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Department of Sociology

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Yard Work and Worker Memories

*An Analysis of Fields and Practices of Remembering
from a Relationist' Standpoint*

Johs. Hjellbrekke

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Johs. Hjellbrekke

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Preface and Acknowledgments

The last four years, I have had the great privilege of being a fulltime doctoral student in sociology. This has given me the time needed to carry out the data production and the analyses that are presented in this dissertation about classes, work and practices of remembering. However, my interest for this topic dates further back. During the summer of 1987, I decided to complete my undergraduate studies with a "grunnfag" in sociology. My aim was to improve my theoretical knowledge before starting graduate studies in history. The following year, books like Philip Abrams' "Historical sociology", Max Weber's "The Protestant Ethic and the Spirit of Capitalism", Pierre Bourdieu's "Outline of a Theory of Practice" and "Distinction", and Sverre Lysgaard's "Arbeiderkollektivet" radically changed my ways of thinking. When returning to history studies, and to a Master's thesis about the collective memory of the French Revolution during the Paris Commune of 1871, I soon had to realize that what I was trying to do was to analyze past events sociologically. However, I found the problem of the sociological relevance of the past with respect to presently situated practices as being of increasing importance. To make a long story short, my history studies were never completed. January 17th 1990, I returned to Bergen and to sociology.

In the mean time, I had contacted Olav Korsnes, Department of Sociology, University of Bergen, who agreed to be my supervisor. Since then, he has been an invaluable critic of everything I have written. Most important, he has constantly made me ask questions that I otherwise would not have asked. When giving my acknowledgments to some of those who have made this dissertation possible, therefore, Olav comes first.

Second, I am heavily indebted to the local union representatives and all the interviewees who work at Rosenberg. Without their help and generosity, this dissertation would have been radically different, if at all possible to complete.

Furthermore, Lennart Rosenlund has graciously shared his own insights, data and published and unpublished analyses of Stavanger with me, and also provided me with a highly needed office in the spring of 1996. Svein Michelsen has not only given me free access to a research archive on Rosenberg. He has also ruthlessly crossexamined me on the analyses of the structural changes in Stavanger and at Rosenberg, expressed alternative opinions on the matters discussed and more than once revealed flaws in my arguments. Sigmund Grønmo has done a similar job with respect to technical-methodological issues

and my views on sociological methodology in general. Bjug Bøyum has once again advised me on survey methods, and my neighbour for six weeks during The Essex Summer School in Social Science Data Analysis and Collection, 1995, John Gelissen (doctoral student at WORC, Tilburg) has helped me out in timesaving and cunning ways when carrying out the latent class analyses. My fellow doctoral students and Mårten Söder at the dr. polit. seminar at the Department of Sociology, University of Bergen, have all been exposed to, and have criticized various versions of the chapters. Oddgeir Osland, John Scott and Hans Tore Hansen have given me valuable comments on the draft version of the manuscript. As always, this dissertation would have been better if I had taken the advice of the above listed persons into account. The shortcomings are therefore mine, and mine alone.

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Last, the obligatory: I hope to see more of my friends and my family than I have been doing the last months!

Bergen, July, 1999

Johs. Hjellbrekke

Charter 1. 'Collective memory', 'class' and work

1.1. Introduction

This dissertation will focus on three topics that for many years have either been neglected, have become less fashionable or steadily have lost ground to other themes and theoretical approaches in sociology. First, it is a dissertation about what the Durkheimian student Maurice Halbwachs (1877-1945) once termed 'collective memory' - or the social frameworks of memory. While historians, anthropologists, ethnologists, political scientists and social psychologists over the last 20 years have shown an increasing interest in this research topic and also in the work of Maurice Halbwachs, this has not been the case in the sociological community. Despite the popularity and the strengthened position of *historical* sociology, the sociological research agenda has, with a few noteworthy exceptions, not addressed the questions of the ways we perceive, remember or interpret the past, the ways social structures in the present influence the processes by which we do so, and the potential conflicts linked to and generated by different ways of interpreting the past. Thus, while there has been a lot of theorizing in contemporary sociology what is usually called 'culture', there has been far less explicit sociological theorizing on how social relations of power not only are structured and sustained by, but also are able to structure the processes by which we perceive, interpret and classify past events, persons and processes.

Second, it is a dissertation about social classes. Since its heyday in the sixties and seventies, class analysis seems to have lost some of its popularity in favour of other theoretical approaches. Somewhat paradoxically, leading class theorists such as Erik Olin Wright have turned class analysis into an almost ahistorical static, objectivist variable-sociology in which classes are supposed to exist a priori as ontological entities. From a similar objectivist theoretical position, John H. Goldthorpe has argued against historical-sociological approaches in general, despite his focus on classes and social mobility. My analysis will be founded on the assumptions that there are far more fruitful ways to study what we have defined as 'classes' than the variable-oriented, objectivist manner propagated by both Olin Wright and Goldthorpe, and that Goldthorpe is wrong in claiming that, for methodological reasons, history and sociology should be sharply separated.

Thus, my position is much closer to the one advocated by E.P. Thompson in "The Making of the English Working Class": "'Class' itself is not a thing, it is a happening" (Thompson 1980[1968]: 939). Within this framework, class analysis is

not understood as the study of an a priori ontological object, but rather as a way of analyzing how experiences, traditions, dispositions, practices, and social relations both influence and are influenced by the ways agents perceive themselves over time. A class analysis carried out along these lines means that the *processes* that structure these "happenings" and practices, and the ways the processes themselves are structured by them, constitute the main object of analysis. It also means that 'classes' must be studied historically, and that the dialectical interplay between *social* and *mental* structures is of vital importance to the analysis. A major goal of this dissertation, therefore, will be to integrate and discuss the problem of 'collective memory' within a theoretical framework of this type, more precisely within Pierre Bourdieu's theory of practice. As will be clarified below, I will go on to claim that such an analysis can add additional reflexivity to Bourdieu's reflexive sociology.

Third, although *not* being a study in the sociology of work tradition, this is a dissertation which focuses on different aspects of work and working life. There are two major reasons for this. First, Bourdieu has not done any extensive studies of work relations and of the structures and trajectories in what might be called the occupational field. For this reason, the applicability of Bourdieu's theory for the study of these topics has, with a few exceptions¹, not been examined or discussed in great detail. In the course of the dissertation, I will try to demonstrate how Bourdieu's theory of practice can be fruitfully applied in a stepwise historical construction of the occupational field to which the empirical case study refers- the Kværner Rosenberg Verft shipyard in Stavanger. Second, I believe that work is still of major importance to sociology, and that work and work organization should still have a central position in sociological theorizing about processes of social stratification. When studying the structures in what Bourdieu (Bourdieu 1991: 229-251) calls the social space, its relations to the structures in the occupational field should therefore be examined. This implies a relational approach: work is seen as central because of its structuring power on other arenas of social life, and also because changes in these arenas, for example educational system, will have structuring power on work, work organization and working life. For this reason, a core hypothesis in this dissertation postulates first that studies of changes in work, skill levels and work organizations can convey important information about societal changes in general, and that the best way to understand changes in work and society is to study these processes relationally.

¹For instance Korsnes 1996.

The empirical case - Kværner Rosenberg Verft, a shipyard located in Stavanger on the south-western coast of Norway - has been chosen for a number of reasons. First, the shipyard has changed its main product three times the last three decades: from oil tankers to gas tankers to oil-platform decks. At the same time, the yard has gone through several organizational and technological changes that have also affected the employees and their work. Some positions in production became highly central, while others lost their centrality. Thus, the positional histories at the yard have been different, and their trajectories in the occupational field the same. Second, the yard is located in a town that, due to the arrival of the oil industry, has experienced important structural changes over the last 25 years. As the studies of Lennart Rosenlund (1998) indicate, the structures in the local social space have been undergoing radical change, as have the occupational structures, which will be considered in chapter 5. These changes have also affected the yard and its position as an employer. Third, historically, the yard has been one of the major employers in the local industrial sector. Not only can the changes that have taken place in this sector be "reflected" in the changes that have taken place at the yard. In the local occupational field, the yard has also been a distributor of vocational educational capital, so changes that have taken place at the yard would also be "reflected" in changes in the structures of the local occupational field. Prior to the arrival of the oil industry, the yard was also central within its sector in fixing the "exchange rate" between specific types of cultural capital (formal qualifications and vocational education) and economic capital. In the mid-1970s, this position was challenged by the oil companies.

All these processes of transformation were going on more or less simultaneously. Analyzing the yard workers' personal and non-personal memories of these changes within the framework of a relational sociology will therefore hopefully provide us with important insight into how the history of a field can exert structuring power over present practices, and how structures in the present exert structuring power over our perception of the past. To rephrase this in other words: how the dialectics between the field histories, the positional histories and the autobiographical histories exert structuring power not only over social practices but also over what Maurice Halbwachs once termed 'collective memory', and how 'collective memory' in turn exerts structuring power over the ways the present structures are perceived.

1.2. Some exploratory questions for the analysis of 'class', 'culture' and work

While there is an immense amount of sociological theory on social classes, work and work organization, and while important contributions to the study of social frameworks of memory can be found, there has not been much theorizing on the possible relations between these subjects. Apart from my masters thesis (Hjellbrekke 1993) and some shorter studies and articles (e.g. Bertaux & Bertaux-Wiame 1985, Cornu (ed.) 1984, Lequin & Métral 1985), little research has been done that explicitly tries to combine these three fields of study theoretically and empirically.

Thus, the more general research questions to be addressed in the chapters that follow are rather exploratory and fairly straightforward in character:

- What kind of relations can be found between the structures in the perceptions of the past held by "occupants" of a given social position, and the social structures that not only influence the formation of social positions in a given society but also make it possible to establish a positional social hierarchy? Or to rewrite George Lukacs: how can the relations between potential 'classes', history and historical consciousness be studied? And in what ways can a study of the way social "classes" classify the past, cast additional light on existing sociological theories of practice and power relations?
- How, and under what circumstances, can the interpretation, classification and commemoration of historical processes, events, epochs and persons become potential arenas of conflict and symbolic struggles? How, and in what ways, can the same elements become vital with respect to the formation of social identities, for instance generational identities, work identities and 'class' identities?

Formulated in this way, there are not many explicit hypotheses about more or less unidirectional, causal relations among variables to "test" statistically in the traditional hypothetical-deductive way. This has been done deliberately. As will be clarified in greater detail in a later chapter on methodology, I am generally sceptical to this kind of theoretical "testing" in sociological research. Instead, I would argue that a sociological analysis should consider the reflexive dialectics in social relations as its central unit of analysis, and that the theoretical and

methodological framework of analysis must therefore be relational. What does this imply?

1.3. Methodological relationism. Some basic assumptions

As many sociologists have pointed out (for example Archer 1988, Dawe 1978), the problems of structure and agency, micro and macro, have dominated theoretical debates in the social sciences. Theoretically, there has been a more or less sharp divide between, for example, rational-choice theorists and structuralists, and methodologically, a divide between methodological individualism and methodological collectivism or holism. One of the main goals of a relational sociology is to overcome dichotomies such as these.

