective behavioral safety practices seem meaningless. Accidents are inevitable and, since no one can predict how the organization, its surroundings, and its technologies will develop, no one can design a safety practice that can work as planned. Extremities are, however, quite pointless. Safety practices should not be meaningless in a NAT perspective - the main point being that no matter how large the number of practices and the depth of these, they will never suffice. There will always occur unforeseen situations that cannot be prepared for, and there will always be uncertainty involved when dealing with high technology. The interesting question is therefore related to the possibility of too much safety focus, in the sense of a high number of different practices creating a higher degree of organizational complexity and thereby working against its own purpose. However ironic it may seem, it is not too out of line. The uncertainty involved in the naturally evolving future does in this perspective exclude any super-rational levels; even super-rationality cannot predict and prepare for unforeseen situations.

I will proceed to discuss what is to be considered the two main perspectives of this thesis, namely the two different institutional perspectives.

2.5 NAT and HROT – a closer examination and critique of the theories

As the two different perspectives within the theories on organizational safety have been presented, they do indeed deserve a closer examination and a more elaborate discussion. This is done in connection with the institutional theories presented above.

The two theories on organizational safety are fundamentally different, as they involve different levels of the organization. Perrow's NAT focuses on the physical characteristics of the organization while the HRO theorists have a focus on the internal dynamics and processes. They do however share a mutual vocabulary and they both make a distinction between the person and its surroundings. The theories offer very different (and sometimes opposing) solutions to accident prevention and they differ widely in their acknowledgement of the

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with the management. My perspective is based on his acknowledgement of human fallibility and his belief that the organization can compensate for its members' flaws.

difficulties involved. They also hold opposing views in their beliefs in the organization's capabilities to compensate for human flaws. Below follows a discussion on both theories.

2.5.1 Normal Accidents Theory – discussion

Perrow has identified and presented two different organizational characteristics that he claims together determine an organization's susceptibility to accidents – interactive complexity and tight coupling. This identification has been recognized as a contribution to understanding accidents, and Perrow's top-down system approach has been credited (Marais et al. 2004). However, the theory is often criticized for being overly pessimistic. This criticism is not necessarily appropriate – NAT seems to me to be more realistic than pessimistic, as Perrow acknowledges the uncertainty factor as something which cannot be anticipated and prepared for. HROT on the other hand does not treat uncertainty in a serious manner, as part of the HROT scholars' recipe to a safe organization is the ability to anticipate – "*Technical operations are treated as if they can be almost fully known, as if surprises and contingencies can be either eliminated or anticipated*" (LaPorte and Consolini 1991; 24). If a surprise is anticipated, is it still a surprise?

Some criticism to Perrow's theory is, however, in order. Firstly, one of Perrow's main arguments is that the historical development cannot tell us anything about future uncertainty. This does seem a bit overdramatized, as not all situations are subject to vast change over time and the uncertainty connected with these situations can remain stable. Organizational learning is one of the HROT scholars' main suggestions to obtain a reliable system, an argument that somewhat opposes to Perrow's view. In high-technological industries, where the technology changes continuously, it is difficult to trust the lessons learned from earlier episodes, and this is Perrow's basic assumption in this context. Where the technology remains stable over time, yesterday's lessons can however be valid today, and maybe even tomorrow. Perrow's argument is based on another aspect of NAT that can be criticized; the distinction between the person and its surroundings. In his theory Perrow considers the person as a dependent variable, as something constant. Its surroundings are treated as the independent variable and it is these that have the quality of being complex. This distinction between the person and its surroundings must be subject to criticism as, according to this way of thinking, it is only the physical characteristics of the organization that can be altered to promote safety. In other words, if the organizational frames are not changed, we can expect accidents to occur.

Perrow's distinction between the person and its surroundings brings forth another problematic aspect; if the person is to be held constant in surroundings possible to alter, how does one handle the concept of multiple and shifting identities? Does this mean that organizational strategies and recipes can be copied from one place to another without being affected by the internal dynamics of the person? Would a perfect American organizational design be as perfect in an equivalent organization in Norway? Many studies conclude otherwise[22]. Treating the person as a constant can not be considered satisfactory.

Finally it seems like Perrow has a political agenda with his book, even though it is considered a major theoretical contribution within the accident literature field. He focuses solely on organizations where accidents with disastrous consequences can occur, e.g. nuclear power plants and biotechnology. His conclusions are that organizations with potentially catastrophic outcomes must be liquidated. His theory thus loses its relevance when discussing "normal" accidents (ironic enough, considering the name of the theory). This brings us back to the first point of criticism towards Perrow's NAT – about how he argues that history cannot reveal the future. As Perrow focuses on catastrophes and major accidents his argument becomes easier to accept; accidents of this scale occur very seldom, and the disasters are usually very different in cause and circumstance. Whether or not Perrow is rightly criticized for being overly negative towards learning through experience is dependent on the relation between small-scale and large-scale accidents. In the case of Perrow's NAT, the perspective chosen on accident causation is relevant. If the accident pyramid and iceberg metaphor mentioned above are correct, then the criticism towards Perrow is appropriate. If the accident pyramid and iceberg metaphor are incorrect, then Perrow's theory should not be subject to criticism on that argument.

As discussed above, this thesis considers the oil company as a whole, and as a complex and tightly coupled system that is susceptible to disastrous accidents. NAT is therefore considered an important theory in this context.

[22] See Kedia and Bhagat 1998, Bhagat, Kedia, Harveston, and Triandis 2002, Kostova 1999.

2.5.2 High Reliability Organization Theory - discussion

How is a high reliability organization identified and defined? Karlene Robert, one of the main researchers associated with high reliability organization theory says that "*one can identify this subset by answering the question, "how many times could this organization have failed resulting in catastrophic consequences that it did not?" If the answer is on the order of tens of thousands of times, the organization is "high" reliability"* (Marais et al. 2004; 3). Marais et al. raise the highly appropriate question: if this is the case, and this is how one should define an HRO, where can one find a low reliability organization? An organization without that kind of safety record would not be allowed to proceed for very long. It would not be accepted. Frequency is the only way to compare organizations in terms of safety, "*to calculate accident rates based on particular activity over a common operational time period*" (Ibid; 3).

HRO theorists oppose Perrow's normal accident theory by stating that complex and tightly coupled systems can operate with very few accidents. This statement is based on studies of two aircraft carriers, US air traffic control, utility grid management, and fire fighting teams. Marais et al. (2004) point out the most obvious and important flaw in the HROT – the systems studied are neither complex nor tightly coupled, even according to their own descriptions[23].

Marais et al. identify an important factor in the element of uncertainty. Without having to deal with uncertainty, both technological, organizational, and social, safety work would be less of a challenge. First of all, technological uncertainty is a basic – "*In complex systems, particularly those operating at the edge of technical innovation, there are always many technical uncertainties that cannot be resolved as required for HROs*" (Ibid; 4). Most organizations which operate with high-tech systems have the problem of unresolved technical uncertainty. If one was to do as required for HROs, and eliminate and resolve all uncertainty before operation, most high-tech systems would have to be shut down. Furthermore, technical uncertainties do not only prevail within new technologies. The oil rigs and technical constructions in the North Sea were made with an expected duration. Several of these have already exceeded their expected lifespan, and many others are approaching their limits

[23]As stated by the HRO theorists themselves: *"HROs struggle with decisions in a context of nearly full knowledge of the technical aspects of operations in the face of recognized great hazard. (…) The people in these organizations know almost everything technical about what they are doing – and fear being lulled into supposing that they have prepared for any contingency. (…) This drive for operational predictability has resulted in relatively stable technical processes that have become quite well understood within each HRO.* (LaPorte & Consolini 1991; 29-30)

(Aldring og levetidsforlengelse. Ptil.no.). This raises new questions and new challenges. Old technology can, in that sense, be just as uncertain as the new and new problems can occur with old technology.

In addition to this, the different organizations need to take political and economical uncertainties into consideration. Most industries are subject to uncertain political and budgetary environments, and the organizations' goals and operations need to adapt to possible changes.

Four different organizational characteristics have been presented to explain the HRO theorists' suggestions to limit accidents and failures, and at the same time generate good performance results. The first characteristic is goal prioritization and consensus. This means that safety should be the organization's top prioritized goal, and there should be total consensus about this. This leads us back to the discussion on rational vs. institutional perspectives on the organization. Most organizations have a purpose, or a mission. No organization is founded only to operate safely. In a rational sense, this is a money-minded world, and it would not be too far off to front the notion of production and sales as being an organization's main mission. In a more institutional perspective, continued existence could be seen as the main goal – and this goal is of course to be seen in connection with more commercial goals; an organization that does not make money and cannot keep up with competition, will not survive very long. In the institutional perspective, safety could be treated as a main priority, but merely as one of many.

In an HRO view, the commercial goals are compatible with safety as main priority, but Marais et al. however point out that "*consensus on prioritization of conflicting goals may waver when a company is forced to choose between operational safety goals (i.e., activities that lower risk) and their organization's continued existence*" (Marais et al. 2004; 6). This brings forth an obvious link to the TQM wave[24]. In a TQM perspective, there need not be any incompatibility in interests – maximizing quality will render long-term economical benefits. In a more opposing economical view, one can discuss the diminishing marginal utility of safety work; the first measure implemented to increase safety might render great results and decrease the incident and accident numbers, the next measure might however not eliminate as

[24] Total Quality Management – a managerial paradigm that is based on the "*assumption that devoting resources to maximizing quality is less costly than poor workmanship*". (Manley 2000; 460)

high numbers of unwanted situations, etc. Even though the economical contributions to a safety programme are the same as with the previous programme implemented, the results can be less profitable. A third view, as in Perrow's NAT, is that increased efforts could lead to decreased safety. Safety should probably be top priority, in a perfect world, but it must be considered as something to combine with other existing goals, and one has to acknowledge both internal and external pressure on the organization's main mission as effective and important. This is, however, the main and most difficult challenge of organizations operating in high-tech industries. How does one manage this? How much risk should one be willing to take before shutting down operations? Difficult tradeoffs and decisions need to be made, and this shows that the HRO theorists' "black and white" perception on safety and reliability is not sufficient. Safety is a far more complex concept than that.

Redundancy is another organizational factor the HRO theorists see as a contributor to increased safety, Perrow's normal accident theory, on the contrary, states this being an element which in fact may reduce safety. He does acknowledge redundancy as a way to avoid accidents, but at the same time, sees it as a possible direct cause of accidents. In the HROT perspective it can seem appropriate to see redundancy as a way to reduce the limitations and boundaries of rationality (Simon 1965) – thinking that if sufficient redundant elements are working together, they can complement each other and reduce the overall limitations. The link between Selznick and Perrow becomes relevant again, as they see the organization as something evolutionary and thus cannot be sure to compensate for its participants' shortcomings. One reason why these two schools can differ so extensively is, once again, that the HROT is based on studies on systems which were neither complex nor tightly coupled. In relatively simple and loosely coupled systems redundancy can be an effective way of preventing failures and thus enhancing safety. In complex and tightly coupled systems redundancy may only contribute to increase the complexity, which clearly would not be optimal. Even if redundancy was an acknowledged remedy to the sickness that is safety, no one could guarantee that independent components will not fail simultaneously. One must also take into consideration the possibility that redundancy can lead to false reliance and overconfidence, and thereby result in dangerous decision making.

The third HRO category addresses centralization, culture, and continuity, and represents what probably can be summed up as the main difference between HROT and NAT. The issue of centralization is one of NAT's main concerns. A tightly coupled system is seen best fit with

centralization, and a complex system is thought to work best with decentralized decision-making authority. The HROT scholars agree on decentralization as the best solution. Decentralization is seen fit by both schools since it permits those nearest to the problem to make swift decisions, without having to go through the time consuming hierarchical steps when time is critical. Centralization is seen by Perrow to be appropriate in tightly coupled systems because to obtain "*unquestioned obedience and immediate response*" (Perrow 1999; 332), where the "*immediate response*" contradicts the opposing view. As Marais et al. point out, the "*interesting cases arise when decision-making is not time critical*" (Marais et al. 2004; 8). Does one expect decentralized decision-making when there is time for higher level involvement? If so, how is one sure that there is time enough?

The HROT scholars identify and acknowledge the concept of culture being relevant in the discussion on whether or not decentralization is the best way to go – where there is a good and uniform culture, the decisions made by persons anywhere in the organization's hierarchy should be according with the management's wishes. Decentralization is possible because the management can rely on their employees to act in accordance to their wishes (of course with the main goal being safety), and thus act reliably. This means that the decentralization proposed is a centralized form for decentralization; authority is decentralized, but because the factors affecting decision-making are centralized.

Culture becomes a very important variable; the level of decentralization possible is dependent on the strength and uniformity of the culture. The concept of culture is, however, not as easily structured and adopted as portrayed by this school of thought. Expecting a "good" culture to generate solely "safe" and "reliable" decisions is merely wishful thinking. In large organizations one should expect a good number of different sub-cultures, with possibly different views and goals. It is hard to trust that a mechanic discovering a fault will go through the same chain of thought as a financial manager, because of the uniform culture in the organization. The result might turn out the same, but different functions and professional groups are very likely to see the same problem with different eyes, and the methods used and questions asked might differ vastly. If the "culture" part of this argument is seen as "something that makes all members of the organization do their best in avoiding accidents", I suggest that "culture" is replaced with a more appropriate word, as perhaps, "common sense".

This part of the HROT is the main focus of this study. Considering the cultural diversity found in the industry, how do the HRO theorists expect the organizations to go forth in creating such a culture? Is it possible at all to create cultural uniformity in major multinational organizations?

The last organizational characteristic which should be devoted to is the one regarding organizational learning. HRO theorists claim that "*HROs try to maximize learning from accidents, incidents, and near misses [,but] while it is difficult to argue against learning from mistakes, the costs of implementing effective organizational learning are high and the problems of competition for resources arises again*" (Marais et al. 2004; 9). Especially in high-tech industries, where the technology is in constant evolvement, learning becomes difficult. The lessons learned from an accident, incident, or near miss are quickly outdated. New technology demands new learning, which is paradoxical in an HRO view. For learning to be possible and effective, one should make sure that the technology remains constant (which is,of course, unrealistic). As discussed above, Perrow has an opposing view on organizational learning – he does not agree with the HROT scholars on the organizations' abilities to learn in a constantly evolving technological industry. Once again, the links between Selznick's perspective on organizations and Perrow's arguments can be mentioned.

2.6 The phenomenon of safety – what is there to understand?

After categorizing the organizational safety theories with the different perspectives on organization we are left with a major question; what in the world does this imply for the safety phenomenon? One implication is that three fundamentally different views on what safety is can, and do, exist simultaneously, ranging from the rational consequential logic to the institutional and more organic logic.

Understanding the concept of risk is a complicated matter, and there are many studies conducted whose sole mission is trying to depict a universal understanding of it. Attempting at that discussion here is highly ambitious, but at the same time necessary before I can proceed to comment on the existing understandings of safety practices. I will focus on the risk understanding in the oil and gas industry.

Two prevailing metaphors are used within the risk understanding discourse on the Norwegian continental shelf. First, we have the accident pyramid, a theory stating that there is a relation between unsafe acts, incidents, and accidents. The theory was originally published by H.W. Heinrich in 1931, in his book *Industrial Accident Prevention: A Scientific Approach*. The theory illustrates one perspective on accident causation: unsafe acts lead to minor injuries and, over time, to major injury. The pyramid metaphor proposes there are 29 minor injuries and one major injury for every 300 unsafe acts[25]. If we reduce the number of unsafe acts we will also reduce the probability for accidents. Second, we have the iceberg metaphor, a comparison between safety work and a floating iceberg; even though the iceberg seems small when looking at the part above water, most of the ice is located under water and not visible to the "untrained eye". The theory is that safety works in similar ways – most unwanted situations and unsafe acts, etc. are located invisibly under the surface, while the less frequent incidents and accidents are visible to all. Reducing what lies under the surface is in this line of thought the way to reduce what lies above the surface.[26] Both metaphors are based on a correlation between incidents and accidents.

2.7 Closing remarks

In this chapter I have discussed different perspectives on organizations. I have presented some universal theories on the logics behind decision-making processes, and I have classified these as either rational or institutional theories. As mentioned earlier, not all categorizations are uncontroversial. I have deliberately placed Herbert Simon in the institutional category, as he does acknowledge that not all human action is based on calculative rationality. I do, however, realize that labelling Simon as an institutionalist is quite controversial. Although I have placed him on the institutional side of the continuum, he is still placed on the border to the rationalist side.