There are several versions of this theoretical and methodological alternative, but Ritzer & Gindoff (1994:3-23) have identified certain basic assumptions that seem to be shared by most social scientists who are undertaking a theoretical reorientation along relational lines:

- an explanation of the social world must always involve the relationships among individuals and society.
- while relationists do not deny the existence of individuals or social wholes, they claim that individuals or wholes *alone* cannot explain a relational phenomenon.
- analytical concepts must be defined to include relations between individuals and wholes.

Mustafa Emirbayer (Emirbayer 1997: 281- 317) has discussed some of these general assumptions in greater detail, and has also identified some of the elements that distinguish a relational sociology from other frameworks of sociological analysis:

- one cannot a priori take individuals or society as the given starting point of a sociological analysis
- a substantialist position (for example rational-actor and norm-based models of action) is rejected in favor of a relational, or transactional, view of social action and historical processes
- a transactional approach sees relations between terms or units as dynamic, unfolding, ongoing processes. A processual focus on historical development is therefore needed in any kind of relational sociological analysis

- classic variable-based statistical analysis is not considered consistent with a relational sociology because it systematically detaches or de-contextualizes the elements that are analyzed from their spatiotemporal contexts.
- power must be defined in relational terms, and is not something that is "seized" or "held" by an agent.

As Ritzer & Gindoff and Emirbayer point out, the analytical problems and promises of relational sociology have not yet been fully explored. Their description of the relationist' position may also be called rather general, and they are not the only ones to emphasize the problems that are still to be addressed. For instance, Emirbayer correctly identifies problems related to boundary specification, network dynamics, causality and normative implications as future challenges. In order to represent itself as a trustworthy alternative to theories based on methodological individualism or methodological collectivism, a methodological relationism must therefore address at least some of these problems in a plausible way.

Throughout this dissertation I argue that the way this position is expressed in Pierre Bourdieu's critical reflexive sociology enables us to address these issues, and that thematically, a study of 'collective memory' might add yet another dimension of reflexivity to Bourdieu's theory of practice. I also argue that a critical examination of existing theories on and approaches to 'collective memory' based on Bourdieu's reflexive sociology will help sort out some theoretical problems in these approaches. A more detailed presentation and discussion of Bourdieu's theoretical framework will be provided in chapter 3. In this introduction, I will simply outline briefly some of the guiding epistemological and methodological principles of Bourdieu's sociology.

1.4. Some basic principles in Bourdieu's critical reflexive sociology

A central element in the epistemological foundation of Bourdieu's reflexive sociology is to be found in Gaston Bachelard's and Georges Canguilhem's historical epistemology, or as it is also called, applied rationalism (Bachelard 1949, Broady 1991). The problem of "epistemological obstacles" is probably the core element in Bachelard's studies of scientific progress. Briefly, epistemological obstacles are grounded on common-sensical knowledge, perceptions and understandings of the research object, and serve to more or less effectively hinder a scientist from asking the "good" or "correct" scientific

questions. In order to establish an epistemological "rupture" with common-sense knowledge, an a posteriori dialectics must be applied against concepts and categories that are more or less taken for granted. In Bachelard's philosophy of science, therefore, scientific progress is considered as dependent on the scientists' abilities to overcome epistemological obstacles in the construction of research objects.

Bourdieu's adaptation of this program to the social sciences may be summarized in the phrase "Le fait scientifique est conquis, construit, constaté" (Bourdieu, Chamboredon & Passeron 1973: 24). The traditional "methodological individualism vs. collectivism" divide is one of the epistemological obstacles that must be "conquered", as both methodologies are considered to reflect popular ways of thinking about social practice.

Instead, social practice is analyzed as a continuous reflexive dialectics between processes of embodiment and processes of objectification. Practice is not viewed as the product of individual motivations or structural constraints, but rather as an outcome of the dialectics between the individuals' dispositions of action, thought and perception (*habitus*) on the one hand, and the various social positions they occupy (in the various fields of action and in the social space) over shorter or longer periods of time on the other.

Bourdieu also takes a clear anti-substantialist position towards the concepts that are used in the analyses, and the distinction between an ontological and an epistemological object is considered fundamental in Bourdieu's sociology. "Classes" are not viewed as units which a priori, but as theoretical objects that can and must be constructed by the scientist. By applying Bachelardian dialectics, the notion of "classes" therefore, is replaced by the notion of "social space".

Thus formulated, Bourdieu's relational sociology focuses on the reflexive dialectics between two different types of history: the embodied history of individuals (an individual's *habitus*) and the objectified history of various types of social structures (the fields of action and the social space). Neither of these alone is capable of "explaining" social practices, or of being reduced to simply a product of one of the other. Analytically, the focus must instead be on their more or less complex processual relations in the arenas of specific conflicts and struggles (the fields of action). In this way, the reflexive processes of "double historicisation" (Bourdieu 1997: 141-45) constitute the theoretical core of Bourdieu's critical relational sociology.

1.5. Some implications for the study of 'collective memory'

With respect to my own study, some initial implications of a relational sociology seem clear:

- 1) The notion 'collective memory' becomes analytically problematic in a relational sociology, partly because it has substantialist and holistic connotations, and partly because it lacks crucial relational elements in its definitions (as will be clarified in the following chapters). This calls for a revision and redefinition of existing concepts and theories. The goal of this revision must be to present a relational alternative to the existing theoretical approaches.
- 2) "Social class" cannot be taken to be an a priori existing ontological unit of analysis. Instead, the analysis must focus on specific kinds of relations between the history of social structures and the history of individuals that might produce "classes". When analyzing the ways social structures in the present influence and are influenced by the ways people perceive, remember and interpret the past, the focus must be on the interrelations between autobiographical, or individual, histories and the histories of different social positions and structures. Neither of these alone can "explain" what Halbwachs once termed 'collective memory'.
- 3) Given the empirical case, special attention must be paid to the historical relations between different crafts in the shipyard, the individual histories of the persons located in these crafts, and their positions in different hierarchies within the firm and in the local community.
- 4) When analyzing how, and under what conditions, past events, processes and persons can become central elements formative factors of a social identity, these processes cannot be analyzed in unidirectional causal terms; past structures and variables cannot be considered to be more or less determine later practices, perceptions and classifications. Instead, these processes and practices must be analyzed as the structured and structuring outcome of different sets of reflexive relations between the past and present states of these central elements.
- 5) When analyzing statistical data, the traditional multivariate statistical techniques of sociology, such as path analysis and regression analysis, are incompatible with a relational sociology as understood by Ritzer & Gindoff and by

Emirbayer. However, I would argue that other statistical techniques do not necessarily encounter the same difficulties. These may be fully compatible with, a relational sociology and even contribute new, important analytical dimensions and possibilities.

1.6. Structure of the dissertation

The introductory chapter has hopefully provided a brief overview of the topic of the dissertation and the more general problems that will be addressed in the chapters that follow. A brief outline of the sociological and epistemological framework of analysis and some of its implications has also been included. This will provide both a framework and a yardstick in the critical discussion of the existing theories on collective memory which follows in chapter two.

An alternative theoretical approach, based on Pierre Bourdieu's constructivist structuralism, but inspired by the theories of Maurice Halbwachs on the social frameworks of memory and Karl Mannheim's sociology of generations, will then be discussed in chapter three. The intention here is twofold: to present a coherent synthesis which draws together the most relevant elements of other theories of collective memory: and to present a typology of the different types of practices related to the subject.

Chapter four will primarily address methodological problems, but *not* understood in the technical sense of the term.² Important epistemological problems related to sociological methodology will also be addressed.

In chapters five and six, a historical overview of the most important structural changes in Stavanger and on the shipyard will be discussed. In chapter 5, one main goal is to make an "educated guess" about the structures in the local social space in the pre-oil era (before 1970), and how these have changed over the last few decades. This necessitates a rather detailed structural and historical description of the pre-war capital structures in the Stavanger area. Chapter 6 will discuss the yard-internal capital structures, and how these have changed from the 1950s onwards.

In chapter 7, the "yard-internal" capital structures and the positional patterns of inclusion and exclusion will be examined. In accordance with the logic in Halbwachs' original work, these structures will be viewed in relation to the yard-positional frameworks of memories.

²These matters will be outlined in the appendixes.

Chapter 8 will deal with the yard generational frameworks of memories, and perceptions of social hierarchies and of work relations. Mannheim's theory of generations will be central to this analysis and the notion of 'formative events', processes and changes.

In chapter 9, we shall widen the scope will expand to include an examination of the yard workers' memories of *yard-external* events, and their sense of their place in the local social space. In this way, the yard-worker frameworks of memories. will be sought analyzed. Finally, based on data from two surveys, I will also indirectly consider the relation between the yard workers' positions in the local and yard-internal occupational field, and their positions in the Norwegian occupational field in general.

In the concluding chapter, chapter 10, the analysis will be summed up in a discussion of how best to study 'classes', 'fields' and 'practices of remembering'.

Chapter 2. A Critical Review of Theories on and Theoretical Approaches to the Study of 'Collective Memory'

2.1. Introduction

Even though Maurice Halbwachs was one of the leading contributors to the group centered around Émile Durkheim and "l'Année Sociologique" in the years following 1905, his works on social classes, social morphology and collective memory are not particularly well known in the sociological community. The same is probably true for most of the more recent literature on collective memory. Thus, a presentation and critical assessment of the core of Halbwachs' theories and also of the more influential later theoretical and empirical studies of collective memory is in order.

As indicated in the first chapter, the basic assumptions underlying relational sociology will be used as the yardstick for this critical assessment. It must be said, however, that there are several aspects of this analytical strategy that might be criticized. First of all, theoretical ambitions vary from author to author. In some cases, the author's clear ambition is to test hypotheses derived from earlier theory on the subject. In others, the authors present only empirical historical descriptions, accompanied by weak or scant theoretical reflection on the subject. In the latter cases, Halbwachs' concepts are more or less taken for granted. Secondly, the studies originate in various disciplines. Even though interdisciplinarity is a major feature of this field of research, there are important discipline-specific variations. Not everyone shares Halbwachs' ambition of presenting a coherent sociological framework of analysis. Third, using the assumptions of relational sociology as a framework for the discussion means that the writings will not necessarily be judged on their own theoretical premises. The "yardstick" will, in some cases, be external. And fourth, as mentioned previously, the problems inherent in relational sociology have not yet been sorted out. The validity of the yardstick itself can therefore be questioned.

Despite these possible objections, I argue that there are at least two factors that speak in favor of the chosen analytical strategy. First, with respect to relational sociology, an additional dimension can be added in the study of historical processes, since such analysis must also include the agents' *reflections* on such historical processes. Second, and more importantly, I argue that relational sociology can provide a more consistent analytical framework to the phenomenon than the existing alternatives. Hopefully, my discussion will show

that a critical revision is necessary, and that relational sociology is able to serve as a solid theoretical foundation for this revision.