After the different perspectives on organizations were presented, I proceeded with the presentation of the more context specific theories; firstly, the introduction of the concepts of identity and culture, then the presentation of the theories on organizational safety. The theories on organizational safety show the different logics when studying accidents and risk,

[25] This theory is of course highly controversial, and seems to be more and more outdated in today's risk understanding. See Manuele 2003.
[26] See Haukelid 2007, Heinrich 1931.

and this chapter has shown how the logics behind the theories on organizational safety correspond with those behind the more universal theories on decision-making in organizations. Three different categories have been proposed; the rationalists, the rational institutionalists, and the institutionalists.

The rationalists promote the notion of human action being based on calculative rationality, and the rational choice theorists have been placed in this category along with the safety climate theorists. The leaders and managers become super-rational in this perspective, as they are thought to possess the ability to identify and define those criteria necessary to obtain the wanted results from their employees' actions. The rational institutionalists acknowledge the limits of the human rationality, and place the super-rationality with the organization. The organization is thought to be the solution to the human fallibility, and through intelligent organizational design one can control human action and subsequently prevent unwanted acts and outcomes, like accidents. The institutionalists avoid super-rationality as they promote the uncertainty of the unknown future and the evolutionary development of the organization. Accidents can never be fully prevented, but some measures are, at the same time, proposed to reduce the frequency and consequences of unwanted situations.

The theoretical reviews and discussions and the above categorizations should now be used to discuss the implications and expectations to the empirical parts of this study. The supposition that three different logics are in action in the current safety work in the industry implies possible conflict areas. The focus will stay on the possibility of creating a uniform culture, and whether or not such a culture will enhance organizational safety. I will proceed with a research design chapter, where the case of the study will be presented and argued for.

Chapter 3 – Research Design

"*I don't claim to be a methodologist, but I act like one only because I do methodology to protect myself from crazy methodologists.*"[27]

3.1 Introduction

To carry out a study like this one needs to make some decisions regarding methodology. The methodology in a research project makes up the connecting link between the theoretical input and the empirical findings. I would like for the study to have a qualitative design, and have a deeper (rather than broader) focus on the research. I plan to focus on one single organization. This may decrease the generalizability across the industry as a whole, but at the same time increases the representativeness within the organization.

This thesis is mainly a case study of Norske Shell and the safety work performed there. I do however discuss the possibility that Norske Shell does not differ from the rest of the industry, and whether or not the thesis is subsequently just as much an analysis of the current safety situation in the Norwegian oil and gas industry as a case study.

The purpose of this chapter is present the case of the study and explain the methodological choices made along the way. I will argue for the choice of case and formulate expectations to the data collected. I will proceed to give a picture of the qualitative data collection process. The last part of this chapter will introduce the data and present the analysis.

3.2 Qualitative case design

A case design involves "*the description of an ongoing event (e.g. organizational change) in relation to a particular outcome of interest (e.g. strategies of coping) over a fixed time in the "here-and-now""* (Brewerton and Millward 2001; 53). Advantages by using case design in a study include the ability to collect a lot of data and knowledge on a topic of research, and to

[27] Howard G. "Ward" Cunningham (best known as the inventor of WikiWikiWeb, the predecessor of Wikipedia) talking about software development methodology.

gain a bigger understanding of the topic. A down side to case design is that it is usually difficult to generalize (generalizing is never really the goal with a case study), and a low external validity. A design like this enables a more in-depth study on a specific situation than other designs.

3.2.1 Choosing a case

The purpose of this study is to highlight the cultural aspects of the of safety work in multinational organizations. The field is narrowed down to the Norwegian context, and thus a multinational organization operating in Norway is appropriate.

Norske Shell was chosen as a case for several reasons. Firstly, the organization should be considered highly representative within the industry in Norway, and it is of noticeable size and volume. While being representative as a multinational organization operating in the Norwegian oil and gas industry, Shell does possess certain qualities that make the organization stand out as an interesting case; Norske Shell is part of a major global organization, the Shell Group, consisting of 104.000 employees in more than 110 countries (www.shell.com). The Shell Group is considered one of the "Seven sisters of the petroleum industry"[28], and one of the six "Supermajors"[29]. Norske Shell has also undergone some major organizational changes that seem interesting in the context of this study, namely the transition from being an autonomous business unit to being part of Shell EP Europe, a European Shell organization consisting of all European Shell offices operating within the area of exploration and production (EP). This has had a clear impact on the Norwegian organization, both managerial and structural, which will be devoted to on a later stage. As Shell has chosen to undergo an organizational change towards centralization and cross-cultural standardization, Norske Shell does seem like one of the most appropriate organizations for a study on the cultural implications on the safety work in the Norwegian oil and gas industry.

[28] The "Seven sisters" term was introduced by Enrico Mattei, later becoming the founder of the Italian energy group Eni. The term reflects the seven sisters' control of the vast majority of the world's oil production and refining. The seven sisters were Royal Dutch Shell, Standard Oil of New Jersey, Anglo Persian Oil Company, Standard Oil of New York, Standard Oil of California, Texaco, and Gulf Oil. (Financial Times, www.ft.com, "The evolution of the Seven Sisters" by Carola Hoyos, 11.03.2007)
[29] The "Supermajor" term is used about the six largest, non state-owned energy companies. The six supermajors are ExxonMobil, Royal Dutch Shell, BP, Chevron Corporation, ConocoPhillips, and Total. (www.wikipedia.org/wiki/Supermajor)

Secondly, Norske Shell has a battery of safety practices which are very representative in the industry. I chose to focus on the Shell Group's Golden Rules, which will be introduced below, after discussions with and recommendations from Norske Shell's safety department. The Golden Rules are highly suitable for this project for several reasons. Firstly, the Golden Rules is a global safety practice in the Shell Group, and this opens for a cultural perspective. The practice is considered universal in the Shell system, and should thus be a highly suitable study object when considering the possibility of cultural uniformity being a safety enhancing organizational characteristic. Secondly, the Golden Rules is considered the superior program within the safety work performed in the organization, and thus makes it possible to analyze with other current safety practices in mind. Thirdly, the Golden Rules was the last safety practice implemented in the organization, and is therefore not only the most current practice, but also the most relevant and freshest-in-mind amongst the members of the organization.

A third reason for choosing Norske Shell as the study's case was the accessibility aspect. Before obtaining access to the Norwegian Shell organization I was employed to work for them on a project for three months. The project was not at all related to the research project, and the access to the organization was approved by people in the organization who were not at all related to my work there. I do however see the possible conflicts which can arise in a situation where the student works for the organization studied. I must clarify the fact that my work there was strictly temporary, I was engaged for a project which started and ended within 3 months. Of course, I used my time there wisely, since it was a perfect opportunity to be extremely flexible when doing my data collection. The interviews were basically performed when the informants had some time to spare, which made the whole process easier for both parts.

3.2.2 Presentation of Norske Shell

Norske Shell was established in 1912, with the name Norsk- Engelsk Mineralolie Aktieselskab (NEMAK), and is part of the international Shell group.

The Shell name and brand can be traced all the way back to 1833, when Marcus Samuel opened a little shop in London, where he did business with decorative shells. His store went well and, after his son Marcus Samuel jr. took over the business in 1878, the company started its involvement in the oil industry. Samuel purchased eight oil tankers in 1880, and started

importing oil and kerosene. This business was so successful that a new and much larger company, The "Shell" Transport and Trading Company Limited, was founded in 1897.

Simultaneously, in 1890, a Dutch company was founded to develop an oil field in Sumatra. This company was NV Koninklijke Nederlandsche Maatschappij tot Explotatie van Petroleum-bronnen in Nederlandsche-Indie.

In 1907 these two companies came together to develop a cooperation, which resulted in the merger into The Royal Dutch/Shell Group of Companies. Several hundreds of companies have emerged from this merger, in more than 100 countries in the world. One of these is Norske Shell, founded in 1912, originally named Norsk-Engelsk Mineralolie Aktieselskab. (Shell Internt, nr 6-7/87 – Jubileumsutgave av A/S Norske Shells bedriftsblad i anledning selskapets 75-års jubileum)

Norske Shell is a Norwegian registered company, operating in different areas within oil and gas. The company runs a network of gas stations, consisting of more than 500 stations nation wide. Norske Shell has participated in the search for oil and gas on the Norwegian continental shelf ever since the first seismic explorations in 1964. The company had the responsibility for the building of Troll Gass, which started production in 1996 and is operated by Statoil. It is also the operating company for Draugen, where production commenced in 1993, and for Ormen Lange. (www.shell.no)

In 2006, Norske Shell had 997 employees, and contributed to 9,500 work-years nationwide. The company paid 11,9 billion NOK in direct and indirect taxes. (Annual report – "Shell in Norway 2006").

Shell EPE

The European Shell organizations went through a transition in 2003, when it was decided that all Exploration and Production (EP) units in Europe were to merge. The result was Shell EP Europe (Shell EPE), consisting of three main offices[30]; Norway, UK, and The Netherlands. The Shell EPE organization is based on the thought of globalization; organizations of the

[30] These are the three main offices in Europe, and the only ones focused on in this thesis. Shell also has offices in Denmark, Ireland, Italy, Austria, and Germany. (www.shell.com)

same enterprise, operating in different but geographically close countries, were to come together and act as one. They would share goals and values, cooperate on competence and personnel, contribute to each other's learning through experience, and have a common set of rules and standards. The European Shell organization would also share management, and the common set of rules and standards would also include the safety field. In other words, the organizing would become function based and no longer based on geography, as the exploration and production part of Shell in Europe would merge together. The sum of the different European Shell organizations would be more important than each single organization, and resources could be allocated and shared in a whole new way.[31] The positive sides to such a way of organizing are great, yet there are several negative sides, sides which obviously are important to the employees.

The idea of a continental enterprise brings with it several advantages which are to a large extent only visible for the organization itself, and its leaders. Sharing of knowledge to enhance organizational learning is one example and the possibility of sharing and relocating resources, both economical and personnel, is another. These are benefits deriving from the economy of scale; the long run cost of each local unit is decreased, while the scale of the organization increases. Some operations which previously were performed in each local office are now run from only one location with validity for the whole European Shell organization.

The Shell Group's Golden Rules

The following presentation of the Shell Group's Golden Rules is based on interview with Arild Lund, previously responsible for behavioral safety (25.04.2008).

Golden Rules was implemented in 2005, globally in the Shell system. The practice is considered by the Shell system as a universal practice that transcends all cultural issues. The practice therefore makes a good case for this study; finding out whether or not cultural uniformity is possible in multinational organizations can be done through analysis of a universal practice – if a practice can be universal it should be possible to assume that also a culture can be universal.

Golden Rules consists of three rules:

[31] Based on interview with the Norwegian HSE leader, Gerd Olaug Vikeså, 22.07.08

Comply with the law, standards and procedures.
Intervene on unsafe or non-compliant actions.
Respect our neighbors.

To fully understand the rise of Golden Rules, one must see the larger context in which they evolved. Mainly three issues seem of importance, based on the information from the first interview with Lund; the house rules, the transition to the European Shell cluster, and the 2004 Shell financial "crisis".

Golden Rules evolved based on the different house rules which existed in the different European Shell units prior the merger. The three units came together and discussed what they had in common in that area, a discussion which resulted in a common set of EP House Rules. These rules are:

I stop any job that feels unsafe.
I understand the rules for the job or I find out.
I wear the correct Personal Protection Equipment (PPE) for the task.
I use the right tools for the job and use them correctly.
I keep my workplace clean, tidy and free of obstruction.
I hold the handrail when using the stairs.
I do use a seatbelt and do not use a mobile phone whilst driving.
I reduce sources of waste.

The new House Rules were modified to be more general, and to also involve the onshore personnel, which was not the case with the previous House Rules. After formulating the new House Rules the wish was to identify the main purpose and superior meaning behind the mentality, and the result was the Golden Rules.

A second factor behind the Golden Rules was Shell's financial crisis. January 9, 2004 Royal Dutch Shell shocked the financial world by announcing the reduction of its proven oil and gas reserves by 20%, and shifting it from "proven" to "probable"[32]. This was not seen as a result

[32] The Economist, March 11, 2004; New York Times, March 19, 2004, Dagens Næringsliv, March 9, 2004.

of calculated and deliberate cheating from those responsible in the Shell system, nor of strategic decision-making in the Shell management, but rather a result of the organizational culture – or even a lack of such. It seemed normal to choose to exaggerate the reserves instead of reporting conservatively, according to Lund. Almost 50% of the reduction in reserves came from projects in Nigeria and Australia[33], but the Ormen Lange field of the Norwegian continental shelf was also involved.

From the first interview with Lund, it seems appropriate to draw a link between this financial incident and the first of the Golden Rules, namely the rule of compliance. This rule addresses acting in compliance to existing rules, regulations, and procedures, in any part of the Shell organization. Having compliance as the first Golden Rules, the rule of intervention came naturally. This is about identifying an unsafe or non-compliant action and doing something about it. An observer of such an action is also responsible. The third Golden Rule, "respect our neighbors", was also seen as a natural follower.

3.2.3 Choice of case in light of culture and identity

Norske Shell does stand out as a highly suitable case for a study on the cultural impact on safety work in multinational organizations, especially because of the organizational change undergone in 2003. The EPE transition presented above makes it possible to argue for the choice of case in different perspectives. First I will argue for the choice in the light of the cultural perspective and concept of identity presented in chapter 2. I will then argue for the choice in the light of the on the theories on rationality and organizational safety.

Three different levels of identity have been introduced in this thesis, and these are to be applied to further explain the choice of Norske Shell as a case for this study. The EPE transition has already been mentioned as a reason for choosing Norske Shell as a case, indicating that national cultural differences will be focused on. There must, however, be some sort of problematization of the stereotyping of the different cultures. The culture which is interesting in this study is the one of Norske Shell and, through the brief introductions of the concepts of organizational, national, and industrial culture, it is possible to assume that several aspects have been influential.

[33] New York Times, March 10, 2004

The Shell culture

Seeing the organizational culture as an institutional concept, as something evolving naturally over years and generations, we can see how the Shell culture can have been influenced by a number of factors. Shell is a very old organization; its history can be traced all the way back to 1833. The Shell Group has evolved somewhat simultaneously from two different countries, and thus two different national cultures; the British and the Dutch. When what today is known as Norske Shell was established in 1912 it is likely that both these national cultures influenced the organization, of course along with the Norwegian culture.

The organizational culture is often considered as a product of the national cultures it underlies. In the case of Norske Shell this includes the Norwegian, Dutch, and British cultures. Also, as the presentation of the industrial culture earlier in this thesis implies, other cultures (especially the American) can be considered influential. It does thus seem likely that the culture of Norske Shell is something else than just Norwegian[34]. The organization is international, operating in an international environment in a highly international industry. Globalization and the convergence of cultures are not new concepts to the industry, nor is the concept of multinationality in all levels of the workforce. The question is thus related to which culture the members of Norske Shell are likely to act in accordance with, when in work-related decision-making situations.

The applicability of Hofstede's dimensions in this study

The impact of national cultural differences in this context needs to be discussed further. The three Shell EPE countries do not differ widely in Hofstede's dimensions, but the theory is however applicable, although in a somewhat limited sense. The applicability of Hofstede's dimensions increase after choosing Norske Shell as a case; the organizational change from 2003 can be thought to bring the organization out of its regular stable path and onto a more ambivalent course, which further can be thought to maximize the potentiality for organizational displeasure amongst the members. The specific context of Norske Shell is thus thought to be very suitable for studying possible tensions due to national cultural differences.

[34] This assumption is just as valid for other organizations operating in the Norwegian oil and gas industry; StatoilHydro's culture, BP Norge's culture, or ConocoPhillips Norge's culture are probably subject to the same industrial cultural influence as the culture of Norske Shell.

The applicability of Hofstede's dimensions in this study is fairly limited, and for several reasons. Firstly, I have already promoted a more dynamic cultural concept than used by Hofstede, and his conception of national culture seems to be more like my conception of industrial culture. Secondly, the small numbers of national cultures relevant in this study makes Hofstede's quantitative approach less valid. I do, however, see the value of his findings, and want to use his data as an auxiliary source when making assumptions about the identities that can be available in the organization and the tension that can be expected due to these.