2.2. Maurice Halbwachs and 'collective memory'

The first to address the topic of collective memory was Émile Durkheim's pupil Maurice Halbwachs (1877 - 1945) in his book "Les cadres sociaux de la mémoire" (The social frameworks of memory, Halbwachs 1925). True to the Durkheimian legacy, the theory Halbwachs presents is highly structuralist, and in a Durkheimian fashion clearly oriented away from all forms of individual and psychological explanation. But what, exactly, is meant by 'collective memory'? A clear-cut definition is hard to find in Halbwachs' work, but his argument is based on a Durkheimian understanding of the relation between the individual and the social structures:

Our memories remain collective, however, and are recalled to us through others even though only we were participants in the events or saw the things concerned. In reality, we are never alone. Other men need not be physically present, since we always carry with us a number of distinct persons. (Halbwachs 1980: 23)

As Lewis Coser has pointed out (Coser 1993:22), the notion of 'collective memory' must consequently not be understood in substantial terms in Halbwachs' thinking. It is not something given. Nor does the group *itself* have a mind and a capability of its own to remember. This is always done by individuals as group members but, they do so by mentally "re-entering" or reconstructing the group:

Other men have had these remembrances in common with me. Moreover, they help me to recall them. I turn to these people, I momentarily adopt their viewpoint, and I re-enter their group in order to better remember. I can still feel the group's influence and recognize in myself many ideas and ways of thinking that could not have originated with me and that keep me in contact with it. (Halbwachs 1980: 24)

In short, Halbwachs' argument is that memory is a social fact, structured and sustained by the social groups an individual has encountered and been a member of during his or her lifetime. In order to remember, each individual reconstructs the social frameworks in which a specific event or process happened or evolved. This reconstruction takes place in the present, and is therefore also highly affected by current social structures. For Halbwachs, memory is a product of a social practice, that is heavily structured by and is functional for our *present* group memberships.

In many ways, Halbwachs' argument is similar to the position advocated by George Herbert Mead in "The Nature of the Past".³ As Gary Cook points out, Mead conceives of the past as mainly representational in nature (Cook 1993: 148):

The past is an overflow of the present. It is oriented from the present. /.../ The past we carry around with us ... are in great part constructs of what the present by its nature involves, into which very slight material of memory imagery is fitted. This memory in a manner tests and verifies the structure.

In this way, Mead assigns a functional role to this reconstructed past. A similar position is also taken by Halbwachs in his later study of the relation between physical space and collective memory in "La topographie légendaire des évangiles" (Halbwachs 1941).

Despite these similarities, there are important differences in the way Mead and Halbwachs understand social action. Where Mead assigns a controlling, societal role to the 'me', but also emphasizes the creative impulsivity of the 'I', Halbwachs is far more deterministic. For Halbwachs, the creative side is without doubt subordinate to the more or less all-embracing societal and controlling side. The bottom-line is always that individual memory is an absurdity, and that memory must therefore be studied in social groups. In the original study, he focuses upon the collective memory of families, of religious groups and of social classes. However, given the main objective of this dissertation, I will restrict my presentation to his analysis of the collective memory in social classes (Halbwachs 1925: chapter 7).

The most fundamental element of Halbwachs' analysis is a distinction between what he refers to as a zone of technical activities and a zone of personal relations. Since social facts in classical Durkheimian sociology must always be explained by other social facts, Halbwachs claims that only the zone of personal relations is truly social, and can act as a basis for the social representations needed for a subjective group and/or class consciousness.⁴ The stronger the influence of the zone of personal relations, the stronger is the subjective class consciousness and the deeper the collective memory of the class. If the influence of the technical zone is stronger, then both the traditions and the collective memory of the class are more fragmented. As a consequence, the working class is more or less

³All citations from this essay are based on Cook 1993: 147- 8.

⁴The same distinction forms the basis for his earlier analysis of consumption patterns in the working class (Halbwachs 1912). "What distinguishes the working class from other groups is that workers in industry are in contact with things rather than with people when they are at work" (1912:141) The zone of personal relations is here defined as the family, and the technical zone is defined as factory work.

excluded from Halbwachs' analysis. Because of the predominant influence of the technical zone and the short history of the class, Halbwachs (in his 1912 - study) does not assign any traditions to the working class (Halbwachs 1912: xiv). Without these traditions, collective memory will lack an important institutional basis to build upon.

Halbwachs' analysis is therefore limited to traditions in the nobility and the bourgeoisie, and the problems these have encountered as the social structures changed, traditional bases of power eroded, or as a class expanded and was forced to include new social groups. In somewhat simplified terms, the power of the nobility was originally founded on economic wealth, military and political positions and personal relationships with other noble families. Social prestige also depended heavily on the antiquity of the title. Gradually, the wealth and functions of the nobility were challenged by a new class - the bourgeoisie - and its power was severely weakened. In short, Halbwachs argues that the response of the nobles was to isolate a collective memory of a distant and glorious past, and to uphold traditions, ceremonies and an awareness of personal relations in order to support this memory. In this way, and despite all changes in social structure, a sense of continuity could be passed on, and the network of personal relationships upheld: the nobles' collective memory itself became a basis for its social prestige.

The bourgeoisie faced a different problem. As a consequence of the changing and differentiated structures of society, it took over the dominant economic and administrative position of the nobility. The social hierarchy of the class, however, could not be established in the same way. Whereas the nobility took account of what Halbwachs calls the social notions of "honor, prestige and titles" (Halbwachs 1925: 128), the bourgeois hierarchy was founded on the "technical function" of a given person or group:

In the commercial and artisan classes, and in the top strata of the bourgeoisie, the person becomes indistinguishable from his task, profession, or function that defines him. (Halbwachs 1925:128)

Whereas the noble, due to the emphasis on the personal relations in the class, could not be reduced solely to his function, the bourgeois can. As a result of its success, the bourgeois class has also had to adapt continuously to a new set of conditions and hence adopt new traditions. At the same time, the class has expanded numerically, and encompassed a large number of new professions. For Halbwachs, the consequence, with respect to the two classes' collective memories, is evident: the nobility, partly because of its withdrawal from the technical zone

and its strong emphasis on personal relations, was an integrated social group. Thus it also had a profound collective memory (i.e. "antiquity of remembrances"). In contrast, the bourgeoisie, because of the influence of the technical zone and its continuous fragmentation as a class into separated groups/professions with more or less unique, "young" and functionally based traditions, was also a less socially integrated group. According to Halbwachs, this development has produced a collective memory with little "antiquity of remembrances", but with a larger "extent" of remembrances (Halbwachs 1992:144).

In this approach, too little room is allocated to the creative and processual dimension of social action. Instead, the individual seems locked in the relations between a social group's present (technical, administrative, or/and political) function and the complexity and density of social networks and relations in the group. 'Collective memory' ends up as a reflection of these two dimensions, and Halbwachs is close to portraying it as a more or less mechanical reproduction of these structures. Compared to Mead, his theoretical framework thus acquires a static touch. Even if 'collective memory' is not to be understood as something given, the social groups supporting the memory often seem to be so. As a consequence, the theory lacks a dynamic, and therefore an important historical, element: the process of social becoming.

This, in turn, makes it difficult to include processes of social change in a plausible way. In my opinion, this becomes very clear in Halbwachs' decision to exclude the working class from his analysis. In doing so, he also excludes important and complex sociological problems concerning the relations between social processes, social change, social becoming, present social structures and 'collective memory'. Despite his analysis of the nobility and the bourgeoisie, in which he focuses on structural changes, Halbwachs does not pay sufficient attention to the historical processes themselves, and how personal social experiences are important parts of them. Several important questions might be raised in this connection, for example: In what ways can common or similar experiences in periods of rapid social change have lasting effects on people's identities and their ways of thinking about their own past, and how can this best be analyzed sociologically? In what way can common social experiences become active elements in the formation of a new subjective group identity, not only with respect to 'collective memory', but also with respect to other social phenomena? How are class-relations, and inter- and intrapositional *conflicts* over the interpretation of common experiences to be analyzed, not only as products of *present* social structures, but also as products of history?

Halbwachs encounters the same kind of problem in "La topographie légendaire des évangiles" (Halbwachs 1941), an analysis of the relations between social groups, collective memory and physical space. The key category in this study is, without doubt, "lieux de mémoire": a material object or physical location that is perceived as important, is assigned symbolic meaning by a given group, and, as consequence, is functional for the group's collective memory. In a detailed analysis based on various religious texts and historical accounts, he shows that the localization of the holy places in the Gospels has varied a lot throughout history, and that the reconstruction of sites is the result of an active commemorative effort on behalf of the later Christian groups, especially the crusaders. In this way, the Christian collective memory (mostly shaped by biblical texts) was actively inscribed in and was able to achieve support from objects in material space.

Once established, a material "lieux de mémoire" gains a stability of its own, in part because of its function for the group's collective memory, but also because of the group's resistance to dramatic change in the physical environment. In a later text, Halbwachs also stresses that the perception and representation of these sites and of space in general, will also vary from group to group:

...we may say that most groups ... engrave their form in some way upon the soil and retrieve their collective remembrances within the spacial framework thus defined. In other words, there are as many ways of representing space as there are groups. /.../...each group cuts up space in order to compose, either definitely or in accordance with a set method, a fixed framework within which to enclose and retrieve its remembrances. (Halbwachs 1980: 156-7).

In his discussion of social groups and physical space, Halbwachs touches on an important issue. Symbolic struggles over historical sites and commemorative ceremonies can become vital elements in political, economical and religious conflicts and can therefore persist over long periods of time. The annual Protestant march through Portadown in Northern Ireland, celebrating the Protestant victory over Catholic forces some 300 years ago, is a good example. In this particular case, the commemorative ceremonies (the Protestant marches) themselves have become important elements of a group's collective memory.

Despite his portrayal of "les lieux de mémoire" as products of an active social construction, Halbwachs does not in a plausible way include the historical processes and/or historical conflicts leading to this construction in his analysis. While the focus remains on the different social groups and their relations to the material environment, the groups themselves seem to be more or less isolated (if highly internally integrated) units. In this way, the relations between different groups and group members are somewhat lost in the analysis. As a consequence,

any social conflicts that may initiate the construction of the "lieux de mémoire", or the conflicts the "lieux de mémoire" may provoke, are difficult to discuss within Halbwachs' theoretical framework.⁵

Halbwachs also lacks a thorough discussion of the possible conflict between the interpretations of previous experiences by the group members, and these members' perceptions of the "lieux de mémoire" constructed by other groups or state authorities to commemorate specific events.⁶ Instead, his theory, once again, becomes rather ahistoric, static and oriented towards the reproduction of existing structures. Once the "lieux de mémoire" are established, the agents seem to be locked into two sets of structures, one social and one socio-material, and end up more like passive receivers of a materialized past than agents that are also capable of reacting *against* these symbols.

As a result, Halbwachs has difficulty explaining both how and why changes in collective memory can take place. Thus, a revision of his original theoretical approach is needed. Over the past 20 years several attempts have been made of providing such a revision, but few of these attempts have originated in sociology. Before the various approaches are discussed, however, it is necessary to consider a brief presentation of Karl Mannheim's theory of social generations. There are two main reasons that makes this necessary. Although Halbwachs' and Mannheim's general sociological orientations clearly are different from each other, both have nevertheless been highly important sources of inspiration in present studies of collective memory (see for instance Schuman and Scott 1989). As I will further outline in chapter 3, I will furthermore argue that a combination of specific elements in Bourdieu's, Halbwachs' and Mannheim's theoretical approaches may add important theoretical and empirical insights when studying practices of remembering.

2.3. Karl Mannheim and the problem of generations

The question posed by Karl Mannheim in "The Problem of Generations" (Mannheim [1928]1993) is different from the set of questions raised by Halbwachs' sociology of collective memory: Mannheim wishes to discuss the difference between a 'generation' as biologically determined entity, as an entity founded on

⁵Even so, Halbwachs is not unaware of the problem, and comments upon the Christian expropriation of local Jewish and Muslim remembrance, ceremonies, sites etc. The conflicts between these two groups, however, are not discussed in the text.

⁶Claudia Koonz' article "Between memory and oblivion: Concentration camps in German memory" (in Gillis (ed.) 1994): 258-280) gives an illustrative example in which this is the case.

purely qualitative experiences and as a sociological category. Still, Mannheim's analysis is highly relevant to issues addressed by Halbwachs, as history and historical consciousness are given a crucial role with respect to the formation of a generation. There are also interesting theoretical parallels. While Mannheim's understanding of the past as incorporated in present structures bears a superficial resemblance to Bourdieu's notion of 'habitus', Mannheim would probably also agree with Mead's and Halbwachs' claim that the past is important primarily because of its representational character:

All psychic and cultural data only really exist in so far as they are produced and reproduced in the present: hence past experience is only relevant when it exists concretely incorporated in the present. In our present context, we have to consider two ways in which past experience can be incorporated in the present:

- i) as consciously recognized models on which men pattern their behaviour [...] or
- ii) as unconsciously 'condensed', merely 'implicit' or 'virtual' patterns. (op.cit.: 369-70)

For the past to be effective as a structuring mechanism, these two ways of incorporating past experiences are not sufficient *per se*. The relation between categories of age and actual experiences must also be of a certain kind if it is to have any significant impact on the agents' positions in the social structure (or 'location' in Mannheim's terminology):

The fact that people are born at the same time, or that their youth, adulthood, and old age coincide, does not in itself involve similarity of location; what does create a similar location is that they are in a position to experience the same events and data, etc. and especially that these experiences impinge upon a similarly 'stratified' consciousness. (op.cit.:372)

Or more directly:

Mere contemporaneity becomes sociologically significant only when it involves participation in the same historical and social circumstances. (op.cit.: 373)

And with respect to sociological and historical research, his conclusion is the following:

It is a matter for historical and sociological research to discover at what stage in its development, and under what conditions, a class becomes class-conscious, and similarly, when individual members of a generation become conscious of their common situation and make this consciousness the basis of their group solidarity. (op.cit.: 364)

According to Mannheim, the formative forces are strongest in a person's late adolescence and early adulthood.⁷ Significant events in this early period of life thus tend to shape, structure and have a lasting impact on a person's later views of the world (Mannheim 1993:373).⁸ In an analysis of this "historical-social" consciousness, the reflexive dialectics between this set of early, formative experiences, events and impressions and later experiences is thus seen as central.

Compared to Halbwachs, Mannheim presents a far more dynamic analytical framework, and adds a creative dimension that is lacking in the work of the former. First, Mannheim also makes it possible to analyze the reflexivity between historical consciousness, past and present social structures and subjective group identity in a more subtle way than Halbwachs.

Second, while Halbwachs' theories are clearly structuralist, it can be claimed that Mannheim, in fact, presents an early version of methodological relationism: the central unit of analysis is always the complex **relations** between objective categories/structures (age, sex etc. etc), historical and individual processes and the possibility for subjective group solidarity through systematic similarities in perceptions. Social groups or categories must therefore not be taken for granted. This makes it possible for Mannheim to distinguish between generation as a **location** and as an **actuality**, and also between different **generation units**: people might share a given historical configuration and social location without developing conscious ties to each other. Where these ties are developed to a generation as an "actuality" (or "generation für sich"), the common formative experiences still might give rise to conflicting interpretations of the formative events and lasting, conflicting views of the social world. Where this is the case, a generation can be identified in terms of conflicting relations of power between different generation units.

Even so, Halbwachs' theories on collective memory offer a more complex, comprehensive and systematic treatment of this specific subject than Mannheim presents in his essay. Thus, simply rejecting Halbwachs' work in favor of Karl Mannheim's approach is not a viable option. Instead, a synthesis of the most valuable elements from both perspectives in a revised theoretical framework, would be a better solution. Attempts at developing such a synthesis have been emerging in American empirical sociology since the late 1980s.

⁷Mannheim locates the starting point of this period to the age of ±17.

⁸Empirically, this problem has been addressed by Schuman & Scott (1989). In the article "Generations and Collective Memories", they show, by using survey data and testing various hypotheses statistically, that memories of political events and social changes, not surprisingly, are structured by age. However, their analysis lacks the overall relational approach advocated by Mannheim.

2.4. Recent sociological approaches 1. Collective memory, generations and historical knowledge

In several articles, Harold Schuman and various associates have addressed questions related to how social generations can become a basis for historical knowledge, opinions on historical events and persons and also for attitudes toward war (Schuman & Scott 1989, Schuman & Rieger 1992a, 1992b, Schuman, Belli & Bishoping 1997). Building on the theories of Halbwachs and Mannheim, the authors have put forward various hypotheses about types of relations and tested these hypotheses within a variable-oriented, causal-analytical framework. In most cases, generation (understood as specific age categories), education, gender and race are analyzed as independent variables.⁹ Most of the research is based on data from surveys in the USA, and the findings mainly support Mannheim's thesis that adolescence and early adulthood are important periods with respect to what individuals mention as important historical events and their knowledge of history. The results confirm this finding as regards what people remember about specific historical processes, events and persons, what kind of historical analogies that were preferred in the Gulf war, and what people mention as the most important events in modern history. Analytically, "generation" is thus treated as one of many potential causes or bases of historical knowledge.

Even though these authors' empirical findings are both interesting and potentially important, there are several problems in their analytical framework. First of all, theoretically, the use of Mannheim's concept of generations is problematic. In some of the analyses (e.g. Schuman, Belli & Bishoping 1997), social generations are reduced to biological age-categories, and simply defined and analyzed as age-cohorts. As a consequence, the relational elements in Mannheim's definition and analysis of generations are lost. Instead, the analyses focus on the more or less direct effects of single variables on some given items in the questionnaire. Possible interactions between variables that measure social locations are not analyzed in a systematic way. Second, the basic arguments in Halbwachs' work on the social framework of memory are not discussed. "Collective memory" is not clearly defined, but seems either to be understood as an aggregate of individual memories or defined in substantialized terms as "the

⁹I will return to some important epistemological problems inherent in the causal-analytical framework these authors apply in chapter 4.

memories about the past that are held by a group, whether a small community or a whole society" (Schuman & Rieger 1992b: 323). Third, the theoretical differences between Halbwachs and Mannheim, and the potential problems involved in a combination of these two approaches, are not mentioned at all (Schuman & Scott 1989).

In short, the work of these authors is not in line with the epistemological position once advocated by Karl Mannheim, their single most important theoretical source of inspiration. Nor is it compatible with the relational methodology and processual oriented sociological approach that can be found in Mannheim's work. To reduce Mannheim's complex analytical framework to a series of tests of derived hypotheses about unidirectional, causal relations between single variables is thus not analytically plausible:

To be based on a factor does not necessarily mean to be deducible from it, or to be implied in it. If a phenomenon is based on another, it could not exist without the latter; however, it possesses certain characteristics peculiar to itself, characteristics in no way borrowed from the basic phenomenon. (Mannheim 1993: 365-66).

As this implies, Mannheim had a far more complex understanding of causality than these authors, and evidently also reservations with respect to application of hypothetical-deductive methods in sociological research. For this reason, while Schuman et al. may have identified some interesting empirical patterns, their theoretical discussions of the results are not particularly illuminating.

2.5. Recent Sociological Approaches. Irwona Irwin-Zarecka: Frames of remembrance

From a perspective within cultural sociology, Irwona Irwin-Zarecka presents a project whose aim is in many ways similar to the project of the French Annales school with respect to historical studies. In her study "Frames of remembrance. The dynamics of collective memory" (Irwin-Zarecka 1994), she expresses a desire to erase interdisciplinary boundaries because, she claims, the subject itself makes this necessary. She defines 'collective memory' in more or less substantial terms:

A "collective memory" - as a set of ideas, images, feelings about the past - is at best located not in the minds of individuals, but in the resources they share. (Irwin-Zarecka 1994: 4)

"Collective memory" can be activated (p.8), there can be absence in collective memory (p.116), collective memory can be "normalized" (p.93) and Irwin-Zarecka explicitly states that

Heuristically, it is helpful to think of collective memory in very concrete terms indeed (op.cit.:12-13)

Furthermore

...[c]ollective memory would be much impoverished if it could not reside in physically distinct spaces - cemeteries, memorials, monuments, but also buildings and structures from the times long gone. (op.cit.:150)

At the same time, there is a lack of terminological consistency, since Irwin-Zarecka also understands 'collective memory' as "a socially articulated and socially maintained 'reality of the past'" (p.54), and favors an analysis of communication situations in communities of memory. A systematic discussion of the relations between materialized collective memory and articulated collective memory is, however, lacking. In sum, Irwin-Zarecka presents an unclear theoretical framework, and the various attempts at a definition of the term 'collective memory' are not particularly clarifying. Irwin-Zarecka is probably aware of the problem, and explicitly says that "[T]he context sensitive approach advocated here does not readily translate into theoretical labels" (p.19)

This does not mean that her discussion is without value. Despite a clear substantialist bias, Irwin-Zarecka identifies a potential problem in Halbwachs' original terminology: that the expression 'collective memory', in its most common usage, suggests a consensus (p.67). Her own project is to study the different ways of constructing a "reality of the past" (p15.), the dynamics of this process, and how 'collective memory' might potentially legitimate political power relations (p. 119). The normative orders of remembrance are seen as central, and much of the discussion focuses on various aspects of the remembrance of the Holocaust. Irwin-Zarecka also points more directly to the conflicts that can evolve around various interpretations of the past, and offers some valuable examples with respect to the study of these processes. This gives her discussion and framework a dynamic element that is lacking in the work of Halbwachs.

From a relational point of view, however, there are major problems in the theoretical framework. First of all, there is a lack of a systematic discussion of interrelations between autobiographies, the histories of different social positions

and social structures with respect to 'collective memory'. Despite the clear influence from Berger & Luckmann's "The social construction of reality" (1966), the analytical strategy is unclear, and in general, there is also a lack of precision when it comes to the terminology relating to social positions. Also lacking is a thorough discussion of social classes with respect to collective memory. Nor is the discussion of social generations as communities of memory particularly clarifying and it provides no new insights. The same is true of her analysis of conflict-generating mechanisms with respect to collective memory, where the discussion is mainly descriptive. Finally, her definitions of collective memory are marred by a substantializing tendency and lack of theoretical clarity.

In short, while her dynamics analysis adds some important elements to the empirical studies of collective memory, and especially on conflicts on memory, it cannot serve as a basis for a relational theoretical approach to the study of collective memory. This basis must be found elsewhere. Outside the field of sociology, one of the major references is a multivolume study edited by the French Annales-inspired historian Pierre Nora.