The parts of Hofstede's data that are relevant to this study can be summarized in a figure:

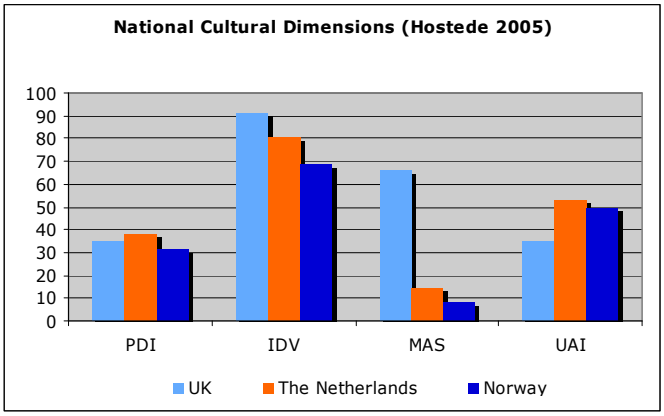

Fig.3.1 – National Cultural Dimensions (Hofstede 2005)

The three countries at hand are very similar, and the limitations of Hofstede's applicability to this study become more obvious; most of the differences are just not big enough to discuss further. The dimension that makes a big difference between the countries is the one regarding masculinity. The most relevant differences in this dimension are related to the concept of management; while one emphasizes consideration and concern for people in a feminine culture, structure and work are considered more important in a masculine culture. In feminine cultures it would seem appropriate to hold meetings in order to discuss and reach decisions based on consensus, while in masculine cultures meetings are more often considered as arenas for people to assert themselves, and decisions are made by individuals elsewhere. Another important difference between a feminine and a masculine culture is related to avoiding and resolving conflicts. In feminine cultures, such as the Norwegian and Dutch, compromise and negotiation is considered the preferred way of handling conflicts. In masculine cultures, such as the British, conflict resolution is characterized more by quarrels and competition. Rewards are based more on equality in feminine cultures, as opposed to equity in masculine ones. Managers in feminine cultures would hesitate to implement a practice which was unpopular

amongst the employees, whilst a manager in a masculine culture would more easily ignore the unpopularity of the practice (and maybe even gain respect by doing so). (Hofstede 2005)

This dimension should be seen in connection with the development of the safety work in the oil and gas industry in general, as the shift has gone from a focus on hard factors (technology and systems) to more soft factors (people). This is not necessarily special for the safety work on the Norwegian continental shelf, as the focus on the softer factors is a trend in the UK and The Netherlands as well. However, the masculinity dimension may imply the possibility of using highly different methods in the behavioral safety work. For example, the use of punishments and rewards is a very masculine method within safety work, and is probably more likely to be applied in UK than in Norway.

From this dimension, which makes out the major difference between the EPE countries, one could make some assumptions regarding the implementation and internalization of safety practices in Norske Shell. Norske Shell is a small organization in the EPE context, and the Norwegian organization is not represented in the EPE management. It is thus natural to expect that the Norwegian culture becomes somewhat overshadowed by the two other major organizations and their own national cultures, meaning that assumptions can be made regarding the cultural origin of the different practices. This makes further implications on the Norwegian culture's susceptibility to the practices possible.

From a national cultural theoretical perspective, one can make assumptions regarding the effectiveness of different methods within the behavioral safety field. The question is not necessarily what the perfect methods for a Norwegian organization would be, but rather the applicability of British and Dutch methods in a Norwegian context. From the implications deriving from national culture discussed in the above section it is possible to formulate assumptions and expectations concerning the reception of such cross-cultural standardized practices.

What seems critical in this perspective is the way a practice is implemented and how the staff is involved and consulted in the process. The vast difference in the masculinity index between the UK and Norway shows that these processes shouldn't be standardized; the techniques and strategies likely to provide the most positive results from the implementation processes are presumably very different in the two countries. The Norwegians would prefer much more

staff involvement than the British, and would probably feel left out and neglected without sufficient involvement.

It is likely that the EPE transition can have an affect on the implementation of standardized practices and, as the discussion above indicates, this is not necessarily the best way of generating results in the safety field. Standardization makes comparison possible across borders, but should not overshadow the main goal in safety work; to actually reduce the frequency of accidents and incidents. Is it possible to create a practice that provides satisfactory local AND international adaptation, or does international adaptation imply local maladaptation, and vice versa? Is it possible that a standardized practice generates the most positive results possible in all the organizations involved, or does standardization just involve a number of sub-optimal solutions that could have been better if adjusted to the local surroundings?

It is assumed that the Norwegian culture is given less priority than the other EPE countries, and the assumptions deriving from the discussions on culture and identity are thus dependent on the level of standardization. If the implementation processes are standardized, it is likely that the British ways and values are most visible. In that case, the implementation process is probably sub-optimal in a Norwegian context. A sub-optimal implementation process can, in the worst case, lead to an unsuccessful practice. More probable, such a process can lead to a longer and more drawn-out internalization process. Also, as discussed earlier, the down prioritization of the Norwegian culture can lead to a stronger sense of belonging to the available cultures and identities at a more local level, emphasizing the Norwegian values and norms. This can subsequently have consequences for similar processes in the future, together with a growing discontentment in the organization.

Multiple identities: the Norwegian meets the Shell person

Belonging to several different cultures simultaneously can be a confusing matter, but mostly in situations where the different cultures imply opposing choices of action. Is one firstly a Norwegian or a Shell person? Does one react negatively to finished safety practices implemented in the organization because of the incompatibility with the Norwegian culture, or does one accept the practice based on a belonging to the Shell culture?

As the organization clearly plays an important part in creating the frames for decision-making, it is also realistic that the organizational culture is very relevant, and we can thus discuss whether or not the national cultural implications deriving from Hofstede's dimensions are reliable in the context. How much deviation from national cultural social rules is necessary for opposition to be likely, when considering the industrial and organizational cultures?

Though it has been said that the Norske Shell culture probably is something more than "just Norwegian", I do choose to see the instability of the Norske Shell organization, due to the EPE transition, as a factor that potentially increases organizational displeasure and the possibility of extra national cultural identification, and thus consider Hofstede's dimensions appropriate. The reorganization which is meant to maximize the homogeneity amongst the EPE countries can have had the opposite results and lead to the organizations' members' stronger national cultural identification.

I consequently choose to keep the assumptions made regarding the possible conflicts deriving from national cultural differences. I do however choose to include the concepts of industrial and organizational culture, and focus on the Norske Shell culture instead of the Norwegian culture. As the Norske Shell culture is thought to be highly influenced by the Norwegian culture (along with the British, Dutch, and somewhat the American cultures), and as the concept of multiple identities shows its potential and relevance, the Norwegian national culture does not lose its significance. The national cultural factor is however supplemented by the concepts of industrial and organizational culture.

3.2.4 Choice of case in light of the discussions on rationality and organizational safety

Also in the light of the discussions on rationality and organizational safety the choice of case seems highly appropriate. The Shell Group's choice of organizational strategy, from a decentralized strategy towards a centralized strategy, can be seen as a rational measure; the economical aspect of the organizational change seems as a way to maximize utility, both related to economy and personnel. It can also be considered as something more institutional, as a natural step forward in a world influenced by general industrial development and the thought of globalization.

In the discussions on organizational safety the debate on centralization in organizations is very relevant. This organizational characteristic is one of Perrow's main concerns in his Normal Accident Theory, and centralization is considered by the HROT scholars to increase the possibility of accidents as it makes it difficult to respond rapidly when dangers occur. The choice of centralization in the Shell Group thus also strengthens Norske Shell as a case in this study, and makes it possible to articulate some expectations regarding possible tensions due to the centralization of decision-making authority. In addition, the HRO theorists promote a decentralized strategy, but the decentralization is dependent on a strong and uniform organizational culture. The Shell Group's Golden Rules are considered universal and culturally independent, and should thus be a highly appropriate study object when trying to find out whether or not such a culture is possible to create.

3.3 Collecting the data

After choosing a case and making assumptions based on the theoretical discussions in chapter 2, it seems appropriate to proceed with a presentation of the data collection process. I will present the different data collection methods used in this study, and conclude with a discussion regarding the strengths and weaknesses of the methodological choices made.

3.3.1 Some challenges in organizational studies

There are some challenges when it comes to collecting data in an organizational context. First of all, obtaining access to the organization, its members, and its documents can be challenging. Accessibility did not become a problem in this study. My temporary employment with Norske Shell probably played a decisive role, as I was assisted by my employers in getting in touch with the right people, and the fact that I was already "in the system". An application to perform a study was sent to the HSE leader, along with a letter of recommendation, and a short project description. After a meeting with the HSE leader and the person who subsequently became my "mentor" I was given access to the necessary personnel and documents.

Also, one must consider the ethical aspects of organizational studies; factors like ethics, objectivity, informed consent, and privacy protection need to be considered throughout a study. Organizational studies may be of sensitive matter – the researcher is often interested in

a problem, or a conflict area in the organization, and getting informants (employees in the organization) to speak their minds on a specific topic may be difficult. It is important that the researcher makes it clear that he/she is not sent from the management, but rather that he/she is there for the sake of the study itself. It is also important that the employees do not just answer in a way which would please the management, and it is as important that whatever stated that can be opposing to the management's thoughts and wishes is not received with negative consequences. The informants should be able to choose to be anonymous, and the management should agree on not using any kind of punishment and rewarding in connection with the research project. I treated the ethical aspect by anonymizing all informants, except for Arild Lund and HSE leader Gerd Olaug Vikeså. All informants were explained about my role as a student and seemingly understood that I was on no assignment from the Shell organization.

3.3.2 Semi-structured interview

From the start of the project, the main method for collecting data was chosen to be semi-structured interviews. Interviewing is a very flexible research tool which can be used in any stage of the research process, and which can be readily combined with other research methods. Depending on the data required, interviews can take many forms. Structured interview is the most quantifiable way of conducting an interview. The researcher has a battery of questions which are to be asked the informants in a fixed order, maybe even by selection of one or more fixed options, in order to easier obtain the ability to code and quantify the data. This method is very similar to the questionnaire, with the important difference being the presence of the researcher and his/her ability to both clear any confusion the informant might experience, and to influence the informant. (Bryman 2000)

Unstructured interviews on the other hand allow the researcher to ask questions regarding any topic which may be of interest to the study. The questions are not fixed, but the interview is more based on an open conversation. The ability to compare and quantify is secondary to obtaining rich data from each individual. (Ibid)

I chose to combine these two methods by using semi-structured interviews as a method in my study. Semi-structured interviews incorporate elements from both structured and unstructured interviews, and thus carry with it the advantages of both approaches. By having a battery of

questions to use in the interview settings, but still allowing for more in-depth discussions where necessary, the data from semi-structured interviews are both easy to analyze and quantify, and also have the potential to generate rich and salient knowledge on interesting topics. Of course, the semi-structured interview also carries with it the disadvantages from both approaches; there will be the danger to spend too long on peripheral subjects, one might lose control of the informant when allowing the interview to have the feel of an open conversation, and one might reduce the reliability when using non-standardized approaches to interview each individual.

3.3.3 Interviews and Respondents

After being given access by Norske Shell, I was introduced to my "mentor", Arild Lund. He had just recently been in charge of behavioral safety in the Norwegian Shell organization, and was an important informant for the study. The data collection process started with two long interviews with Lund, and these interviews were going to be a contribution to the foundation of which the rest of the process would be based on. Lund gave a lot of important information, both background information and his own thoughts on the subject. He was also the one who made a list of informants for me to contact during my summer months working for Norske Shell. Lund talked to and prepared the informants before my contacting them, and he explained the project and gave them the necessary permissions to spend their work time with me. This was obviously a huge advantage. My informants were already somewhat prepared and they had been asked by a superior to participate. Lund had also made sure that demographical factors were considered – just about half of the informants were women, just about half were contractors, and there were at least two informants from each participating department. All together, a total number of 18 informants were on my list, not including Lund himself, nor Norske Shell's HSE leader Gerd Olaug Vikeså. 11 of these were interviewed, the remaining seven were left out due to practical reasons; they were either unavailable or too closely related to the project I was hired to work on. This resulted in a total of 14 interviews, including two with Lund and one with Vikeså.

The interviews were recorded on tape to avoid unnecessary distractions from having to note down everything. All informants were informed about the advantages of tape recording and their consent was always given prior to the interviews. One interview was carried out over the telephone. The rest were carried out face-to-face in various meeting rooms in Norske Shell's

office building in Tananger, outside Stavanger. The two interviews with Arild Lund, along with the interview with Norske Shell's HSE leader Gerd Olaug Vikeså were of explorative quality; these were carried out with focus on gathering information on the organization, its safety practices, and possible focus areas for the study. The rest of the interviews focused on the respondents' views and opinions on the organization and its safety practices, as well as the general trend towards behavioral safety work.

Some of the informants were in fact skeptical of their leaders being informed about their responds. It seemed that this fear faded when they were reassured that no names would be used in the final thesis, and that this was a project for a student at the university and not for someone sent by the management. Others were, however, very free-speaking, with lots of thoughts on the subject. It was mainly during these interviews that opposing arguments to the current safety trend became obvious.

3.3.4 Literature review and analysis

A thorough literature review and analysis seemed necessary, as it was not simply a case of examination of previous studies, but also a choice of direction. The safety literature is much divided, and different paradigms seem to live side by side in a highly complex theoretical environment. At this point the study got a theoretical turn and, as the theoretical discussions are considered both relevant and important for the rest of the project, I chose to include the literature review and analysis as part of the methodology.

3.3.5 Shell People Survey

At a fairly late stage in the project I was given access to an excerpt of the results of a survey conducted throughout the global Shell Group, the Shell People Survey 2008. The Shell People Survey is carried out every 12 to 18 months, and is conducted by International Survey Research (ISR). The survey is a method for the leaders in the Shell system to receive feedback and inputs on different aspects of the organization, based on nine different categories; Employee Engagement, Diversity & Inclusion, Performance and Reward, Learning and Development, Overall Management Effectiveness, Work-Life Balance, Communications, Customer Focus, and Business Principles. The excerpt given to me was a Survey Detail Report for the EPE Technical unit in Norway, and shows the results from 5 different

groupings in the Shell system: Shell Group, Exploration and Production (EP), EPE Technical-Norway, EPE Technical-Norway 2006, and Top Quartile Benchmark. In other words, the excerpts shows two very interesting dimensions; firstly, how the Norwegian technical unit scores compared to the rest of the Shell Group and secondly the development in the Norwegian technical unit's scores from 2006 to 2008.

3.3.6 Strengths and weaknesses – looking back at the process

To claim that a study is conducted without any weaknesses is very bold and probably untrue. Each study has its strengths and weaknesses; the challenge lies in identifying them. This section is devoted to such identification.

Studying safety (especially qualitatively) can in itself be considered a methodological weakness, as it implies studying something that does not exist until something (accidents) occurs. This study is based not on quantitative accident statistics, but rather on the attitudinal and conceptual aspects of behavioral safety, and some would probably say such a study cannot generate results related to how to improve technical safety. The people saying so are probably right – this study has very little to do with technical safety. This study is however based on a social scientific side of safety work, something that until lately hasn't been recognized as relevant. As long as one acknowledges the relevance of social science in safety work, a qualitative design should be a very appropriate choice.

One main problem with studying safety is the immense complexity of the concept of causality. If something is safer than it used to be, this can be because of a certain practice being implemented. It can however also be because of a technological improvement. Proving that one certain safety practice actually makes an organization increase its safety is not really possible in a constantly evolving industry, and this has to be taken into consideration.

Interviews and respondents

Interview as a method to collect data in studies such as this does carry with it some disadvantages, as mentioned earlier. However, the method seemed appropriate when studying the attitudes and understandings related to the safety work. Some of the interviews did come a bit off course, but generally they all worked out as expected. The one phone interview

conducted was by far the least remunerative, and the conversation was limited to only include what was absolutely necessary. All face-to-face interviews were positive experiences, based on comfortable conversational situations. From the list of 18 informants given to me by Arild Lund, only seven were not interviewed. This was mainly due to time issues and practicalities, and the fact that some of them were to closely related to my work at Norske Shell.