2.6. Historical studies. Pierre Nora and "Les lieux de mémoire"

As the editor of a seven-volume (Nora 1984, 1986 and 1992) study of 'collective memory' in modern France, Pierre Nora has mainly tried to adapt Halbwachs' perspective to the field of modern political history. The seven volumes cover what is understood as the collective memory of "La republique", "La nation" and "Les France", and Nora started the work with the intention of writing "une histoire de France par la mémoire" (Le Monde, 5. february 1993), or in other words: to write the history of France by writing the history of the memory or memories of France. I will not go into a detailed analysis of the more than 100 articles (written by more than 40 historians), but concentrate on Nora's attempt to discuss 'collective memory' theoretically. A more comprehensive review of the work of Nora & al. can be found in Wood 1994: Memory remains: "Les lieux de mémoire".¹⁰

In his first definition of collective memory, Nora takes a clearly more substantialist approach than Halbwachs. "Collective memory" is to be understood as what remains of the past of the groups' experiences, what these groups make of

¹⁰See also Hutton 1993.

their past¹¹, or the sum total of lived or mythified experiences in a given group's memory. Building on Halbwachs, Nora also makes a sharp distinction between historical memory and collective memory. Where the former is understood as the analytical, critical collective memory of the historians, the latter is fluid, globalizing, inspired by beliefs, and also rejective: "unpleasant" memories are not welcome.

One of the basic assumptions underlying Nora's work is that in modern society there is no longer "an environment for memory". Memory is separated from traditions, customs, habits etc., and in order to establish a sense of continuity we instead create material and institutional "lieux de mémoire" for memory to build upon:

If we were able to live within memory, we would not have needed to consecrate lieux de mémoire in its name. Each gesture down to the most everyday would be experienced as the ritual repetition of a timeless practice in a primordial identification of act and meaning. (Nora 1984:xix cited from Wood 1994: 127)

Throughout Nora et al's work, the concept of "lieu de mémoire" is central, both theoretically and methodologically, and the history of the memories of France is synonymous with the history of its most important "lieux de mémoire". Over the years, Nora has defined this concept in different ways. In the introduction to the first volume, he compared a "lieu de mémoire" to shells on the seashore "when the sea of living memory has receded" (Nora 1984: XXIV). According to Nora, three elements are needed for these "shells" to become a "lieu de mémoire": they must be material, they must be given a symbolic meaning and they must also be functional (1984: XXXIV). In his latest article, Nora's definition is modified: a "lieu de mémoire" is now understood as a

meaningful entity of a real or imagined kind, which has become a symbolic element of a given community as a result of human will or the effect of time.¹²

Given this definition, it is hard to discriminate between symbols that can and cannot be a "lieu de mémoire". This broadness of scope is also reflected in the collection of articles; they cover more or less everything from libraries to generations, though the vast majority concerns commemorations, official

¹¹In the French original: "La mémoire collective est ce qui reste du passé dans le vécu des groupes, ou ce que ces groupes font du passé". 1978: 398.

¹²As translated by Wood 1994: 123-4. The French original is slightly different: "Unité significative, d'ordre matériel ou idéal, dont la volonté des hommes ou le travail du temps a fait un élément symbolique d'une quelconque communauté." (Nora 1992 ***: 1008)

symbols or counter-symbols of specific groups.¹³ Given the main objective of the project, the approach is clearly institutional: the primary social framework is France as it is today. The task is to analyze how 'collective memory' has been a vital part in forging a French national consciousness, and most symbols are of material kind.

From a sociological point of view, neither Nora's evolutionist theoretical approach nor his definitions are particularly clarifying. If taken literally, his claim that modern societies no longer live within memory, and that they are based on mediated experiences, is an unfortunate one. In the final analysis, this would imply that group members' *actual* experiences no longer play a central part with respect to their patterns of action. If that is the case, cognition is no longer important. Thus, Nora's *theoretical* discussion of collective memory is in my view a cul-de-sac compared to the work of Halbwachs. Where Halbwachs argued in favor of a *sociological* approach to the study of memory, based on Durkheimian theoretical assumptions about social action and the reproduction of society, Nora has as already mentioned taken a substantialist point of view: collective memory can be defined as the real or imagined memories of a given group's experiences. Even though political conflicts over various symbols form an important part of the analysis, Nora does not discuss how these groups are to be constructed analytically; nor does he offer a systematic discussion of how people located in different social positions in France have perceived the various "lieux de mémoire" over given periods of time. Nor does an analysis of how these objects or commemorations are perceived by people located in different social positions *today* seem to be a part of the project. These choices are also reflected in his methodological approach: despite his aim of writing the history of the memory of France, interview data with living French men and women are virtually non-existent. Instead, the focus is highly institutional: what objects and/or commemorations have been established in order to *create* a French national identity, and what is the history of these objects/commemorations? The analyses are based on archival data, written accounts, textbooks, pictures, various symbols etc. etc. and they are also heavily centered around material objects and official ceremonies.

In order to study 'collective memory' as it is in France or anywhere else today, Nora in my view needs both a wider methodological approach and a more stringent theoretical framework for locating the social groups which, under given

¹³E.g. "Le mur des fédérés" where the Paris communards were shot in the aftermath of the uprising.

conditions, can constitute "the social frameworks of memory" analytically, not only in present day France, but also historically. The relations between the most important groups then need to be clarified in a far more systematic way than has been done thus far. This also means that the 'collective memory' of everyday life must be included in the analysis.

Nora is probably not unaware of this problem, and in one of the last volumes (Nora (ed.) 1992^{***}) he analyzes social generations both as "lieux de mémoire" and also as makers of "lieux de mémoire". His main question is straightforward: Are there French "generations"? The answer is not surprising: Yes, there are French generations, created by the dialectics of memory and history, past and present. (Nora (ed.) 1992^{***}: 964) However, Nora's analysis lacks both the theoretical complexity, the clarity and the relational qualities that can be found in Karl Mannheim's discussions of social generations. Given his main goal, Nora instead focuses on a specific French generational memory "en bloc", and hardly at all on the relations between social locations, generations and generation units.

Despite this critique, his work has without doubt been of great value to historians. Not only has it established a new and important type of historical research in the domain of political history. It has also been an important contribution to a new kind of historiography. His historical approach, his focus on memory's importance in the *creation* of historical consciousness, and his emphasis on the dialectical relation between history and memory also gives his studies a reflexivity that is lacking in Halbwachs' work.

Still, Nora's theoretical discussion of 'collective memory' is in my view more of a step in the wrong direction, mainly because of his lack of analysis of the social relations between the different groups who are supposed to "remember". In short, Nora, apart from his original definition of a "lieu de mémoire", in my view, has little to offer in a *sociological* analysis of the relations between "social classes" and 'collective memory'.

2.7. Anthropological perspectives 1. Paul Connerton: "How societies remember"

While Nora can be accused of reducing 'collective memory' to material objects and politically institutionalized commemorations, the anthropologist Paul Connerton's analytical strategy is somewhat different. Like Nora, his framework for analyzing social or collective memory¹⁴ still has a clearly substantialist

¹⁴Connerton uses both these concepts to address the theme.

character, and Nora would probably agree with his claim that social or collective memory is to be understood as (or restricted to) commemorative ceremonies. However, *unlike* both Nora and Halbwachs, Connerton makes the social body central in the analysis:

If there is such a thing as social memory, I shall argue, we are likely to find it in commemorative ceremonies; but commemorative ceremonies prove to be commemorative only in so far as they are performative: performativity cannot be thought without a concept of habit; and habit cannot be thought without the notion of bodily automatisms. (Connerton 1989: 4)

Connerton's argument is first based on a distinction between personal memory claims ("acts of memory that take as their object one's life story"), cognitive memory ("What this type of remembering requires is, not that the object of memory be something that is past, but that the person who remembers that thing must have met, experienced or learned of it in the past.") and what he refers to as habit-memory ("having the capacity to reproduce a certain performance") (Connerton 1989: 22-23). In somewhat simplified terms, his claim is that only the latter, because of its central importance for all kinds of performativity, can be the basis of a social memory. In commemorations, we thus stylistically re-enact the past, but our bodies also keep the past "alive" through a "continuing ability to perform certain skilled actions" (Connerton 1989:72). In this way, he argues that with respect to social memory, habituation is crucial because this makes it possible to "locate" a ceremony in "the bodily substrate" (Connerton 1989: 71).

Connerton acknowledges the importance of Halbwachs' work, but claims that the latter did not see that memories of the past "are conveyed and sustained by (more or less) ritual performances", and that Halbwachs never addresses the fundamental issue of how collective memories are passed on from one generation to the next within a social group (Connerton 1989:38). In Connerton's opinion, this is done through communication, and an analysis of the formation of social memory must therefore concentrate on acts of transfer that make common remembering possible. He further suggests that memory is sedimented in the body through two different types of social practice: *inscribing* practices - highly formalized practices that make it possible to trap or hold information (or communicate) after the actions have ended - and *incorporating* practices - or little formalized practices whose messages are dependent on our actual/physical

presence (Connerton 1989: 72-3). In this way, Connerton tries to include the continuous processes of internalization and externalization in his scheme.¹⁵

Even though the argument may be somewhat exaggerated, Connerton is probably right in claiming that what he calls bodily memory has been neglected by many philosophers and social scientists.¹⁶ Halbwachs did not pay much attention to this aspect. By focusing on bodily *practices*, Connerton also offers a less static theoretical approach than Nora. But this does not mean that his analytical framework is without problems. One or problem is the lack of a systematic discussion of how the relations between personal, cognitive and habitual memory are to be understood and analyzed. If taken literally, the position Connerton is advocating is a reductionist one: in the final analysis *everything* is to be explained by structures in the bodily substrate, and these structures alone. Even if he focuses on the dialectical interplay of inscribing and incorporating practices, little or nothing is said about how this process is linked to and influenced by social cognition, except that culturally specific bodily practices entail a combination of cognitive memory and habit-memory (Connerton 1989:88). Nor are possible conflicts between the taken-for-granted habit-memory and acts of cognition discussed in any detail. As a result, and despite his emphasis on practice, one is sometimes left with an impression of the agent as a non-reflective performative victim of his own habit-memory.

Given his initial goal, "to show that there is an inertia in social structures that is not adequately explained by any of the current orthodoxies of what a social structure is" (Connerton 1989:5), this is perhaps not surprising. However, it may be argued that these lacking discussions reveal an important weakness in Connerton's overall theoretical framework: the relations between structures located in "the bodily substrate" and social structures in general, e.g. economical and political structures, are hardly discussed at all. Instead, his analysis of relations of power and authority is restricted to showing how these are expressed through the body in ritual-like performances of subordination.¹⁷ While this can be an important issue in the study of face-to-face interaction, it cannot in and of itself explain the existence of other kinds of power structures, e.g. objectivated economic and political structures, structures that are regulated by but also regulate

¹⁵Whether this solution to the problem of incorporation and objectification is a good one is an open question.

¹⁶As Østerberg (1988: 174) points out, this is not the case with Merleau-Ponty and Bourdieu. Nor can it be said about Edward S. Casey's philosophical study "Remembering" (Casey 1986) .

¹⁷"Power and rank are commonly expressed through certain postures relative to others." (Connerton 1989:73)

patterns of interaction. Nor does his analysis shed light on the structural conditions for reproduction or change of power relations. Also symptomatic of his study is that he does not clarify how the 'generation' concept is to be understood, but seems to take this analytical object for granted. As Connerton explicitly criticizes Halbwachs for not paying attention to how memory is passed on from one generation to the next, this must be considered a major weakness.

This critique, however, does not apply to all anthropological studies of memory. An alternative approach is to be found in the work of the British anthropologist Elizabeth Tonkin.