There is, of course, the possibility that being given a list of informants is a disadvantage. The individuals could have been chosen not to give an objective picture of the organization's employees, but more to show the best and most positive sides of the organization. Maybe it would have been better for me to choose the informants myself, based on observations and maybe even random sampling. However, looking back on the responds from some of the informants, this does not seem to be the case. Many were very negative toward everything happening within HSE in the organization, some more specific and some more general than others. Lund also emphasized the importance of achieving opposing responds before producing the list of informants, and it truly seemed like he was interested in finding the flaws, rather than the positive sides. Obviously, for the organization, it is much more beneficial and interesting to unveil the negative arguments to the different practices, as the positive sides are both obvious and already overstated by the organization itself and its management. When Norske Shell agreed to participate in this project, the decision was based on a genuine interest in the topic and them knowing that it might generate some results on how they can reach out to a larger part of their employees on sensitive matters like safety.

Shell People Survey

The Shell People Survey was a major contribution to the strengthening of this study. The survey is based on a large sample size, and it is very detailed. It would of course have been preferable to have access to the part of the survey results which showed the numbers for the whole Norske Shell organization, and not only the technical unit. However, it has been said that the technical unit's results in the survey are highly representative of the organization as a whole. The survey is used in this study to strengthen the validity of the findings deriving from the data collected from the interviews.

Alternative research methods

One needs to ask oneself whether or not alternative research methods should have been included in the study. Of course, the time and size aspect of a study like this makes the data collection process fairly limited, and one can never be fully satisfied with the amount of data. I could have chosen to base the study on a more quantifiable method, e.g. a questionnaire. The data would probably be easier to categorize and could have included a larger sample. I did however find the interview method to increase the possibility of capturing the details behind the attitudes and understandings of the people interviewed, and I do believe that it was the best method for this specific study.

3.4 Presentation of data and analysis

The following chapters will present my analysis of the data collected in Norske Shell. The analysis will be spread over four chapters in a thematic manner. First, in chapter 4, I will introduce the EPE transition more elaborately. I will then present and discuss the data collected about the actual case of this study, namely the Shell Group's Golden Rules. These will be analyzed and seen in connection with the theoretical contributions in this study. Chapter 6 will function like a bridge connecting the two previous chapters, and see the analysis in connection with the research questions presented in chapter 1. Chapter 7 will discuss what seems to be a major issue in the industry, namely risk understanding. Chapter 8 will summarize the findings of the study and, hopefully, make room for some conclusions.

Chapter 4 – Shell EP Europe – cross-cultural standardization

"Standardization leads to rigidity, and rigidity causes things to break."[35]

4.1 Introduction

In 2003 it was decided that all Exploration and Production (EP) units in Europe were to merge, and the result was Shell EP Europe (Shell EPE). This chapter will focus on the Shell EPE organization. Firstly, I will discuss the implications deriving from the transition. I will then give a picture of the empirical data collected surrounding EPE transition, and try to summarize the organization's members' views and attitudes. I will then see the restructuring in light of the institutional theories, and discuss the degree to which the choice to reorganize can be seen as based on a rational or institutional view of the organization (or both).

The EPE transition is important to include in the analysis, as it is a direct reason to the implementation of the Golden Rules. The Golden Rules practice, being the main study object of this project, is seen as universal and culturally independent. I will later discuss the organizational change in relation with the Golden Rules, to map out whether or not such a restructuring theoretically can have affected the safety in Norske Shell.

4.2 Cross-cultural standardization in the oil and gas industry

Cross-cultural standardization in the oil and gas industry is not special for Shell, most major oil companies have practices and rules at a global level[36]. The question is, however, related to how such standardization is organized.

Multinationalism has characterized the Norwegian oil and gas industry since the very start. The operating companies are all multinational, even the Norwegian StatoilHydro operates at a

[35] Quoted in Gray, Scott (2006). *The Mind of Bill James: How a Complete Outsider Changed Baseball*. New York: Doubleday. pp. 191

[36] See BP's Code of conduct (http://www.bp.com/sectiongenericarticle.do?categoryId=9003494&contentId=7006600), Total's Code of conduct (http://www.total.com/static/en/medias/topic1608/Total_code_conduct_en.pdf), or ConocoPhillps' HSE policy (http://www.conocophillips.com/NR/rdonlyres/54D24E09-254D-479D-A8DC-F044C8A6F25E/0/hse_policy.pdf).

global level. Michelsen (1989) points towards the operating companies' wish to coordinate across borders and discusses how decisions are made at the headquarters with effect for every unit. The decisions made have had a tendency to be detailed and have been pressed on the local subunits.

There has been different traditions for multinational management in the industry. The American standard has been characterized by frequent managerial changes. Together with a tendency of detailed decisions from the headquarters, this is thought to have consequences for the lower levels in the organization. Somebody has to yield, and it sure will not be the main headquarters. One very visible consequence from the history of cross-cultural standardization is how all companies have English as their working language. The employees in the different local units have become bilingual while the American and British leaders have remained monoligual. The European companies have, however, chosen less frequent changes in management and have, in a historical perspective, relied more on local adaptation (Michelsen 1989). Nevertheless, the American influence on the industry is, and has always been, pronounced. Some sort of industrial convergence seems to have taken place, and it seems like the European ways have moved closer and closer to the American.

Shell does not, in this perspective, stand out as different from the rest of the industry. There has been a tradition for centralization in the industry, and central decision-making with effect on subunits is not very special. I do not, however, know of any other company that has chosen a continental organizational strategy.

It becomes appropriate to ask some questions: How does one organize such standardization? Is it possible to work toward organizational uniformity and simultaneously well-functioning subunits? Where is the border between multinational decision-making and local autonomy? Has Shell managed to overcome the cultural obstacles involved? Do the advantages of the standardization process exceed the disadvantages?

4.3 Implications from the transition

In order to see the impact of the EPE transition on Norske Shell's safety work, one needs to consider what the transition actually implies. Although the three main European Shell offices clearly have influenced each other before merging, each unit has always had its autonomy –

each unit has had the option of choosing for itself. Even before the transition the wish to standardize within the Shell group was present, as is for probably any organization operating globally. However, the local offices had their own local management, with the power and option to stop new concepts and practices which they saw as unfitting. This option has decreased to a level of insignificance after what can be seen as an organizational upheaval, and the local offices cannot as easily stop practices from being implemented. In other words, it is possible that the transition has influenced the safety in Norske Shell, when seeing the standardization and forced implementation of safety practices as a consequence.

The notion of having one mutual management for the European Shell cluster is another aspect that needs to be addressed. The leaders are no longer local and they are neither Norwegian nor situated in Norway. This has to be seen in connection with cross-cultural management theory, and cultural theory will be beneficial to include in the discussion regarding the pros and cons of the Shell EPE transition. This also has to be seen in the discussion on standardization of safety practices, as the leaders now do not have the knowledge of the local cultural aspects which maybe should be considered before “forcing” the implementation of new practices.

4.4 The response to Shell EPE in Norske Shell

The empirical findings in this study show a lot of discontentment related to the Shell EPE transition. This discontentment is interesting to analyze further and the discussions need to include answering questions regarding why there is discontentment with the organizational structure. Subsequently it is interesting to discuss what the discontentment can imply in a safety perspective.

Basically two different aspects of the EPE organization have been brought up in the interviews as negative consequences of the transition; firstly the newly evolved remoteness of the leaders, and secondly the standardization of practices and the implementation of practices considered non-compatible to the Norwegian culture.

Questions regarding the EPE transition were asked every respondent in the study, and there was clearly some passion regarding its negative sides. Its positive sides, which more or less are related to the benefits of the economy of scale, are clearest to the top management, who has a deeper insight in the organizational and profit-based aspects of the solution. The notion

of not having local leaders to the same extent as before the merger is clearly a chief objection from the employees' side:

"*There are no longer any leaders nearby to whom one can relate. This is relevant for major issues and also for more day-to-day issues. It has been very frustrating not having someone around who can make decisions, and I believe that this has been noticeable to the organization. We don't decide anything anymore. And we are no longer master over our own matters – we have to go to England or the Netherlands to ask how to do things. And I believe that not having any internal power is very destructive to the organization, especially in the long run*."[37]

Not having their leaders nearby is evidently an issue for the employees in Norske Shell, and the frustration surrounding the extra time needed to proceed with their doings, while waiting for a decision to be made somewhere in the European (or even global) Shell system is obvious. This seemed to be a factor on several levels. Firstly, it seems that the employees of the Norwegian office miss having decision-makers in their presence, mostly because of the extra time spent waiting for decisions to made overseas. Secondly, another negative side of not having leaders present is the thought of not being noticed:

"*If a leader is very distant and doesn't see you, doesn't see how you perform, and doesn't have any idea of how you function locally and how you are perceived by your co-workers, it feels pretty unfair. One needs feedback, both positive and negative*"[38].

Thirdly, not having Norwegian leaders reduces the local cultural knowledge:

"*In a way, Norske Shell had more ownership and autonomy before 2003. We could argue against the implementation of new practices by referring to our culture not being compatible. Certainly we can still argue similarly, but not in the same way. It used to be more accepted, because we had a management here who defended our points of view in the bigger context*."[39]

[37] Interview 4, 03.07.08 – my translation.
[38] Interview with HSE leader, Gerd Olaug Vikeså, 22.07.08, my translation.
[39] Interview with Arild Lund, 25.04.08, my translation.

The discontentment regarding remote leaders is also fairly obvious through the Shell People Survey. The survey's most interesting categories in this context are those regarding "Employee Engagement" and "Overall Management Effectiveness". In general, the Norwegian technical unit was around 25% less satisfied than the rest of the Shell group. The satisfaction has decreased since the last survey in 2006, strengthening the possibility that the EPE transition has played a significant role.

The members of the Norwegian technical unit were generally less satisfied with their jobs, less motivated to commit extra effort to help the company succeed, less proud to work for Shell, less likely to recommend Shell as a good employer, and less overall satisfied with the Shell organization[40]. They felt less involved in decisions affecting their work, less encouraged to come up with new and better ways of doing things, disagreed sharply that decisions get made without undue delay and that the change process is moving in the right direction, found their team leaders being less accessible when needed, felt less encouraged by their team leaders, felt less informed about the direction in which the organization is headed, were less convinced that their leadership has an effective plan for competing in the future, were less satisfied with how the Shell organization is led, and were less convinced that the structures and reporting relationships allows them to effectively execute their business strategy.[41]

The reactions to the EPE transition appear to be negative in the Norwegian organization, but should, at the same time, be possible to consider in an opposite manner. First of all, the negativity can be seen to unite the employees; they stand together in their opposition, and they agree on the terms. A mutual inconvenience has been imposed on them, provoking a mutual reaction. Apart from uniting the employees, the discontentment also signalizes commitment and interest; the employees complain because they care and want to see their organization well-functioning. They would not oppose if they were indifferent to what is happening in the organization. Unity and commitment amongst the workforce should be considered positive, and all the negative feedback in relation with the transition can, therefore, actually be positive for the organization.

[40] These statements are all based on the results of the Norwegian technical unit's responses to the individual questions within the "Employee Engagement" category.
[41] These statements are all based on the results of the Norwegian technical unit's responses to the individual questions within the "Overall Management Effectiveness" category.

4.5 Shell EPE in light of institutional theory

Was the organizational change towards Shell EPE based on a rational or institutional view on the organization? Was it a choice made by the management in order to maximize the organizational effectiveness, or was it the natural development of an institution affected by the legitimizing demands of its surroundings?

The most obvious advantages deriving from the restructuring of the Shell organization can all be considered rational and calculative utility maximizing. Sharing of knowledge to enhance organizational learning is one example and the possibility of sharing and relocating resources, both economical and personnel, is another. These are benefits deriving from the economy of scale; the long run cost of each local unit is decreased, while the scale of the organization increases. Some operations which previously were performed in each local office are now run from only one location with effect for the whole European Shell organization. Clearly this should be a positive contribution to the effectiveness of the organization, especially in an economical aspect.

The organizational restructuring can also be seen as an institutional process; in a world constantly moving towards globalization, the creation of continental organizations does not seem inappropriate. Maybe a thought of bounded rationality lies behind the new organization – the limitations of each individual organization can be reduced or even eliminated as a result of the new and bigger organization.

4.6 Summary

This chapter has looked closer at the EPE transition and discussed its implications. It has also looked at how the organizational change is considered in the Norwegian organization. The analysis of the Shell EPE organization seems to head in a negative direction; the discontentment amongst the employees is pronounced. The main arguments against the new organization include remoteness of leaders, with subsequent prolonged decision-making, decreased internal power in the organization, and reduced cultural knowledge. Another aspect is the standardization of practices and the possibility of cultural incompatibility. A third aspect is more positive; the employees in Norske Shell seem to unite in their discontentment, and their complaining signalizes commitment to the organization.

The EPE organization has been mentioned as a key reason to the implementation of the Golden Rules; the Golden Rules practice was, amongst other reasons, implemented to create mutual grounds for the different EPE countries. I will proceed to present, discuss, and analyze the Golden Rules, before discussing the connection between the practice and the organizational restructuring.

Chapter 5 – The Shell Group's Golden Rules

The Golden Rule: Whoever has the gold makes the rule

5.1 Introduction

Shell's Golden Rules is the case of this study, and the background of the practice has already been discussed. In the Shell system the Golden Rules are considered culturally independent, and the practice is seen to transcend all local conditions and interpretations. The purpose of this chapter is to discuss the practice further, in relation to the theoretical foundation laid in chapter 2. I will first present the story of the practice, including the reasons behind the implementation and the reception of the practice among the employees. This discussion will include seeing the practice in the different perspectives presented in chapter 2. The rational and institutional perspectives on organizational decision-making will contribute to the discussion on the grounds for which Golden Rules was implemented, seeking to find out whether the practice was implemented to increase effectiveness in the safety work or if it was implemented as a means to meet the legitimacy demands from the organization's surroundings (or both). I will proceed to discuss the originality of the practice, to see whether or not the Golden Rules stands out as a unique practice in the industry. Finally, I will seek to discuss whether or not the Golden Rules actually is a culturally independent practice and this discussion will develop into treating different potential aspects of cross-cultural standardization. The chapter is based on the data collected through the interviews conducted in Norske Shell.

5.2 The story of the Golden Rules

How and why was Golden Rules implemented in Norske Shell? Was it a decision based on rational utility maximization or was it a consequence of the expectations from the organization's environment? This section focuses on some different explanations to why the Golden Rules were implemented in the Shell Group.

5.2.1 Why the Golden Rules

In the attempt to find out why the Shell Group implemented the Golden Rules I found it most suitable to start at the top of the hierarchy and work my way down. Also, when trying to identify the rationale behind the choice of implementation, the appropriate way to proceed seemed to be through the "ambassadors" of the program, in other words those who have an HSE responsibility. Amongst my respondents, two individuals stand out as such ambassadors: Gerd Olaug Vikeså, the Norske Shell HSE leader, and Arild Lund, who previously was responsible for behavioral safety in Norske Shell. In addition I was given access to a DVD made for the Shell Group called "*The Golden Rules – Getting Us to Goal Zero*". This DVD shows the Executive Vice President of Shell EPE giving his explanation to why the Golden Rules were to be implemented:

"*What I'm not proud about is our safety record. We continue to hurt people and have high potential incidents. And that's just plain wrong. And it's not just wrong, it doesn't reflect the kind of company that we are, or the kind of company that we aspire to be. And it certainly doesn't reflect all the good that this company has done in the world over the last 100 years. So what are we going to do? We have to shift our mindset; from being satisfied with small continuous improvement and focusing on just hurting fewer people this year than we did last year, and get to a place where every injury and every high potential incident is unacceptable. The goal has to be zero. And we have to shift to a place where safety is a deeply held value that stands right alongside and integral to honesty, integrity, and respect for people. And it comes from a place of really caring for those around us, whether they be Shell people or contractor people. I want us to have the same feeling when we hurt people in this company as we feel when people lie in this company. It has to hit us in the gut. And the way into a Goal Zero culture is going to be for you and I to follow the Golden Rules; comply, intervene, and respect. And when we do that we're going to see longer and longer periods of time between when people are getting hurt and high potential incidents. And then we'll know we're on to something. The Goal Zero will not be easy, but I believe that we're morally obligated to take this journey. I want to have a place where everybody goes home every day healthy, and I want to have a place where we can all be proud of the safety performance and the safety culture in Shell.*"[42]

[42] Tom Botts, Executive Vice President of Shell EPE. From the Shell DVD "The Golden Rules – Getting Us to Goal Zero".