2.8. Anthropological perspectives 2. Elizabeth Tonkin: "The social construction of oral history"

While Connerton's approach is highly focused on the body, Elizabeth Tonkin seems to be more in line with a relational approach. Her aim is to

look at the interconnections between memory, cognition and history, and show how they help to shape our individual selves. Individuals are also social beings, formed in interaction, reproduction and also altering the societies of which they are members. (Tonkin 1992: 1)

Tonkin discusses the different ways oral history is structured, and how oral history structures other aspects of social life, building on the empirical basis of her anthropological fieldwork in Liberia. As the title of her study indicates, she relies heavily on the work of oral historians, and primarily focuses on the position of the storytellers, their narratives and narrative genres. While other leading oral historians, e.g. Paul Thompson (1978), mainly focus on methodological problems and possibilities related to the use of oral sources in historical research, Tonkin clearly has theoretical ambitions for her study. One of her main goals is to attack the conventional subject-object division in social theory:

In arguing for a view of representing pastness that makes it active and socially constitutive, I necessarily attack theories which dichotomize individual and society . [...] I argue that memory and cognition are partly constituted by social relations and thus are also constitutive of society. We are all simultaneously bearers and makers of history, with discursive representations of pastness as one element in this generation and reproduction of social life. (Tonkin 1992: 97)

In order to overcome the division between the 'subjectivist' and 'objectivist' positions in anthropology, Tonkin identifies memory as "the key mediating term" between the individual and society (Tonkin 1992: 98) and socialization

(done by various agents) as the main structuring process where memory, cognition and history are interconnected. Her main argument, which bears some resemblance to Mead and Berger & Luckmann's theories of the self, is simply that "memory makes us, we make memory", and that this is a process of continuous social construction: individuals are social beings that are shaped by, but also shape social institutions. Memory is of major importance in this process.

Beyond doubt, Tonkin provides many valuable insights and also has much to offer with respect to an analysis of oral history. She also rightly claims that Halbwachs had reductionist views on socialization and did not pay sufficient attention to memory as a structuring and creative process. Thus, she claims, Halbwachs has difficulties when it comes to questions regarding how and why memories and societies change (Tonkin 1992: 105). Focusing on the processes that continuously structure social memory, she also adds a dynamic element to the analysis which is lacking in "Les cadres sociaux de la mémoire". Finally, her critique of the notion "collective" as a misleading holist term is also relevant. (p.106)

Tonkin's own methodological, theoretical and analytical strategy is, however, more unclear and problematic. The analytical model seems to be heavily indebted to the writings of George Herbert Mead on the self, and Berger & Luckmann's analysis of the social construction of reality, but does not provide any genuinely new insights with respect to relational process analysis. In a rather superficial discussion of Bourdieu's notion of 'habitus' that also lacks analytical precision, she criticizes Bourdieu for regressing from the implications of his theory, because "[to] Bourdieu, subjectivity is an illusion, created in and through the habitus" (Tonkin 1992: 107). Her own model of a creatively cognitive person, she claims, alters this conclusion (ibid.).

Given her relational ambitions of overcoming the subjectivism-objectivism divide, it is somewhat surprising that she still wishes to focus on subjectivity as a theoretical element of central importance. There is also a lack of precision with respect to how social structures are to be analyzed, and the kind of structures, apart from cognitive structures and interaction patterns, that are considered as central in the analysis. Focusing mainly on memory as an integrative, socializing mechanism, her analysis of how conflicts over past events and processes should be analyzed is also weak. Due to her focus on narrativity and genres, there are also elements in her theoretical approach that might easily lead to a reductionist approach in which socially structured memory is more or less directly linked to and understood as textual, narrative and other verbal

representations of the past. Furthermore, little is said about how processes of major structural changes can or will affect the social construction of oral history, about how major events and processes can be formative with respect to positional identity, and how social classes and power-relations are to be understood.

Tonkin is probably well aware of the shortcomings in her discussion, and explicitly states that

The process of interaction between memory, social praxis and the structure of oral representation can only be suggested here; many of them deserve a book to themselves. (Tonkin 1992: 121)

Thus, while Tonkin definitely offers a valuable supplement to the traditional ways of doing and analyzing oral history, her theoretical framework still lacks important elements that are needed in a sociological analysis of the relations between work, classes and 'collective memory'.

2.9. Social psychological perspectives on 'social memory'

Partly originating in the Soviet psychologist Lev Vygotsky's work on the social genesis of consciousness and social memory, and his aim to overcome the subjectivism-objectivism debate in psychology, more recent social psychological research has resulted in a variety of theoretical approaches to the study of the social constitution of individual memory. A common denominator seems to be

...a radical challenge to the orthodox view that memory is located solely within the head, a challenge which suggests that the nature of individual memory cannot be analysed without essential reference to the notions such as 'society', 'community', and 'history'. (Bakhurst 1990: 203)

Given the theme of this dissertation, I will mainly focus on the ways these relations are conceived of in some of the recent theoretical discussions on memory in social psychology. This brief presentation is not exhaustive, but rather highly selective, and most attention will be paid to theories and aspects that are most relevant for my own analyses.

Steen F. Larsen (1992: 53) identifies two key areas in psychological studies of memory: episodic and autobiographical memory as contrasted to ecological approaches to memory. Episodic memory "stores information about temporally dated episodes and events, and temporal-spatial relations among these events" (Larsen 1992: 54). The contexts of these episodes and events are divided into internal and external personal contexts: Internal personal contexts are

understood as the "cognitive environment", while the external personal context is the broader setting in which the event takes place. Whether or not autobiographical memory is a subcategory of episodic memory seems to be a matter of discussion. Generally, a clear-cut psychological definition of autobiographical memory seems to be hard to find, as is a generally accepted psychological definition of memory itself (see Rubin 1992: 495-499).

Larsen (partly building on a critique of Tulving, Brewer and Conway) suggests the following taxonomy to overcome the problems related to the relations between what is remembered and the contexts of remembering:

Table 2.1: The core-and-context taxonomy of memory (after Larsen 1992: 61).

Context	Core-event		Superordinate Form
	Personal	Non-personal	
Context	Autobiographical Memory	Narrative Memory	Episodic Memory
De-contextualized	Autobiographical Fact	World Knowledge	Semantic Memory

The first dimension in Larsen's taxonomy is a distinction between contextualized and de-contextualized memory. While episodic memory has a personal context, semantic memory does not, and consists of our "memories" of various types of facts and knowledge (Larsen 1992: 57). The second dimension distinguishes between memories with a personal and a non-personal core.

These dimensions make it possible to distinguish autobiographical from narrative memory. While the former is remembered as personally experienced episodes, and includes "material which characterises the rememberer and may therefore contribute to his or her story as a person, a self" (Larsen 1992: 62), 'narratives' are used by Larsen as a shorthand for "texts and other symbolic representations [that] are made to convey a message of some sort or describe something or tell some story" (Larsen 1992: 60) that not can be said to be a part of our autobiographies. In narrative memory, so-called flashbulb-memories, e.g. memories of the assassination of John F. Kennedy, Martin Luther King or the Japanese attack on Pearl Harbor, are of great significance with respect to analyzing the interrelations between memories of personal circumstances or contexts (or the social frameworks in Halbwachs words) and the core historical events that are

remembered. Since the mid 70s, theories on flashbulb memories have been a major source of inspiration in historical studies of memories of major political events (see Pennebaker, Paez & Rimé 1997).

As Larsen acknowledges, there are, however, major problems in his taxonomy. The central concepts, 'core' and 'context', cannot be clearly defined, and it is even not always clear how to distinguish between the core and the context of an event in the analyses. In autobiographical memory, this seems more or less to be a question of the subjective interpretation of the remembering individuals. A clear strategy for analyzing the relations between the different types of memory is also lacking, and the critique that I have raised against Paul Connerton also applies to these social psychological approaches and analyses: social structures are conceptualized and analyzed in a marginal way. As a result, the strategies for analyzing the relations between the individual and social structures are unclear. This can, in part, be due to experimental traditions specific to psychology, where controlled laboratory studies seem to have dominated the research for some time. As a consequence, an analysis of various types of structural constraints is lacking. Finally, the relations between socially structured patterns of practices and memory are not systematically discussed. Thus, a plausible relational solution to the problems once addressed by Vygotsky seems thus not to be found in the social psychological perspectives.

Despite this critique, there are definitely valuable elements in the social psychological theories of memory that one should attempt to integrate in a sociological analytical framework. As Martin Conway correctly points out, Mannheim's theory of generation units is based upon the premise that what the members of a generation unit have in common are important "commonalities in autobiographical and semantic memory" (Conway 1997: 29). The relation between these two types of memory thus becomes central in a Mannheim-inspired analysis. Underlying Larsen's taxonomy is also a distinction between memory as a personal, *embodied* entity, and a non-personal, structural *objectivated* entity. The possible relations between these two "memory-poles" should also be further analyzed and conceptually clarified.

2.11. Social classes and the study of 'collective memory'

With the possible exception of Steen F. Larsen, all the theoretical approaches presented have been highly influential in the political, sociological, historical, anthropological and social psychological research that has been carried

out thus far on 'collective memory'. In this chapter, I have argued that, even though these approaches offer important theoretical and thematic contributions to the study of memory, they do not, on their own, possess the qualities necessary to address the problem of how the relations between social classes, work and social memory can be studied sociologically. Given the limited amount of research that has been done on this specific combination of research topics, this is not surprising. Thus, a downright rejection of all findings and discussion on this basis alone, hardly represents a legitimate critique.

A better strategy is to focus on how the various elements in these different contributions can be included in a broader sociological framework without reproducing the problems I have indicated in the above presentation. If this is to be done, I would first agree with Tonkin's claim that the research object Halbwachs originally termed 'collective memory' should be analyzed as both a structured and a structuring mechanism. Tonkin's own framework, however, does not possess the necessary theoretical complexity for this analysis. And even if the notion 'collective memory' (because of its substantialist and holistic connotations) is an unhappy one, there are elements in Halbwachs' sociological *perspective* on the study of memory that are still relevant in the analysis of the relation between social classes and what we normally call "culture". If we are to avoid reproducing the static elements in Halbwachs work, Irwin-Zarecka's call for a dynamics analysis should be taken seriously.

At the same time, the theoretical approach must be historical in orientation, and structural changes must somehow be included in the analysis. A clarification of central concepts, e.g. social class, is also needed. In order not to reproduce the theoretical reductionism, the theory must also be able to focus on the dialectical *relation* of objectification and embodiment. Consequently, there are also important elements to build on in the work of Nora, Connerton, Conway and Larsen. As mentioned above, Nora's concept of "lieux de mémoire" and his historical approach add a reflexivity that is lacking in Halbwachs, and Connerton's focus on practice and habits add a theoretical complexity that is lacking in both Halbwachs and Nora. The same is true of Conway and Larsen's distinction between autobiographical and semantic memory.

In constructing an alternative theoretical synthesis, all of these arguments must be taken into consideration. In the next chapter, I will argue that if this synthesis is to be able to meet the premises of a relational sociology, and at the same time be of relevance to the theme of this dissertation, Pierre Bourdieu's

theory of practice and Karl Mannheim's essay "The Problem of Generations" are two of the best places to start.