This statement is given by the Executive Vice President of Shell EPE, Tom Botts. Here it seems that the Golden Rules program is used deliberately as a method to reach Goal Zero. As Goal Zero is the most superior safety program available, this is not really surprising. Every single work done that is safety related can similarly be seen as a means to the end of Goal Zero. What is interesting here is the emphasis put on the Golden Rules as the savior; the way to reach Goal Zero is, in Mr. Botts' view, through creating a safety culture – "*the Goal Zero culture*", and the way for that to happen is through the Golden Rules. If all Shell personnel follow the Golden Rules the organization will experience not only the rise of a healthy safety culture, but also the decrease in injuries and high potential incidents. This statement has to be seen in its specific context; the video from which it was quoted is a marketing video meant to introduce and sell the Golden Rules practice. The discourse will, therefore, vary from that of my other informants.

The next explanation to why the Golden Rules were implemented came from the Norwegian HSE leader:

"*I believe that it has to do with the fact that all countries have had their own rules. There is a general tendency towards a higher degree of interconnection and standardization, towards us all having a mutual system. There are some cultural differences between the countries, and the need for the rule of compliance was probably greater in other countries than Norway. However, since we are part of the same organization, we are all subject to the same systems and requirements and we have the same practices to relate to. Exactly what triggered the implementation of Golden Rules I couldn't say. But I do believe that there have been incidents that have led the management to the decision that a new practice was necessary.*"[43]

Vikeså's view of the reasoning behind the Golden Rules shows the choice of implementation as based on a wish to create something uniform across the borders, something common for all Shell units. She does not disregard the possibility that the decision was triggered by specific incidents, as some sort of hindsight rationalization. Another statement about the practice, this time from the person recently in charge of behavioral safety in Norske Shell, shows the possibility of a simultaneous rational and institutional explanation:

[43] Interview, Gerd Olaug Vikeså, 22.07.08, my translation.

"*I believe that the oil companies focus on safety for two reasons simultaneously; firstly to make the operations as safe as possible, and secondly because its expected by the authorities and the economical implications deriving from those expectations. And I think it has to be this way, I believe it's healthy. I think that the safety work is based on achieving the highest possible level of safety. You want to be able to tell your workers that this is a safe workplace and that after a day at work they can go home as healthy as they arrived. It's good for the company, and it's good for the individual. This is the foundation. But of course, there are economical sides to safety work, and we see that in many ways; for example through risk assessment. If you construct a rig without safety systems you risk having the rig blow up, and subsequently go through an economical crisis. Safety is a good investment for the company."*[44]

The rationale behind the implementation of the Golden Rules seems to somewhat depend on the person asked. The three explanations depicted here do not differ extensively, but appear to vary somewhat in depth. The expectations to the practice seem to soften in the lower levels in the hierarchy. The first explanation, from the Shell EPE Executive Vice President, shows high expectations to the practice; the Golden Rules were implemented to create a safety culture that subsequently will get Shell to Goal Zero. The Norwegian HSE leader emphasizes more organizational sides to the practice and portrays the Golden Rules as a result of the wish to standardize, but as something that also may have been triggered by specific incidents. The person responsible for behavioral safety in Norske Shell has a more institutional explanation. Firstly, he highlights the institutional sides of the safety work, the legitimizing demands from the society, the workers, and the organization itself. At the same time he acknowledges the economical sides, not only to the safety work in itself, but also to the meeting of the legitimizing demands. This shows that the rational and institutional perspectives on organizations can, and often do, co-exist.

The main ideas behind the practice are somewhat meaningless unless directly related to the effects the practice has had on safety, whether it be in relation to creating a safety culture or reducing safety statistics. The actual implementation and presentation process is the next step to figure out, before handling the employees' attitudes and views of the practice.

[44] Interview Arild Lund, 12.06.08, my translation.

5.2.2 Implementing the Golden Rules - how was the process?

When seeking to explain the process of implementing the Golden Rules in the Norwegian Shell organization I choose to divide the process in three different parts; the presentation of the practice, the staff involvement in the process, and the reception of the practice.

The presentation

Finding out about the Golden Rules presentation process turned out to be more difficult than first presumed; it seemed like most people just did not remember exactly how it happened.

"*There was some sort of initial campaign, but I think that you can ask anyone in my department, and probably in the other departments also, and they won't remember what was said or how it was done.*"[45]

This statement is somewhat verified through the Norwegian HSE leader being one who does not remember how the process happened. She does, on the other hand, assume that the presentation followed the usual procedures:

"*I don't really remember how the process was, it was so long ago. We already had our own rules, and when the EPE transition came we all went for a mutual change. I remember it as being presented as an interconnecting thing from EPE, that it in fact was pretty much the same as what we already had. The process itself was probably a combination of a general meeting in the canteen and presentations from the different line leaders. (…) I don't really remember it.*"[46]

The derivations one can draw from these statements are somewhat limited. We can assume that the practice was presented to the staff through an assembly in the canteen as well as through the different line leaders. We can also assume that the presentation did not really affect the workers, since no one seems to remember the process (the Golden Rules were implemented in 2005, three years before my asking these questions, and some sort of memory of the process would, therefore, not be too much to expect). Arild Lund points out that the organization finds the process of presenting new practices challenging:

[45] Interview 6, 06.06.08, my translation.
[46] Interview, Gerd Olaug Vikeså, 22.07.08, my translation.

"*We should talk a bit about how things are introduced, because we struggle a lot with that. The way things are presented and the matter in which things are introduced, especially since EPE. There are many British people out there in the system that have their own ways of introducing things. Norway is a hi-tech country, and we use the internet and electronic facilities to convey matters and to make it all a bit more interesting. The British, on the other hand, want posters. When the Golden Rules were introduced we were given enough posters to wallpaper the whole building, it was pretty fantastic. We only used screens, but in Aberdeen they had posters literally everywhere*."[47]

The struggle mentioned seems to be related with the EPE transition and the wish to standardize procedures across the different organizations. The way things are presented in the UK is not necessarily the way to obtain the best reception in a Norwegian context. The above example draws on the technological differences between the countries, and that the Norwegian organization would rather like to make use of the technologies at hand. Apart from the technological aspect, one part of the statement stands out as an implication of a bigger cultural challenge. The "*especially since EPE*" phrase indicates that the EPE transition actually has made a difference in these matters, and that the change is not for the better. This seems to strengthen the assumptions made in chapter 3 about cultural awareness in the implementation processes. Staff involvement was the major point deriving from the discussions on national culture, and as it was pointed out that the EPE transition has affected the presentation process it should be considered to strengthen the assumption. This leads us to the point where it would seem natural to find out how the staff was involved.

Staff involvement through the Working Environment Committee

Staff involvement is important in a Norwegian context, and it is expected and somewhat required. When an organizational change that has a considerable relevance to the working environment is proposed, Norwegian law requires that the proposition always goes through the Working Environment Committee (WEC), where the employees are represented. The Golden Rules was such a change, and the WEC was indeed involved in the process. The statements gathered about the WEC involvement, however, show the involvement as more of a formality than anything else:

[47] Interview Arild Lund, 25.04.08, my translation.

"*They don't really have a say in the discussion. They get it presented as "this is something the Shell Group has decided on, and this is how it's going to be". It's not really an object of discussion.*"[48]

This statement came from Arild Lund. The WEC's involvement does not seem to be considerable in this sense. This is also confirmed by the Head Safety Deputy, who is the staff's main representative in the WEC:

"*The Golden Rules first entered through the Working Environment Committee. But you can't really say no to the Golden Rules, since it comes from the Group level.*"[49]

It does not seem as though that the employees had a say about the implementation of the Golden Rules; the rules were coming, and there was nothing to do about it. The role of the Norwegian institution of the Working Environment Committee appears to have been reduced to mere symbolism. According to the assumptions made about staff involvement this should mean that the practice was met with some opposition. However, the Head Safety Deputy does not seem to see a problem with the process:

"*We can not be too negative to what is new. We're good at protesting and screaming here. But who knows? Maybe in five years we can look back at the best thing that ever happened in this industry. Forced change can also be good change.*"[50]

This statement is interesting on two different levels. Firstly, that the Norwegians are critical and good at expressing their discontentment. Skepticism towards new things seems normal, and this can be seen in connection with the lack of staff involvement. Secondly, that it all depends on the perception one has on safety. Implementing a practice can have positive effect, no effect, or negative effect. But whatever the effect may be, it will not be visible immediately.

Another aspect comes to mind: which objective arguments could have been used against the implementation of the Golden Rules? There is a possibility that the practice has such a

[48] Interview Arild Lund, 25.04.08, my translation.
[49] Interview 8, 10.07.08, my translation.
[50] Interview 8, 10.07.08, my translation.

universalism to it that it becomes difficult to find arguments against it. However, there seems to have been a lack of staff involvement when presenting and implementing the Golden Rules, and even if WEC representatives seem happy with the process it is still important to take a look at the general reception of the practice amongst the employees.

The reception of the Golden Rules

How the staff's reception of the Golden Rules seems to depend on the view on the practice; are we to consider the Golden Rules by themselves, or include the further implications of the practice? First of all, let us consider the Golden Rules exclusively. The Golden Rules practice does not seem to have been met with opposition, despite the assumptions made. Arild Lund sees the simplicity of the practice as a considerable factor:

"*The Golden Rules implementation process was pretty painless, since it was so similar to what already was. Any change is usually subject to opposition, but I would claim that this didn't happen with the Golden Rules. When people first saw them they thought "hmm, that was a pretty simple thing". It was just pretty similar to what we already had, so it met little opposition here in Europe.*"[51]

From this statement we can understand that the practice itself is simple and easy to comprehend. We can also understand that the practice is simple and easy to comprehend compared to other practices, and we can understand that since something simple was being implemented, for once, there was no opposition. This statement contrasts the view of the Shell EPE Executive Vice President; he saw the Golden Rules as some sort of shift in paradigm, something new and ground-breaking that would result in Goal Zero being reached. The Golden Rules are seen here, however, as something similar to what already was.

Another explanation to why there was little opposition to the practices comes from the Head Safety Deputy of the WEC. He considers the Golden Rules as a realistic practice, and sees this as an important facor:

"*Realism is necessary – not that you have to be heard at all times, but that what comes along is realistic. The Golden Rules have such realism about them. How you choose to implement*

[51] Interview Arild Lund, 25.04.08, my translation.

and what kind of regime you choose to have is another case. But the Golden Rules in themselves are good."[52]

This can also be understood in several ways. Firstly, we can understand that the Golden Rules is a realistic practice. Secondly, we can understand that the other practices are unrealistic, and that the realism that the Golden Rules has is special. If the practice is seen as "good", but always in comparison with other practices, and the Golden Rules is the superior safety practice, does not the lack of simplicity, comprehensiveness, and realism of other practices come back to haunt the "goodness" of the Golden Rules?

5.3 The originality of the Golden Rules

Having a set of superior rules is not something special – most oil companies have something similar. It is important to see Golden Rules as only one part of a much larger safety system – in addition to Golden Rules Shell also practices the already mentioned House Rules, the Hearts and Minds project, and Goal Zero. Golden Rules should be seen as something superior in this context – three rules of conduct, three behavioral expectations, three codes that surpass everything else. Golden Rules is seen to transcend all cultural issues. Everybody, anywhere in the world, should be able to comply with rules, intervene on unsafe actions, and respect their neighbors. No cultural aspect can oppose the Golden Rules, according to the Shell Group.

As mentioned, one should see Golden Rules in connection with Shell's history. Firstly, the transition to Shell EPE, and the process of finding the common grounds of the European Shell units, and secondly the financial crisis of the Shell Group. In that sense, Golden Rules can be seen as something special for Shell. They can be seen as the result of the organization's history and the means to reach a goal of not repeating history. Arild Lund seems to find the practice original:

"*You can probably find similar practices around in the other companies too, but I have to admit that I've been a bit around and I have never found anything as clear as Shell's Golden Rules.*"[53]

[52] Interview 8, 10.07.08, my translation.
[53] Interview Arild Lund, 25.04.08, my translation.

However, one must also see the rise of the Golden Rules in accordance with the general trend in the industry. Cultural awareness is the new trend. Changing behavior and attitude is the latest remedy to an everlasting problem in the industry – namely not being able to reduce the incident rates to the goal of zero. So the question evolves to whether or not Shell's Golden Rules actually brings something new to the table, or if it can be seen as just another safety practice. It seems like the employees share this view:

"*There is not anything new about it, it's just a different set of words from what everybody else has.*"[54]

The above quote does not reflect positively on the Golden Rules, and it is representative of the attitudes of the employees portrayed through the interviews conducted in this project. In general, employees do not seem to see the originality of the Golden Rules, as compared to practices of other companies. Another way to see the (un)originality of the practice is in comparison with the other practices in the Shell system:

"*All these buzzwords come, and they all seem like a new scheme, the latest greatest phrase, and after a while, especially on the rig, they think "oh, here comes another one", and they're actually all the same.*"[55]

The informant giving this statement refers to the Golden Rules as a buzzword, as a fashionable practice in line with the general societal discourse. The originality of the Golden Rules decreases in this view, this time in comparison with other Shell practices, when he says that "they're actually all the same". The Golden Rules can, in other words, be seen as nothing new to the organization, but merely as new words and slogans to what already was. He also makes a differentiation between offshore and onshore working environments when saying "especially on the rig", implicating that the offshore workers have been more exposed to numerous new practices. This is not really unexpected, as the focus has historically been greater offshore than onshore. Maybe, when trying to include the onshore personnel and creating new practices that include all, which certainly is a new trend, the offshore personnel are more exposed to having a "just another practice" attitude.

[54] Interview 11, 13.08.08, my translation.
[55] Interview 9, 25.07.08.

5.4 Golden Rules – the Shell Group's attempt in creating a culturally independent and universal practice.

Golden Rules is a practice that has validity within the whole Shell group. The three rules (comply, intervene, and respect) are seen to transcend all cultural issues and should not, according to Shell, be subject of opposition in any culture:

"*So those three rules, if you think about them, they're applicable in all situations. And they're easy to remember. And that's the strength of the practice. (…) And what I thought was especially positive about them is that if you take them to a higher level you see that they do not have any cultural specifications. They are as fitting in Norway as in the UK, or in Finnmark as in Oslo. They're very broadly applicable. (…) Wherever you are in the world, in a Shell location, you should know the three rules. Everybody talks about them. Everybody should understand them.*"[56]

The rules are, however, vague and inexplicit, and local interpretations are not only possible, but even necessary. I will in this section go through the Golden Rules, to see to what degree the practice can be considered culturally independent.

"Comply with the law, standards and procedures" means that one needs to know the laws, standards, and procedures that are in effect. Laws are different in every country, and compliance to these is (probably) expected on a governmental and legal level as well an organizational level. For Norske Shell this first Golden Rule involves the compliance with the House Rules, which have validity in all EP (exploration and production) parts of the Shell group. The House Rules include eight different behavioral rules and, as the first Golden Rule includes the compliance with these, they should all be treated;

1. I stop any job that feels unsafe.

This first rule is based on a feeling, a sense that something about the job being done is unsafe. The rule is thus potentially subject to a vast differentiation – what one person considers unsafe does not necessarily coincide with another person's perception of the same situation. Safety is often seen in connection with uncertainty, which further implies the lack of knowledge about something. Considering a job unsafe means having knowledge about one's own lack of

[56] Interview Arild Lund, 25.04.08, my translation.

knowledge, and it is, therefore, difficult to believe that all unsafe jobs will be stopped as a result from this House Rule.

Furthermore, one must consider the uncertainty of the future; one can seek to decrease the risk level of a situation and choose what seemingly the safest decision is, but one will never know whether or not the decision was the right one. Niklas Luhmann (1993) points out this problem and also makes a distinction between risk and danger. Danger is in this view seen as a replacement for safety, and the distinction is thereby important in this context. Firstly, it is important to understand that uncertainty exists as both risk and danger. Risk is seen as the uncertainty we expose ourselves to through decisions. Danger is seen as the uncertainty we are exposed to through our environments – the uncertainty that is not calculated. Eliminating risk does not mean eliminating danger, and thus not eliminating uncertainty. Whether or not a decision is "safe" is therefore not possible to know before the situation is over and the consequences of the decision are known, and this rule is therefore only meaningful in cases where the uncertainty is related to risk.

Culture is very relevant when interpreting this rule, as cultural aspects are seen to affect the understanding of and the feelings related to (un)safety. The level of risk one is willing to take is, by many, thought to be culturally dependent. Hofstede (2005) points out that a differentiation between uncertainty avoidance and risk avoidance is important as risk avoidance refers to something specific, to the probability that a specific event will happen, and uncertainty avoidance refers to ambiguous states. "*Paradoxically, they [people in uncertainty avoiding cultures] are often prepared to engage in risky behavior in order to reduce ambiguities, like starting a fight with a potential opponent rather than sitting back and waiting*" (Ibid; 172). In other words, a British employee should be less uncertainty avoiding than a Norwegian, and the Norwegian is more likely to perform a risky action if the action is seen to reduce an ambiguous situation. state

2. I understand the rules for the job or I find out.
When does one know that one understands something? And when does one know that the understanding one has is correct? This rule is clear in situations where detailed guidelines and procedures are provided, but rather indistinct in situations where one simply does not know that rules exist. This rule presupposes regulations on another level, and where these are

nonexistent there just might not be anything to find out to fully "understand the rules for the job".

3. I wear the correct Personal Protection Equipment (PPE) for the task.
This rule is clear only if the guidelines on PPE requirements are distinct[57]. In such situations this rule should however be redundant, as complying with standards and procedures is a Golden Rule and should definitely include compliance with PPE requirements. In situations where PPE requirements are not provided in detail this rule also becomes dependent on knowledge, which furthermore can vary among a staff.

4. I use the right tools for the job and use them correctly.
As the PPE rule, this rule is only clear when guidelines and manuals for jobs and tools are provided.

5. I keep my workplace clean, tidy and free of obstruction.
This rule is clear and, at first sight, more a matter of appearance and practicality than safety. Clean workplaces look good, and are easier used by visitors. However, there is literature showing the correlation between workplace tidiness and safety[58].

6. I hold the handrail when using the stairs.
This rule is probably the most used example within the behavior modification field. The rule itself is clear and unambiguous. The problem is, however, the signals sent by introducing it. It is safe to state that all personnel in an oil company are adults, and it is also safe to state that all personnel have used stairs extensively prior to being hired by an oil company. This rule is thus there to modify behavior that all personnel undoubtedly already master. This is a good example of a rule which is not related to an obviously risky situation and one which Norwegian workers are likely to oppose. At a later stage of this thesis this rule will be used more in-depth to show the different levels of understanding available in the same organization regarding safety work.

7. I do use a seatbelt and do not use a mobile phone whilst driving.

[57] There are plenty of external rules regarding PPE. There are European standards, user's guides, NORSOK standards, and standards from the PSA.
[58] See Saarela 1990 and Nasanen & Saari 1987.

The most dangerous arena for all oil companies is traffic, and it is here most incidents happen. Incidents and accidents that happen in traffic are included in the companies' safety statistics[59], and driving has therefore become a focus area within the safety field. Seatbelts are mandatory by law in Norway, but mobile phones are allowed when using handsfree sets. Shell goes further than Norwegian law when they fully prohibit the use of mobile phones in cars[60].

8. I reduce sources of waste.
This rule is the only one related to the environment. The rule itself has a clear purpose, but depends on the workers having sufficient knowledge about how to best contribute towards waste reduction.

Compliance as a Golden Rule becomes more intricate when seen in relation to the House Rules, which are only some of many standards and procedures that are to be complied with. Interpreting the Golden Rules thus implies an interpretation of the House Rules, among other things. As long as the Golden Rules include standards and procedures that can be subjects of local interpretations, they cannot be seen as a culturally independent practice. The rules are not sufficient in decision-making situations, since most of them presuppose and demand a higher form for knowledge and regulation.

"Intervene on unsafe or non-compliant actions" is the second Golden Rule. This is the rule which indicates that the Golden Rules practice is obviously not of Norwegian origin, as this is the rule which probably is the most difficult for Norwegians to comply with. Intervening on obviously dangerous situations is one thing, but the highly feminine Norwegian culture makes intervention very unnatural. It is very likely that the British Shell organization experiences a substantially higher number of interventions than the Norwegian and Dutch organizations, as the masculine British culture makes assertiveness a natural quality. This assumption is verified by Arild Lund:

"*Amongst the golden rules, the rule of intervention is the one we have focused the most on in Norway, since it is this rule we have most problems with. The Norwegian culture is not compatible with it – we do not have a culture for going over to people and saying "what are*

[59] Considering that the time spent in traffic is work related – driving on one's personal time is not considered work related, and accidents happening in such events are not included in the statistics.
[60] This is not special for Shell – most oil companies operating in Norway have similar rules.

you doing? Stop doing it, it can be dangerous". We feel that it can lead to getting a punch in the face. It's just out of our comfort zone; we like discussing a situation with several people before we go telling people that what they are doing is wrong, because we feel that the intervention has to be rooted in something. The Norwegian culture is kind of weird that way. We need time to discuss and rationalize. This is also visible in meetings; it's very frustrating for the British and Dutch, because us Norwegians just sit there and listen and consider, and at the end of the day we want to go home and think more about it and ask our neighbors and whatnot. And the next day we return and say that we agree after all. The British sit in their meetings and are all "this is how it is, we're going through with it, that's that", and that confuses us Norwegians. (…) It's like that with the Golden Rules as well. For them intervening is just something they do. They do things like "hello, we are going to practice intervention now, let's wait in the stairway and intervene". That's weird to us, we don't want that here. It's actually just about our cultures being different."[61]

This statement highlights the femininity of the Norwegian culture; whilst the British (and the Dutch) emphasize decisiveness and prompt and aggressive decision-making, the Norwegians need time to reach consensus. Which is the better alternative in the long run is difficult to say, but the combination of the two strategies can lead to frustration and tension, and this should be considered and prepared for.

In another perspective, the Norwegian culture can actually be quite compatible with the rule of intervention. The low power distance found in the Norwegian culture could indicate that intervention across hierarchical order comes naturally. This leads to an assumption that intervention in general is difficult in a Norwegian context, but if one first is comfortable with intervention one does not really care whether or not the person one intervenes on is of higher or lower hierarchical ranking.

Intervention on unsafe or non-compliant actions also implies a certain amount of knowledge about the laws, standards, and procedures that are to be complied with, as well as knowledge regarding what should be considered unsafe. It also implies the ability to interpret the laws, standards, and procedures as discussed in the above section on compliance. In other words, the intervention rule is dependent on interpretation, which can be (and probably is) of local

[61] Interview Arild Lund, 25.04.08, my translation.

and culture specific nature. There is also some sort of super-rationality implicated in the rule of intervention; one is required to question the jobs of other professionals based on what might be just a random sighting of a situation. The super-rationality does not match the ones portrayed in chapter 2, as it is neither the management nor the organization that is super-rational, but rather every single employee in an intervening situation.

The third Golden Rule is *"Respect our neighbors"*. This does seem both clear and natural, but is at the same time subject to interpretation. Seen in connection with the two other Golden Rules, compliance and intervention, how does one show respect? Does one have respect for the non-compliant person's life and therefore intervene on the action, or does one have respect for the non-compliant person's professional integrity and therefore chose not to intervene on the action? Or maybe the respect rule refers to the manner in which one should intervene? In any event, the Golden Rule regarding respect is also subject to interpretation, and also this can (and probably is) of local and culture specific nature.

The Shell group's culturally independent Golden Rules are not necessarily culturally independent. All three of the rules are subject to local interpretation, as are the EP House Rules.

5.5 Summary

This chapter has focused on the Shell Group's Golden Rules. I have introduced the story of the practice, including the rationale behind it, the implementation process, and the employees' reception. I have discussed the originality of the practice and argued against its cultural independence.

The EPE transition brought with it centralization, and centralization is a very important characteristic within the field of organizational safety. The only ones promoting a centralized strategy are the HRO theorists, and they state that a uniform culture is a prerequisite. The findings of this chapter are related to the alleged universalism of the practice. The Shell organization sees the Golden Rules as universal, culturally independent, and comprehensible. However, the practice has not had any practical affect on the employees, and it is difficult for most to see the effectual change. It seems like the practice has not worked as it was meant to do – there is no universal understanding available.

Chapter 6 – Can organizational safety be enhanced through cultural uniformity?

"The proper method for hastening the decay of error, is not, by brute force, or by regulation which is one of the classes of force, to endeavour to reduce men to intellectual uniformity; but on the contrary by teaching every man to think for himself."[62]

6.1 Introduction

In the previous two chapters we have seen more in detail how the safety systems work in Norske Shell. Chapter 4 analyzed the organizational transition from 2003, when the European Shell Exploration and Production units merged into Shell EPE. The chapter showed the level of discontentment in the Norwegian organization that are directly related to the transition. The implications deriving from the transition will be discussed further in this chapter.

Through chapter 5 we have seen how the Golden Rules practice was implemented and received, and discussed its cultural vulnerability and universialism. The conclusions were that the practice was not culturally independent, as portrayed by the ambassadors of the practice in the Shell system. The Golden Rules, however simple and self-evident, are dependent on interpretations and do not work on their own as a tool in decision-making situations. Also, the lack of staff involvement was proposed as a reason why nobody seemed to remember the implementation and presentation process and why the practice by many is seen as "just another practice". Questions were asked regarding whether or not the Golden Rules practice brings something new to the table, or if it merely works as a waste of time and resources.

The purpose of this chapter is to connect the discussions on the EPE transition with those on the Golden Rules, to see if there can be implications on the safety of Norske Shell. Keeping in mind the research questions I will discuss the possibility that Shell has managed to create a uniform culture.

[62] William Goodwin 1793.

6.2 Shell EPE – what to make of the transition?

The EPE transition has shown itself as an important contributor to organizational discontentment in Norske Shell, and most arguments can be related to a newfound remoteness of leaders. Three different negative sides of the remoteness of leaders have been highlighted through the interviews; prolonged decision-making processes, lack of personal feedback from leaders, and a reduction of cultural knowledge. A positive aspect has also been briefly discussed; the employees of Norske Shell seem to unite in their discontentment. They stand together in their disagreement with the organizational strategy. Furthermore, the complaining and opposition signalizes something important: the employees would not have complained if they did not care – their opposition, in that way, signalizes commitment to the organization.

The choice of Norske Shell as a case has already been briefly discussed in relation to the theoretical contributions surrounding rationality and organizational safety, and it has been said that the matter of centralization as a consequence of the restructuring strengthens the case. However, going deeper into the implications from the organizational transition, not only centralization stands out as an important factor. The EPE organization can also be seen as something that increases the system's complexity, something that – especially together with the increased centralization – really opposes to what Perrow proposes will help decrease the organization's susceptibility to accidents.

In his newest book, *The Next Catastrophe: Reducing Our Vulnerabilities to Natural, Industrial, and Terrorist Disasters* (2007), Perrow focuses on the challenges related to globalization, and states that standardization is not necessarily the best strategy to choose. He suggests that the concentration of political and market power should be reduced and that today's companies are just too big and well beyond the required size for production effectiveness. Organizations could decrease in size, without it having a negative effect on production. His arguments can help understand the rationale behind the expansion of organizations; the bigger one is, the bigger the concentration of power. Reducing the size of organizations is one of his main agendas; firstly to reduce the complexity and secondly to reduce the chances that the organization becomes a target for external malign intentions.

Through NAT, Perrow proposes that in order to decrease an organization's susceptibility to accidents one needs to decrease the organization's coupling, its complexity, or both.

Subsequently one should understand that an increase in one or both of these organizational characteristics can lead to an increase the organization's susceptibility to accidents. The complexity in the Norwegian Shell organization can be thought to have been increased as a result of the EPE transition; the communicative lines have been lengthened and the leaders are more remote, authority has been centralized, and practices are subject to standardization. The patterns of interaction have been spread, both organizationally and geographically, subsequently prolonging the decision-making processes. However, the idea behind EPE is uniformity, and uniformity can be seen as a way to reduce complexity; if everyone acts based on the same logics the complexity decreases. Yet, in order to obtain uniformity in such a large organization one needs to first centralize authority and prolong the decision-making lines which, in turn, increases complexity. We therefore cannot take for granted that the EPE transition has increased the complexity in the organization, but we can assume that it has not complexity has not been reduced. The complexity of the organization has either remained stable or been increased.

The centralization warned about by both schools of organizational safety theorists is thought to affect to organization's ability to "*cope with unplanned interactions of failures*" (Perrow 1999; 332) and suppress the ability of the individuals closest to the problems at hand to respond rapidly and appropriately when dangers occur. Through NAT, Perrow suggests the possibility of choice between the two strategies, as his classification of tight coupling and interactive complexity leads to an incompatible recommendation; tightly coupled systems should be centralized, whilst complex systems should be decentralized (Perrow 1999). The centralization recommended in tightly coupled systems is to ensure swift reactions and undisputed obedience. The decentralization recommended in complex systems is to make sure that those closest to subsystems can cope with unplanned interactions of failures. One of Perrow's main points is that simultaneous centralization and decentralization cannot exist.

The HROT scholars, on the other hand, seem to propose a centralized form of decentralization. They promote decentralization as the correct organizational strategy, but point out that this is only possible where there is a good and uniform culture that guarantees that all personnel act in accordance with the management's wishes. The decentralization recommended can thus be seen as centralized in many ways; the decision-making is indeed done at all levels, but always in accordance with set values, goals, and strategies. Centralization can exist simultaneous with decentralization.

When seeing the HRO theorists' recommendations in this manner, the Shell EPE organization does not seem to counter the notion of decentralization too much. The authority that has been centralized seems to be at the organizational level, whereas the individual level decisions are still decentralized. The Shell Group's Golden Rules is a good example; compliance, intervention, and respect do indeed imply a certain degree of decision-making rights at all levels of the organization. Operations can still be stopped by those closest to the problem, and all individuals in the organization have a responsibility for their own actions, as well as a duty to intervene on unsafe actions performed by others.

However, having a strong and uniform organization culture is seen by the HROT scholars as a prerequisite for decentralization, ensuring that the decisions that are made are met with approval. As discussed earlier, the tension due to the organizational transition can be thought to make the cultural identities available in the organization harder to identify, as well as it can create a stronger sense of belonging to the different subcultures. Giving the Norwegian culture less priority can lead to an extra Norwegian identification amongst the Norwegian workforce. Similarly, giving the Norwegian Shell organization less priority can lead to an increased identification to the Norwegian Shell organizational culture. I have mentioned that a possible positive aspect of the discontentment in the Norwegian organization due to the EPE transition is that the employees seem to unite in their complaining and disagreement. This unity is, however, on a local level; the Norwegians unite with the Norwegians.

Creating a uniform culture cannot be an easier task when increasing the scale of the organization. Quite on the contrary, the increase in scale will complicate the dynamics found within the organization and lead to a higher number of available identities and perceptions of appropriateness. This could lead to a paradoxical conclusion; by trying to create and promote a uniform culture, the organization can actually end up with increased heterogeneity. In other words, the actual effect is the exact opposite of the planned effect.

The question is thus subject to a shift; it is not necessarily the centralizing strategy as a result of the EPE transition that is the potential problem. Rather, I would like to focus on the conditions for the centralization to be a positive strategy. The Golden Rules become essential. The practice has already been seen as a way to decentralize authority – all three of the Golden Rules imply a certain degree of decision-making rights at all levels of the organization. The

question thus becomes related to culture; can this practice, with its assumed universialism and cultural independence, be seen to create the uniform culture needed to compensate for the centralization performed by making possible simultaneous decentralization?

6.3 Golden Rules – what to make of the practice?

The point of the close revision of the Golden Rules is to see whether or not Shell has managed to create a universal and culturally independent practice. Further, this can help to see the practice's actual effects on the safety in Norske Shell. "Actual effects" in this context does not involve statistics and numbers, but rather the possibility that the practice has affected the safety through creating a culture, or a mind-set, that further can be thought to affect the safety.

The fact that none of the informants remembered the implementation or presentation process of the Golden Rules can be interpreted in a negative manner for the practice. The practice has the quality of being "just another practice", however superior and easily understandable it may be considered to be. Being "just another practice" does make the practice seem immaterial, especially when seen in connection with its contents. All three of the Golden Rules can be seen as obvious practices, and can, therefore, function merely as a reminder of what people already know, do, and take for granted. The practice does not work as a tool in decision-making situations, and it is shown that different interpretations of the three rules can exist. No real changes are made by implementing the practice, and no behavioral changes can be linked directly to the three rules. It therefore becomes difficult to see the purpose of the Golden Rules. If the practice fails to bring anything new to the table, how can it be contributing to a safer organization?