Chapter 3. An alternative relational approach to the study of memory

3.1. Introduction

Thus far, 'collective memory' has been treated as a potential mechanism in the continuous formation of a positional identity. The fact that the object of study thus is understood as both a structured and a structuring social mechanism has certain important implications. First, this implies that the theoretical approach must be processual and historical in orientation. Second, if a reductionist position is to be avoided, this formative mechanism must be theoretically integrated into a broader historical-sociological framework: it must be understood as one of *multiple* relevant mechanisms in the processes that are analyzed. Theoretically, the relations between these various mechanisms and their outcomes also needs to be clarified.

The relationships among individuals and society over shorter or longer periods of time must be the focal point in this theoretical clarification, if this is to be compatible with the fundamental assumptions in relational sociology. Once again, this makes the notion of 'collective memory' problematic.

Tentatively, the object of study will therefore be defined as 'relational memory'. Consequently, in the chapters to come, the term 'collective memory' will be abandoned. There are several reasons for this. Analytically, a relational approach to memory implies that it is not elements in memories themselves, but rather *the agents' structured and structuring practice of remembering* that should be analyzed as part of social processes. The various structured "memorial" outcomes or products of these structuring processes also need to be conceptually clarified and analyzed, both as embodied and as objectivated states of memory. Furthermore, the "internal" relations between these different "memorial" states or outcomes should be further discussed. A relational approach in turn implies that the relations between the practice of remembering and other types of practices must be further explored, both theoretically and empirically. While at the same avoiding the substantialist fallacy and the theoretical connotations implied in the term "collective", the term also indicates that the methodological approach should be relational.

Thus far, I have argued that none of the theories presented in chapter 2 are able to address these problems in a satisfactory way. In this chapter, I outline a theoretical alternative to the study of relational memory, mainly based on Pierre Bourdieu's theory of practice, and elements of Karl Mannheim's sociology of

generations and Halbwachs' original theories on the social frameworks of memory. First, a short presentation of the theoretical core and central analytical principles in Bourdieu's sociology is needed. The relevance of a study of relational memory to Bourdieu's sociology is then discussed with emphasis on power relations and potential symbolic capital dimensions related to the agents' classification of past events, processes and persons. Some potential problems in Bourdieu's theoretical framework that might be highlighted in a theoretical and empirical analysis of relational memory will also be addressed. Thereafter, I discuss relational memory with respect to fields, positions and social generations. Finally, I present a taxonomy of various "memorial outcomes" and practices, and discuss some relations between these elements, mainly using results from previous studies on "collective" memory as empirical examples.

3.2. A brief outline of Bourdieu's theory of practice

In broad terms, the main objective of Bourdieu's analysis is to grasp how social practices and power relations are structuring and also structured by the complex relations between agents' *positions* in a *social space* and in various *fields*, their *dispositions* (or habituses) and *the positions that are actively taken* (les prises de position) [Bourdieu 1994:19] in a field by these agents. All of these concepts are defined as various products and producers of history: while the social space and the fields are understood as objectified history, the habitus is seen as embodied history. Social practices are analyzed as an outcome of the reflexive dialectics between these types of history as positions and dispositions (Bourdieu 1997: 179-188). Bourdieu's theory of practice can thus be summarized in the following equation: [(habitus)(capital)] + field = practice (Bourdieu 1979: 112).

In opposition to substantialist definitions of classes and groups, Bourdieu locates "classes" theoretically as positions within a multidimensional *social space* of relations. The dimensions in this space are constructed on the basis of various types of capital that are more or less active as principles of social differentiation.¹⁸ The relative positions and systems of oppositions within the social space are thus seen as products of the distribution of different types of capital (economical, cultural, social etc.) and social power relations in the society that is analyzed. Positions close to each other in this space will therefore have commonalities with

¹⁸For a discussion of the various types of capital, see Bourdieu 1986: "The forms of capital", in Richardson, J.G (ed.): Handbook of Theory and Research for the Sociology of Education New York: Greenwood Press 1986: 241-258.

respect to the overall volume and structure of capital that are held by the agents occupying the given position. These relationally defined "classes" are not to be understood as *actual* classes (or mobilized groups), but rather *probable* classes (potentially *mobilizable* groups). There is thus a sharp distinction between "class" as an *ontological* and an *epistemological* phenomenon, and a "class" is therefore not something that can be considered given a priori, but something that must be constructed through a continuous "labour of representation" (Bourdieu 1991: 234 and 1994: 25-29).

At the same time, the various types of capital are also structuring mechanisms in the various *fields of action*. These are analyzed as arenas in which the agents invest their capital as means in a struggle for realizing field specific goals, e.g. the achievement of powerful positions in the political or the scientific field. The distribution, differentiation and accumulation of the various types of power or capital is also seen as the outcome of previous struggles in the fields, and thus therefore also as a product of a historical process. This implies that the existence of a field is not seen as transhistorical. Every field has had a genesis located in time and space, and the structures in a field are therefore also to be understood as a product of the history of the field.¹⁹ The same goes for relations of dominance. As a consequence, the history of the field must be given a central position in the analysis of the logic of a field itself.

In somewhat simple terms, an agent's position in the social space can thus be understood as a theoretically "weighted" synthesis of the positions the same agent occupies in various fields. In the same way, the structures in the social space can be portrayed as a "weighted" synthesis of the structures in the most important fields of action²⁰, and a given agent's power in a field can be seen as dependent on the volume of capital the agent can "invest" in the "field-play", the structure of the agent's capital, and the agent's habitus.

While a 'habitus' will also encompass parts of what Paul Connerton (1989) calls bodily memory and habitual practices, the concept cannot be understood in isolation from the concepts of "field" and "social space". Instead, a habitus is seen as a partial embodiment of the structures in the social space and the fields where the agent has been active over shorter or longer periods of time:

¹⁹For a discussion of the properties of a field, see "Quelques propriétés des champs", (Bourdieu 1980b).

²⁰A more detailed presentation of the construction of a social space can be found in "Distinction" (Bourdieu 1979) and "Homo Academicus" (Bourdieu 1982). For an introduction to the statistical techniques (correspondence analysis) used by Bourdieu, see Greenacre 1993, Greenacre & Blasius 1994, Hjelbrekke 1999.

Les conditionnements associés à une classe particulière de conditions d'existence produisent des *habitus*, systèmes de *dispositions* durables et transposables, structures structurées prédisposées à fonctionner comme structures structurantes, c'est-à-dire en tant que principes générateurs et organisateurs de pratiques et de représentations qui peuvent être objectivement adaptées à leur but sans supposer la visée consciente de fins et la maîtrise expresse des opérations nécessaires pour fins et la maîtrise expresse des opérations nécessaires pour les atteindre, objectivement "réglées" et "régulières" sans être en rien le produit de l'obéissance à des règles, et, étant tout cela, collectivement orchestrées sans être le produit de l'action organisatrice d'un chef d'orchestre. (Bourdieu 1980: 88-89)

Practice is thus not analyzed as a product of the rational calculations of an individual actor or as normatively regulated by sets of social rules, but as the outcome of a reflexive dialectics between the objective structures of capital and the positions in the social space, the objective structures of capital and positions in the various fields, and the structures and the creative capacities inherent in a habitus as a generative scheme of thought, perception, classification and action. In this way, the habitus is understood as the *embodied, active presence* of history:

Histoire incorporée, faite nature, et par là oubliée en tant que telle, l'habitus est la présence agissante de tout le passé dont il est le produit: partant, il est ce qui confère aux pratiques leur indépendance relative par rapport aux déterminations extérieures du présent immédiat. (Bourdieu 1980: 94.)

The habitus of an agent will have its own individual characteristics, but at the same time it has structural similarities with other habituses:

...chaque système de dispositions individuel est une variante structurale des autres, où s'exprime la singularité de la position à l'intérieur de la classe et de la trajectoire. (Bourdieu 1980: 101)

For this reason, the habituses of agents in positions close to each other in the fields and in the social space will also have a tendency to reproduce practices that have certain characteristic structural similarities, or *homologies*, across multiple fields and over time.

Unlike Connerton, Bourdieu in this way avoids reducing *all* structures to structures in the bodily substrate, and also manages to grasp the dialectics of embodiment and objectivation in a far more plausible way in the analysis. At the same time, these embodied structures are not merely seen as a reflection of the objectivated structures in the social space or in the various fields: the homology between the space of positions and dispositions will never be complete. Instead, one must focus on the dialectical relation between these structures, and in

particular on the dialectics between a habitus and a given field. In order to perceive the struggle in a field as "worthwhile", the agent must be "equipped" with a disposition to recognize the objects, positions and capital types that are fought over as of more or less indisputable value. While participating in the struggle in a field, the agent will therefore not easily question the legitimacy of the existence of the field itself. The controversies in a field can thus be localized in what Bourdieu calls "the universe of discourse", but the existence of the field itself must be taken for granted by the agents, and its fundamental conditions of existence localized in "the universe of the undiscussed" or "doxa" (Bourdieu 1977: 168-69): While a scientist will probably be more or less inclined to take part in the struggles in the scientific field, and also to raise questions over the validity of some of its elements or principles, he or she will probably not question the legitimacy of scientific activity as such.

In a given field, there will thus be some types of capital and power relations that the agents not only have a disposition to recognize as legitimate but also as more or less unquestionable because they are founded on reputation, notoriety, trust, prestige, integrity, debts of honour etc. In these cases, the forms of capital will not be easily recognized as capital by the agents. Furthermore, the power relations and relations of domination through which they are active are more or less taken for granted or "wanted" by the agents involved in the relations. When this is the case, Bourdieu analyzes the forms of capital as symbolic capital²¹, and the relations as relations of symbolic power, dominance and/or violence (Bourdieu 1997: 197-244).

The central questions are, however, how and in what ways a study of relational memory can be of relevance to Bourdieu's theory of practice, and vice versa: how Bourdieu's theory of practice can be of relevance in a study of relational memory. I argue that this is mainly a question of adding an element of thematical reflexivity to Bourdieu's theoretical framework and an element of theoretical reflexivity to a study of relational memory.

3.3. Adding additional reflexivity to a reflexive sociology

At one level, the first of the questions outlined above is a question regarding how a study of relational memory can add an element of reflexivity to Bourdieu's reflexive sociology. In other words can an investigation of relational

²¹A further elaboration of symbolic capital and modes of domination can be found in "Le sens pratique", chapters 8 and 9. (Bourdieu 1980)

memory represent a critical analysis of both the theoretical and empirical foundations of Bourdieu's field analysis at the same time? Given Bourdieu's emphasis on the historical dimensions of the social world, both as history objectivated (the structure of the fields and the social space), and as embodied history (the structures in the habitus), his framework should also be able to shed light on structural similarities and dissimilarities in the agents' perceptions, knowledge and interpretations of and about field histories.

Basically, if fields and habituses are seen as products and producers of history, they should somehow also affect the agents' memory of these same historical processes. Their memory of these processes should then be able to influence other types of practices in the given fields, in turn. Or to put it somewhat more strongly: the fact that agents are "exposed" to the same social processes, but are located in different social positions, should somehow also affect their ways of thinking about and remembering these same processes. In this respect, a vital issue is whether some events in the history of a field will be perceived as more important than others, and whether these perceptions vary according to agents' field positions and position in the social space. Antagonistic positions in a social field should also partly be expressed in the ways dominant and dominated agents classify the history of both the field positions and the field itself. While the agents might agree on the *overall* importance or significance of a set of "field-constituting" events, systematic "disagreements" in the judgements of their positive or negative implications can also be expected.