The "just another practice" view of the workers can also be seen in connection with the lack of staff involvement in the implementation process. Is it possible that if the staff was more involved in the process the practice would obtain a higher status amongst the workforce? If so, is it possible that the practice actually could have assisted in the creation of a healthy culture that promoted safety?

It is difficult to say anything about the effects of the Golden Rules. There is, however, little reason to believe that the effect that it has had on the safety of Norske Shell has been positive. What can be learned from this revision is the cultural differentiation made between the

Norwegian and the British organizations. The strategies and facilities used when implementing the practice varied across the borders; while the Norwegian organization chose to use interactive facilities to introduce, implement, and attend to the practice, the British chose to rely on posters. So, not only are the rules themselves subject to vast cultural differentiation, the practical (in this case the visual) changes related to the practice are also different. The Norwegians seem to want to contrast themselves with the British, and many point towards the British when asked how far the behavioral safety focus can go. This is also visible through other practices in the organization. The offices are in principle meant to have the same behavioral rules and standards, and a Norwegian employee should be able to behave in the same way when visiting the Aberdeen office as he would at his local Norwegian office. However, there are observations made which deviate from this principle. It seems like the differences between the Norwegian and British offices are noticeable, with the British having more rules "*like not being allowed to slice your own bread, like the canteen workers having to wear protective footwear, like having arrows indicating which side of the corridor to walk on, and like having the stop card system*"[63].

When it comes to the focus on behavioral safety it seems like the line for exaggeration is drawn at very different places for the two countries, and it seems like the British have a different view on safety than the Norwegians. It becomes extra visible when the Norwegians portray the British ways as extremities, saying things like "*it's totally extreme over there*"[64] and "*we don't do that here. It's over the top.*"[65]

The differences here can be linked to Hofstede's cultural dimensions as well as the discussions on super-rationality. Bumping into someone while walking in the hallways does not seem like a risk worth eliminating in a Norwegian context, and this is probably because of the cost implied by doing so. The risk-level in the office hallways is extremely low, and regulating such elementary behavior is, in Norway, equivalent of treating the employees as idiots – as if they didn't know how to walk without hurting themselves. It just seems like a risk worth taking to avoid appearing condescending, in a culture where equality in power and status is emphasized. The management, or the HSE department acting on the management's behalf, should not put themselves in a position where their "super-rationality" is shown off.

[63] Interview 8, 10.07.08, my translation.
[64] Interview with Arild Lund, 25.04.08, my translation.
[65] Interview 6, 07.07.08 – my translation.

Rather, showing the employees some faith and reliance can lead to more responsibility from the workforce and reduce the potential discontentment in the organization.

Walking in hallways can reasonably be compared with walking in stairs, the difference being the gradient. One can thus ask whether or not the Norwegians are consistent when accepting the handrail rule while refusing the arrows in the hallways. However, the visible symbolic effects are different; arrows in the hallways are very visible. The handrail rule is not visible at all, except for in the Golden Rules pamphlets handed out to visitors and in other Golden Rules/House Rules. It must also be remembered that the handrail rule is the most controversial in Norway, and the rule met by most opposition. It can seem like the Norwegian limit for what is accepted within behavior modification is related to effect; if a rule is seen to have the effect of reducing real risk, then the rule is accepted. The integrity of the individual is important and it seems like the line between behavioral rules and treating people as idiots is finer in Norway than in the UK. The perception of safety just seems to be different in Norway than in the UK, and the trade-offs between risk level and the cost of low-risk elimination seem to vary.

What is there then to make of the Golden Rules? The practice seems redundant, being "just another practice" and stating the obvious. It is hard to believe that it has led to the creation of a "healthy safety culture" when seeing the little effect it has had on the employees. It is also very difficult to believe that the Golden Rules practice has contributed in the creation of a uniform culture, it rather seems like the practice has led to increased heterogeneity and sub-cultural identification. There is, in other words, no reason to believe that the Golden Rules has had a positive effect on the safety of Norske Shell. There are, however, two other possibilities when it comes to the effect of the practice; it can either have had no effect or negative effect. The potential negative effect can be related to immunity – one can become immune when exposed to the same words over and over again, not unlike how bacteria become resistant to antibiotics. For every practice implemented that does not have a clear positive effect, the likelihood of discursive immunity increases. If the practice has had no effect, and can just be seen as a waste of time and resources, then it can, in fact, be considered having some negative effect after all. The resources wasted, if this is the case, are numerous; the organization's money, its personnel, the employees' time, and their attention. Wasting the employees' time and attention brings us back to the immunity aspect and allows us to raise an appropriate question; what will happen the day the organization has something important to implement?

6.4 Has Shell managed to create cultural uniformity?

A strong and uniform culture is presented by the HROT scholars as a prerequisite for a decentralized organizational strategy, and Perrow's NAT states that tightly coupled systems should be centralized to obtain quick response and unquestioned obedience. The decentralized strategy proposed by the HROT scholars as the best way to decrease the organization's susceptibility to accidents, and proposed by Perrow as one of two choices in strategy, is in other words dependent on a uniform understanding of appropriateness. This notion, especially seen in connection with the EPE transition, seems to be problematic.

The centralization performed through the transition was the most obviously important characteristic and it was shown how this strategy can turn out both positively and negatively. The HROT scholars' need for a strong and uniform culture to ensure correct decisions that are in accordance with the management's wishes does not seem to have been met. The size of the new organization, seen in connection with the centralization and new remoteness of the leaders, complicates the possibilities of creating such a culture, and the tension and discontentment due to the transition seems to lead to a stronger sense of belonging to the sub-cultures available. Appropriateness is, in other words, not necessarily agreed on.

The data collected in Norske Shell points towards a lack of a uniform culture. Part of the discontentment identified related to the new remoteness of the leaders can seem to be directly related to cultural issues; the standardization of practices deriving from the centralization of organizational authority decreases the local adaptation which was possible earlier. In the previous chapter the Shell Group's Golden Rules was subject to an analysis. The main conclusions were that the practice is not culturally independent, as opposed to what the Shell organization communicates. It was also shown that the Golden Rules indeed weren't as thoroughly known amongst the workers as the HSE department thought. Some of the informants couldn't even state the three rules, and some didn't really know the difference between the Golden Rules and the House Rules. Also, it was shown how different the practice is understood within the same organization. In other words, if the Golden Rules is one way of decentralizing the otherwise centralized line of authority, the centralization at hand does seem to counter the advice from both schools within organizational safety theory.

This leads us back to the paradox mentioned above; when attempting to create a uniform and homogeneous culture, the organization could actually end up with the opposite result – an increased heterogeneity and stronger sub-cultures. It can thus be said that the EPE organization counters the advice from both schools of organizational safety theorists, and therefore be thought to increase the susceptibility to accidents. The increase in scale of the organization makes creating a uniform culture even more difficult, as even more sub-cultures and identities are available.

Connecting the notion of centralization with the aspiration for cultural uniformity can also be seen in relation with the different perspectives on organizations. The EPE transition and the Golden Rules practice can be seen as part of a bigger organizational strategy. While one is strucutral and related to economical conditions, and the other is practical and related to safety, they both signalize the same strategy; more universialism, less local cultural adaptation.

It becomes important to discuss the relation between the rationalistic and institutionalistic organizational characteristics, and the relation between structure and culture. The EPE transition is of structural character, and the different organizational perspectives would have different views on its implications. From a rationalistic perspective, one could assume that it would be expected that the internal dynamics of the organization (identities, cultures, etc.) change according to the new structure – that the internal dynamics adapt. An institutionalistic perspective would, on the other hand, open for another relation between structural and internal characteristics; the structure may affect the culture, the culture may affect the structure, and the structure and culture may evolve simultaneously and in accordance with one another. The empirical findings of this study point toward an institutional perspective; it does not seem possible to separate structure and culture. The EPE transition has affected the culture, and the culture has affected the reception, and consequently the effect, of the transition. The Golden Rules practice can be seen as a way for the organization to control the culture, its evolvement, and its effect on the transition. However, we have seen how the practice has contributed in increasing the heterogeneity in the organization, and strengthened the local identities and cultures. The structure and culture have had a mutual effect on each other.

Chapter 7 – The paradoxical risk understanding.

"Human responses to risk are filled with contradictions. Countless aphorisms warn us about risk, but their directions are not clear: "Look before you leap" conveys a different message than "he who hesitates is lost". Our behavior in the face of risk is incosistent"[66]

7.1 Introduction

I will proceed to discuss the risk understandings in the industry. How the safety work is conducted and communicated in Norske Shell does tell us something about the prevailing risk understanding. Remembering the theoretical discussions from chapter 2, including the theories on organizational safety and the iceberg/pyramid theories, I will discuss the practical and normative implications on today's safety focus.

7.2 Understanding risk, or misunderstanding safety?

One problem that Norske Shell faces in its safety work is, in my humble opinion, representative of the whole industry, and seems to be related to the operalization of risk and to the many different levels of understanding amongst the workers. Some understand the logics behind the practices, and some simply do not. Who has the correct understanding remains a mystery, but someone must indeed be wrong. The bigger picture exceeds the safety practices and is related to the general risk understanding. The iceberg/pyramid theories were presented in chapter 2, and support a correlation between unsafe acts and major accidents. If these are correct holding the handrail in the office buildings should be a profitable solution to accident prevention. If the theories are incorrect, the handrail rule becomes superfluous.

7.2.1 Exemplification of different understandings

Firstly, let me illustrate the different understandings found through my interviews in Norske Shell. The best way to illustrate this is through the conversations regarding the rule of holding the handrail. The inoriginality of this example is somewhat a pity, as the handrail rule probably is the most discussed part of safety work in the industry. I would have liked to avoid

[66] Nelkin 1985; 15.

this as an example, but the rule is still the most controversial one available, and is the easiest to make an example of.

The reason why the handrail rule is a good example is that this rule can be understood very differently. Some choose to see the rule in a very utility rational sense; we hold the handrail to avoid falling in the stairs:

"*I think it's understandable, especially the handrail part. I have been close to falling in the stairs many times, and the handrail actually saved me.*"[67]

This way of seeing the rule is very simple, and falls under the category of the rationalists. This statement is also very positive to the rule, the informant seems to appreciate the rule and to see its value.

Another understanding of the rule is seeing it as an indirect tool for accomplishing something else, in this case intervention. Several of my informants saw the handrail rule as a way to practice what is considered the most difficult part of the Golden Rules in Norway, namely intervention:

"*I asked "why do we do this?", and he actually pointed out to me that slipping and tripping is not the main reason. The main reason is because its one of the easiest things to intervene in, and it's at that level of being on display that you could actually intervene in a correct way. If you're able to intervene on someone doing something that's worth gold – that's gold dust.*"[68]

"W*e do the things we do; back into the parking space, hold the handrails, have the lid on our cups, (…) don't carry things or use the cellphone in the stairs. By doing this I believe that people will develop a good attitude to HSE which will further lead to the wish and knowledge to intervene (…). Because it goes against the feeling in our backbone, and intervention is difficult for us. But if we see something that is very contrary to what we believe in we will intervene.*"[69]

[67] Interview 2, 02.07.08, my translation.
[68] Interview 9, 25.07.08.
[69] Interview 6, 07.07.08, my translation.

Seeing the handrail rule as an easy way to practice intervention shows that the understandings available in the organization can exist at a deeper level. Practicing intervention on a day-to-day basis and with something so elementary as holding the handrail can make the workers more prepared for "real" interventions in other situations.

The level of understanding behind the rule does, however, not stop here. A third level of understanding shows the attitudinal connotations of the practices; by holding the handrail consistently one develops a healthy attitude towards safety.

"*I hold the handrail myself, but because (…) I see the handrail as a metaphor for how I want the rest to be.*"[70]

The handrail as a metaphor seemed to be valid for those with this understanding. Holding the handrail is thought to help in creating an attitude that makes people don't accept shortcuts and make them conscious about their choices:

"*Especially the handrail rule has been used as an example that this is all to make people think, to make them conscious and help them understand HSE properly. They have to understand that when you're working on an operation – we can't have rules for everything – you have to think about the potential outcomes, think about what actually can happen. If you teach them to hold the handrail and they do it often enough, it actually becomes a habit (…). And that's generally what you want to achieve when it comes to HSE rules; that people don't take shortcuts and that they fall into good habits.*"[71]

Another version of this perspective is the symbolism of the handrail rule. One way to see this is by acknowledging the coupling between the onshore and offshore activities, and seeing the impact the work onshore can have on operations offshore:

"*People hold the handrail, but we have left the discussions about it. Now we have begun to understand that it is all about thinking through our actions ahead, and keeping in mind the jobs we do. Most people sitting here working have some sort of impact on the job being done offshore, or at a construction site somewhere, or at a rig or something. So it's clear that you*

[70] Interview Arild Lund, 25.04.08, my translation.
[71] Interview Gerd Olaug Vikeså, 22.07.08, my translation.

have a responsibility to do the job thoroughly, that the equipment is properly designed, that you don't choose bad solutions, that you involve users that can help to check that it's done right. In doing that, we can avoid situations where we have to climb or hoist things, in other words making things simpler. That's what people out here are working on. And they have to understand that there's someone somewhere who is going to use these systems in the hard end (…), and that's what it's all about. That people understand that what they're sitting and doing here actually has a consequence for someone somewhere else."[72]

Another symbolic view on the rule is seeing holding the handrail as an active action one chooses consistently every day, as a way to work slowly, but surely, with an HSE attitude:

"*I do not believe that I will die if I don't hold the handrail. But when I explain people about safety I usually use the handrail as an example. Not because it's terribly dangerous not to hold the handrail, but because is an symbolizing act that does something about the way to think about safety. It's something you choose to do every day, so it becomes a habit after a while, an underlying active action, and you get to work a bit with HSE everyday, from within yourself.*" [73]

The different understandings portrayed show the many different ways in which a practice can be understood; from the utility rationalistic to the institutional and symbolic sense.

7.3 The paradoxical risk understanding

The iceberg/pyramid metaphors are essential when discussing risk understanding, and whether or not they can be assumed to be correct is important to examine. The basic assumption behind these theories is a correlation between unsafe acts, small incidents, and major accidents; if the smaller incidents are reduced, the major accidents will subsequently be reduced. This perspective dates back to 1931, when Heinrich published his book, "*Industrial Accident Prevention: A Scientific Approach*". Today, 78 years later, it shouldn't be too early to discuss the possibility that the theory is not correct. Fred A. Manuele (2003) argues against the theory in "*On the practice of safety*". He refers to the numbers from the National Safety Council publication *Injury Facts, 2000 edition*, comparing those of 1933 to those of 1999: in

[72] Interview Arild Lund, 25.04.08, my translation.
[73] Interview 6, 07.07.08, my translation.

1933 there were 39,000,000 workers and 14,500 deaths, making a death rate of 37 per 100,000 workers. In 1999 there were 134,688,000 workers and 5,100 deaths, making a death rate of 3.8 per 100,000 workers (Manuele 2003; 125). From these numbers he poses the highly relevant question: "*Could workplace studies made in the 1920s be valid in relation to the workplace as it now exists?*" (Ibid; 125), and answers with "*I don't think so.*" (Ibid; 125). The workplace situation is just too different today.

Tore Tjelmeland (2003) shows, in his study on risk understanding in the petroleum industry, the lack of correlation between incidents and accidents through a correlation analysis. His analysis shows that the only statistical significant correlation between the different categories[74], is a negative correlation between small injuries and serious injuries. The other categories do not correlate. His conclusions are therefore that there is no connection between the categories, and that the iceberg/pyramid theories consequently can be rejected.

Also the industry seems to be moving away from the iceberg/pyramid theory, and this is also communicated in the Shell system:

"Back to the iceberg theory – the iceberg theory has been based on the notion that all the invisible unsafe acts turn into a serious accident. And I believe it's a fact that the industry is turning away from this focus. (…) I think it's a fact the industry is moving away from the belief that even if you have ten thousand reports on miscellaneous near-misses that never happened, it will lead to one thousand injuries, one hundred lost-time injuries, and one fatality. I don't only believe this – I'm sure of it."[75]

Arild Lund, giving this statement, seems sure that the theory is outdated and no longer prevalent in the industry. However, looking back at the earlier parts of this study, the general risk understanding becomes paradoxical. Something seems to be inconsistent. The handrail example, however cliché, is in fact very interesting; it sums up the paradoxical risk understanding that prevails in the industry. The paradox is this: if the pyramid metaphor is outdated, why the focus on low-risk situations? If there is no correlation between holding the handrail and a platform blowing up, why waste the resources (understand: the organization's money, its personnel, the employees' time, and their attention)? To turn it around: if the

[74] He operates with the following categories: small injuries, serious injuries, and fatalities.
[75] Interview Arild Lund, 12.06.08, my translation.

pyramid metaphor is prevalent, why not have guards in the stairways to make sure that everbody holds the handrail? Why not have moving walkways to avoid workers crashing into each other while walking? Shouldn't that be thought to help avoid offshore catastrophes?

The answer to these questions are important, but not easy to reach. The paradox does, however, have practical and normative implications. The practical implication is that safety work needs to be differentiatied; low-risk situations should not be treated in the same manner as high-risk situations, even if only for capacity purposes. If there is no differentiation, one should indeed have guards in the stairways and moving walkways in every office building.

The costs of the focus in today's safety work can be seen to exceed the profits; lots of resources are allocated to make already pretty good statistics just a little bit better. Campaigns are created and practices are implemented that seem to have no direct practical effects, e.g. the Golden Rules, and the cost of doing this needs to be discussed. Monetary resources is one aspect, another is the wasting of the employees' time and, even more important, their attention:

"*One can lose some respect for HSE, if it's exaggerated. And I believe that Shell is getting to a point of exaggeration. If you're out doing a dangerous job, you'll do a Safe Job Analysis. If you're working with hydrocarbons you have to be alert. But if all of us hold the handrail or not – it's just not the same risk level. And I believe that the immense focus onshore is being ridiculed.*"[76]

As seen in the analysis of the Golden Rules, being "just another practice" can be seen as just a waste of resources. The practice has had no practical effect and can thus not be thought to have increased the safety of the organization. As mentioned earlier, there are still two possibilities; the practice can have decreased the safety, or the practice can have had no effect on the safety whatsoever. Whichever of these possibilities turns out to be correct, the best case scenario involves a waste of money, time, and attention, and the possibility that the employees "*lose respect for HSE*". The best case scenario is, in other words, not good.

The normative implication is related to the responsibility imposed on the workers; should they be held responsible for the organization's safety records because they choose not to hold the

[76] Interview 11, 13.08.08, my translation.

handrail? If there is no covariation between small unsafe acts and major accidents, why keep employees accountable for their co-workers' crazy staircase behavior?

The behavioral rules related to low-risk situations, like holding the handrail, must be based on one of two logical premises; either the iceberg/pyramid theories or a thought that there exists one safe or rational behavioral choice for each situation. If the rejection of the iceberg/pyramid metaphors actually is prevalent in the industry, we can assume that there is thought to be some sort of logic of appropriateness available for each behavioral situation. If such a variety of appropriateness exists becomes an empirical question, and will not be possible to answer until all possible situations have shown their logics of appropriateness. In that case we must assume that every situation has one "correct" (or "rational", "appropriate", or "safe") outcome. The appropriateness, as it is today, has not been reached through an institutionalization process or a cultural process, but rather through the organization creating the frames for appropriate behavior. The organization is super-rational, and the rationality of the employees can be seen as bounded (Simon 1945).

Chapter 8 – Summary of findings and conclusions

"We all have our philosophies, whether or not we are aware of the fact, and our philosophies are not worth very much. But the impact of our philosophies upon our actions and our lives is often devastating. This makes it necessary to try to improve our philosophies by criticism."[77]

8.1 Introduction

This study has been on the topic of organizational safety. The litterature on the field is much divided, and two perspectives seem to prevail. First, we have the Normal Accidents Theory (Perrow 1999). The theory has become one of two prevailing schools of thought, and the main arguments include that accidents are inevitable. The other perspective is that of the High Reliability Organization theorists. This line of thought disagrees with NAT on the inevitability of accidents, stating that accidents can be avoided through intelligent organizational designs.

The purpose of this study has been to test and question the HROT. One of its main arguments is that of simultaneous centralization and decentralization; authority and decision-making are recommended to be decentralized, but only when the premises for decision-making are centralized. In other words, decentralization is dependent on cultural uniformity, and together these organizational characteristics are thought to increase the organization's reliability and decrease its susceptibility to accidents. This study was performed to question the notion of cultural uniformity and discuss the degree to which it can be possible for a multinational organization to create a uniform culture.

The case of this study has been Norske Shell, and the organization's alleged universal and culturally independant Golden Rules. Seen in connection with the EPE transition and the centralization and standardization performed, the case seems highly relevant. Studying a universal and culturally independent practice should be considered a good way to test the HROT; if Shell actually has managed to create a uniform practice there should be reason to believe that cultural uniformity is possible to obtain in multinational organizations.

[77] Popper [1986] 1972; 33.

The purpose of this chapter is to summarize the findings of this study, as well the conclusions reached along the way.

8.2 Summary of findings

The organizational transition performed in the European Shell system has been the source of substantial discontentment amongst the employees in Norske Shell. The main arguments behind the discontentment are related to the newfound remoteness of leaders, with subsequent prolonged decision-making, decreased internal power in the organization, and reduced cultural knowledge. One can choose to see the positive aspects of such discontentment; the opposition to Shell EPE can have contributed to increased fellowship in Norske Shell. The opposition shows that the employees care, and they seem to unite in their discontentment. However, Norske Shell is no longer a unit, but rather a subunit. Increased fellowship within Norske Shell does, therefore, indicate increased subcultural identification. Increased subcultural identification points toward decreased cultural uniformity.

The EPE transition seems to have made cultural uniformity more challenging to achieve. The organization is larger and more complex, and includes an increased amount of subcultures. If the transition at the same time has lead to an increase in subcultural identification, the wish to create a uniform culture can not be seen to have been reached. The review and discussions surrounding the EPE transition has shown something important: organizational strategies related to structure and culture do have an effect on safety. This can tell us that safety should not be differentiated from the rest of the organization, but rather be acknowledged and treated as an integrated part of the organization.

The Shell Group's Golden Rules has been presented as an alleged universal and culturally independent practice, and the three rules – Comply, Intervene, and Respect – are supposedly not possible to oppose to. The data of this study shows otherwise; the Golden Rules are neither universal nor culturally independent. There does indeed exist different understandings of the practice within the organization, and the rules are indeed subject to interpretation.

The main findings surrounding the presentation and implementation of the Golden Rules are related to cross-cultural standardization. The techniques and facilities used in the UK do not

necessarily have positive effects in Norway. It has been discussed that the highly feminine Norwegian culture requires a high degree of staff involvement, and one can consider the possibility of the Golden Rules having a greater effect if the staff was more involved in the process.

The Golden Rules are, in this study, not considered a positive contribution to the organizational safety of Norske Shell. There has been no practical effect from the practice, and the employees have a hard time identifying the changes – there just does not seem to be any difference between before and after the implementation of the practice. Questions have been raised regarding how the Golden Rules can have been a positive contribution to the organizational safety when it does not seem to bring anything new to the table. If the Golden Rules have had no positive effect on the safety of Norske Shell, there are still two other possibilities; the practice can have hade a negative effect or it can have had no effect. The negative effects can be related to discursive immunity; exposing the employees to new practices without practical implications and effects can result in their becoming immune to the discourse. What will then happen the day the organization has a "real" practice to implement? The possibility that the practice has had no effect brings forth another problem; if this is the case, the Golden Rules can be seen as a waste of time and resources. Money and time are just two aspects, the employees' attention is another. Wasting, or misusing, the employees' attention leads us back to the immunity problem – when will they know when their attention really is needed? The practice having no effect thus seems to be negative after all.

Many central organizational characteristics that are thought to increase organizational safety are opposed to through the EPE transition, and it becomes difficult to believe that the effect on the safety of Norske Shell has been positive. In addition, the alleged uniform Golden Rules can not be seen to have aided in the creation of a uniform culture. Quite on the contrary, the practice, along with the organizational transition, seems to have led to an increased subcultural identification. The effect seems to be the opposite of the intentions – by trying to create cultural uniformity, the organization has actually achieved increased cultural heterogeneity. So, unless the statistics can prove a decline in accidents and incidents that is due to the EPE transition, the Golden Rules, and/or the implications deriving from the two, I must conclude that the transition has dragged the organization in the wrong direction.

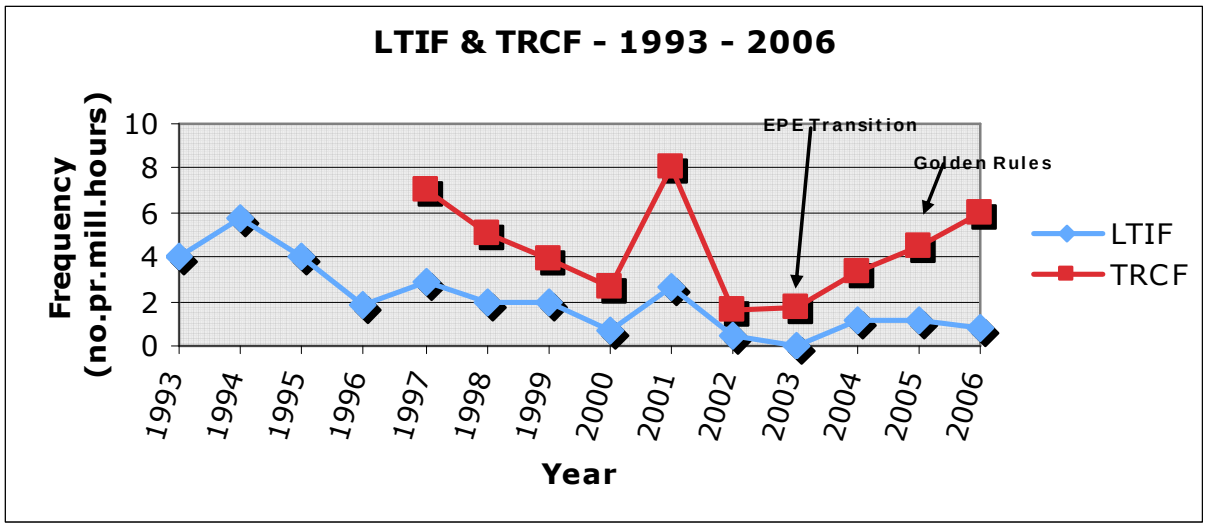

Fig.8.1 – Lost Time Injuries and Total Recordable Cases pr million working hours in Norske Shell 1993 – 2006.

Here we have the Lost Time Injury Frequency (LTIF) (blue line) and Total Recordable Case Frequency (TRCF) (red line) for Norske Shell in the period 1993 – 2006. The frequency is based on numbers given to me by Norske Shell. The EPE transition and the implementation of the Golden Rules are marked.

I have earlier promoted the qualitative view on safety work over the quantitative, and have avoided use of statistics. Statistics are, in the context of this study, not really interesting; no matter what the statistics say we can never know exactly what triggered the changes. A decline in cases can never be exclusively linked to a safety practice, so we can never reach conclusions like *the Golden Rules practice has reduced our Total Recordable Case Frequency by 60%*. There are just too many factors within safety work. Another aspect is that of time; the qualitative view on safety opens for a much longer-term perspective. The Golden Rules practice does maybe not show its effect yet, but maybe it will in ten years. Even then, if the effects show in ten years, we can still not be sure that they are exclusively related to the practice. The only reason to use statistics in this context is to strengthen the conclusions; can anyone argue against my negative conclusions by referring to the statistics? Quite on the contrary; the statistics show an increase in frequency starting the year of the EPE transition, and continuing after the Golden Rules were implemented. The effect, if possible to consider from statistics, seems negative.

During this thesis I have also discussed the risk understanding that seems to prevail in the industry. The iceberg/pyramid metaphors are considered outdated in the industry as well as in

the litterature. The focus on low-risk situations, like walking in the office stairways, therefore becomes paradoxical. The paradoxical risk understanding comes with practical and normative implications. The practical implication is that safety work should be differentiated, and the focus should correspond with the risk level. Low-risk situations need to be treated differently from high-risk situations, the cost of no differentiation is just to high. The normative implication is related to the responsibility one can ascribe to the employees; should they really be held accountable for the organizational safety if they choose to not hold the handrail?

8.3 Conclusions: Can organizational safety be enhanced through cultural uniformity? Is it possible to create a uniform culture in a multinational organization?

Which conclusions can be reached from these discussions? Firstly, I must express my skeptism towards the HROT's suggestions to organizational safety enhancement. I do consider it a possibility that organizational safety can be enhanced through cultural uniformity; my critique is more related to the possibility of creating such a culture. We must consider and problematize the scale of the organizations that the theory is intended for; the complexity and multinationality do not make up good conditions for uniformity.

The case of this study showed the intangible conditions that the organizations are subject to and operate in. The EPE transition came with centralization. Centralization is considered an important organizational characteristic in this context, and it has been shown how a centralized strategy can turn out both positively and negatively. The HRO theorists need for a strong and uniform culture to ensure correct decisions that are in accordance with the management's wishes were not met. The organization has increased in size and, together with the centralization and newfound remoteness of leaders, this seems to complicate the premises for creating cultural uniformity. Also, the discontentment and tension due to the transition seems to have led to a stronger sense of belonging to the sub-cultures available.

It seems to me that the HROT is not meant for organizations like Shell – organizations characterized by multinationality and cross-cultural standardization. Cultural uniformity as a prerequisite for decentralization just does not seem plausible. Shell has tried, through the Golden Rules, to create uniformity. The paradox is that the practice seems to have had the

opposite effect – increased subcultural identification and more internal heterogeneity. If cultural uniformity is not possible to create in multinational organizations, we must assume that authority and decision-making cannot be decentralized. The possibility that this is a finding possible to generalize across organizations should be considered; maybe the HRO theorists' recommendations, performed on the wrong organizations, can have opposite results? If this is the case, the HRO theorists should either reconsider their recommendations or consider specifying their target group.

The categorization performed in chapter 2, linking the theories on organizations and rationality with those on organizational safety, showed the similarity between the different logics. I decided to reject the most rationalist category at an early stage, as this category does not acknowledge human fallibility. Human fallibility, as I see it, is a given premise in today's safety work. The two other categories, the rational institutionalists and the institutionalists, were thus focused on. The rational institutionalists include the HRO theorists and the organizational perspective of Herbert Simon. The institutionalists include NAT and Selznick's organic view on organizations. The main difference between these categories lies in the capabilities of the organization. This categorization can highlight an important aspect; it is difficult to differentiate safety work from the rest of the organization. Theories on organizational safety do not differ much from those on organizations in general, and organizational characteristics, such as structure, culture, management, and goals, do affect safety. A higher degree of integration between the two fields might be rewarding, or would, at least, be a bit closer to reality.

Today's risk understanding is a paradox; the iceberg/pyramid metaphors are rejected, by academics as well as by the industry, but there is still a lack of differentiation in the safety work. The alternative logic behind the low-risk situation behavioral rules is that there in fact is one "correct", "safe", "rational", or "appropriate" alternative available in all situations, and that the low-risk behavioral rules are there to make sure that the right alternative is chosen. This line of thought is very similar to the two most rationalist categories from chapter 2. The rationalist category, including the safety climate theorists and rational choice scholars, would probably agree on these behavioral rules existing to best calculate behavior and eliminate the possibility of human error. The rational institutionalist category could agree on these rules being the organization's way of obtaining a higher level of rationality – a way of

compensating for the human fallibility. The institutionalist category is the only category that can not seem to make sense of the low-risk situation behavioral rules.

An ironic argument arises: There seems to be an unresolvable difference between the organizational safety theorists, and no matter how much knowledge and empirical data that is accumulated there does not seem to be a way to resolve these differences. The irony is that this indirectly supports the Normal Accidents Theory – one can never know what the future will bring, and knowledge and experience is only valid as long as the situation (including the technology, systems, and social conditions) stay the same. In other words, by not being able to proclaim a winner in the contest between the organizational safety theories, does not the winner become Perrow and his NAT?

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