If this proves not to be the case, a potential problem is revealed with respect to the foundation of Bourdieu's theoretical framework. While his framework is claimed to be founded on the dialectics between embodied and objectivated history, it will not apply to the analysis of the agents' perception of the history that has produced these histories. By empirically focusing on the relations between the agents' practices on various fields, their autobiographical accounts of their social trajectories, their perceptions and evaluations of long- and short-term processes, their appropriated memories and evaluations of specific historical events, epochs and persons, this question can be addressed in a plausible way. While upholding Mead's and Halbwachs' claim that history is representational in nature, it will at the same time be possible to realize Elizabeth Tonkin's objective: to analyze the practice of remembering as a *structured* and a *structuring* mechanism with respect to the formation of social identities and to the logic of fields. If a Bourdieu-inspired analysis shows that this is not the case,

one might conclude that a series of critical questions about the historical foundations of Bourdieu's theory can be raised.

In my view, this conclusion is neither the most plausible nor the most theoretically interesting, with respect to the applicability of Bourdieu's theoretical framework. The reason is straightforward: field analysis cannot be applied to every social phenomenon, simply because Bourdieu's theory of practice is not a "grand theory" but first and foremost a theory of the genesis, production and reproduction of power relations. One of the problems related to a Bourdieu-inspired field analysis is, however, how the analyst is to specify the *limits* of a given field. When does the analysis of fields apply and when not? When can a social phenomena be analyzed in field terms, and when not? A study of relational memory within a Bourdieu-inspired framework might help to clear out this problem of "boundary specification". The fact that it is possible to identify a structured and structuring, manifest or latent, conflict over the history of a field, such as would be relatively easy to do in an analysis of the political field, for example, might be used as an indicator or a litmus test for the validity of a field analysis of a specific social phenomenon. Instead of a tout-court rejection of Bourdieu's theory of fields, one might thus identify some of the limits of its application.

Furthermore, an analysis of a field with a thematical emphasis on relational memory might also provide important information on processes of field genesis, and on critical epochs in the history of a field. If analyzed within Bourdieu's theoretical framework, the agents' practices of remembering must somehow be relevant to the production and reproduction of power relations in the various fields of action. If this is the case, it also implies that one can expect that periods of intense struggle in a field, or periods where the value or the status of field-specific types of capital have been at stake, will be remembered as more important than more "peaceful" or less "threatening" periods by the agents involved in the struggle. The historical conjunctures of the struggles in a field are thus of central importance in an analysis of the practice of remembering.

Another important theoretical problem that will be raised in a study of relational memory is the issue of how social practices can be analyzed, not only as an outcome of a dialectics between different types of history, but also, and at the same time, as a product of a dialectic between structures in the past and structures in the present. I claim that a study of relational memory on the basis of Bourdieu's theory of practice is not only able to address these two related problems simultaneously, but also to make it possible to avoid the pitfall of a

deterministic position in which practices are seen as more or less unidirectionally determined and reproduced by past social structures. Instead, the agents' *creative capacities* and competences for reflection are emphasized. By thematically focusing on the practice of remembering in a field analysis, the criticism e.g. Jeffrey C. Alexander (Alexander 1995) has raised against Bourdieu's framework for being both reductionist and the last version of structuralist marxism can be met.

The argument is, once again, rather straightforward: the practice of remembering is a practice that also involves an ability to reflect upon the past from a position located in the present. First, this means that this particular practice will only be meaningful to analyze sociologically as an outcome of a dialectical process between past and present structures and experiences. Second, a sociological analysis of relational memory must necessarily see agents as capable of reflecting not only on their own history, but also on the structural conditions that have partly shaped them as agents. At the same time, one must acknowledge the possibility that this is a competence and a capacity that, like other habitus-generated creative capacities, will also vary according to field positions, positions in the social space and structures in the habitus. A study of relational memory will thus imply that the creative capacities to reflect on the processes and structures that have shaped the same habitus, must also be given a central position in the analysis.

All of the previous questions have addressed the problem of thematical relevance with respect to Bourdieu's theoretical framework. When discussing the relevance of Bourdieu's theory of practice in a study of relational memory, we are also asking whether or not a Bourdieu-inspired analysis can add theoretical complexity to the existing theories on memory, and thus also provide important new insights. I have repeatedly claimed that a combination of his theory of practice, elements from Mannheim's sociology of generations and Halbwachs' theories on the social frameworks of memory will do so. The next two questions are thus: In what ways can Mannheim's sociological approach to the study of generations be of relevance for Bourdieu's theory of fields and the study of relational memory? And, how can a Bourdieu-inspired analysis at the same time add additional insights to Mannheim's sociology of generations?

3.4. Adding an additional dynamic to field analysis

Despite Bourdieu's emphasis on the opposite, the notion of a social space can easily be understood as a totalizing structural description of relations between real, existing agents. Although the notion is a *theoretical* construction of the most dominant stratifying principles and structures of capital in a given society over time, there is an imminent risk that the weighted positions (representing multiple agents within this space) might be understood as the positions of "real", instead of theoretically identified, social groups.

As Claudine Attias-Donfut has pointed out, the same risk of "substantiation" applies to concepts like "youth", "old age" and "generation":

La profonde influence de la classe sociale sur les trajectoires de vie fait éclater l'unité globalisante des notions de vieillesse comme de jeunesse. La variation régionale, le degré d'urbanisation ne pèsent pas moins sur les destins individuels comme sur les opinions, attitudes, modes de vie... De même, hommes et femmes d'une génération sont soumis à des processus de vieillissement profondément différenciés. (Attias-Donfut, 1988: 169-170)

One of the possible strategies to avoid this analytical pitfall will then simply be to focus on the relations between the analytical concepts, rather than the concepts themselves. In this way, none of the categories can be pre-constructed to be understood as actually existing social groups. Given Mannheim's emphasis on the distinction between social locations, generations and generation units, it might be claimed that the idea is already present in his work. However, even if this is correct up to a certain point, Mannheim gives neither a systematic discussion of the relevant social structures nor a clear-cut definition of the parameters needed for locating the different social locations. If the formative capacity of historic events is to be fully analyzed, such clarification is needed.

Also for this reason, a combination of Bourdieu's analysis of fields and Mannheim's idea of formative events might prove useful. As I have argued above, the history of the field must be included in the field analysis. Some events will, however, be of greater importance than others with respect to the development of the logic in a field and also to the development of potential subjective group identities. Field-specific generations can thus be identified. At the same time, these events will probably not affect all positions or age-groups in the same way. In order to analyze the complexities of a field, the impact for agents of entering certain positions in the field in specific periods and at a specific age, or belonging to a given position in a field when the field-structure undergoes significant changes, must be taken into account. While this will also make it

possible to reveal the level of intra- and inter-generational conflicts in a field, the historical specificity of being in a given field-position at a given age will also be highlighted.

At the same time, yet another dynamic element can be added to the field analysis by exploiting Mannheim's ideas of generations and generation units. By combining these ideas with Bourdieu's ideas on fields and field position in a conceptual cross-tabulation, we arrive at the following taxonomy of possible *subjective* group formations:

Table 3.1: A taxonomy of possible group formations resulting from combining generations and fields.

	Intra-positional formation	Inter-positional formation
Intra-generational formation	Position-specific generation units	Field-specific generation units
Inter-generational formation	Position-specific generations	Field-specific generations

By combining the two approaches like this, I argue that an increased sensitivity to "local" field processes, field events and effects can be achieved. The call for a dynamic analysis of relational memory can thus be met in a more precise way than is allowed for in the framework suggested by Irwin-Zarecka. The lack of precision found in Nora's analysis of generations can also be avoided.

For instance, special attention must be given to the difference between field-specific formative events, and position-specific formative events and oppositions. While generation-specific conflicts between different field-positions might be central to and part of the *overall* logic of a field, important changes might also affect field positions in ways that generate "local" struggles or oppositions within areas of the field. Alternatively, some events, changes or processes, e.g. technological changes, might produce position-specific inter-generational conflicts, while the other positions in the field not are affected at all by the same events or changes.

In this way, an integration of Mannheim's approach in Bourdieu's field-analysis might not only provide a clearer understanding of the relations and intersections between the agents' habitus, autobiographical accounts, and their positions and trajectories in the social space, field structures and field struggles. It should also make it possible to "locate" different formative events as associated with different positions in the fields, and also to reveal systematic commonalities and differences in the retrospective evaluations of *similar* formative events between and within the various field positions.

This does not mean, however, that all the analytical problems in a study of relational memory have been solved. In order to analyze the formative capacity of some event, process or change, one must be able not only to distinguish analytically between important and unimportant events for the field, but also for the different positions in the field. This is also a question of criterion-specification: what criteria or parameters are needed in order to be able to define an event as formative? From a Bourdieusian point of view, I argue that one central criterion must be that the events have been or still are central for the genesis, reproduction or restructuring of relations of power and domination in a field or within a field position. In turn, this approach will also make it possible to analyze the history of a field or a field position as a potential type of capital that can be more or less openly fought over in the field. Since relations based on trust, confidence, integrity etc. must somehow be founded historically, the history of the field or a field position can also have status as a field-specific type of symbolic capital.

With respect to the problem stated in the first chapter, how to analyze the relations between "classes", work and relational memory, the agents' homogeneity and/or heterogeneity in classifications and interpretations of specific events also become crucial in an analysis of the degree and probability of a *subjective* awareness of similarities and dissimilarities in field positions, both within fields and across fields. Once again, this not only raises the question of the agents' capacities for both "field-" and self-reflection, but also the problem of how structures in the present are partly able to organize the agents' retrospective evaluations. We must therefore focus on how these social frameworks become a part of the mental frameworks or structures that organize the agents' memories, and whether, or how, these mental structures correlate with the social structures, e.g. capital structures in a field.

Furthermore, the extent to which the dialectics between the practices of remembering and other field-specific practices can be analyzed as a condition for

the formation of a subjective group-identity should be further clarified. The first step in this analysis must be to reveal the dominant social frameworks of a given memory, and thus also to identify some of the most important structuring mechanisms with respect to the agents' remembering practices. In other words, it is necessary to identify who the agents subjectively consider to be included as "insiders" and "outsiders" in the relevant situations, and also how this varies according to field positions and generations.

3.5. 'Classes', 'social frameworks' and 'relational memory'

Once again, we are reminded about the central importance of the dialectics between subjective and objective structures. While focusing on the objective structures, the analysis must at the same time also reveal who the remembering agents perceive as the important groups or positions when the various events, situations, processes and persons are remembered. While Halbwachs original contributions, and in particular his ideas of "the social frameworks of memory" are, thus, still relevant to the analysis of relational memory, the shortcomings in his work mentioned in chapter 2 must somehow be dealt with. As I argued in section 2.2, some of the strongest structuralist and mechanistic elements in his theoretical approach must be moderated, and historical processes given a more central place in the framework.

But how are these subjectively perceived frameworks to be analyzed? Several studies have focused on the agents' use of the personal pronouns "us" and "them" as being of vital importance in the analysis of subjectively recognized group memberships and of the subjectively recognized differences between the positions. In what was to become a classic in Norwegian sociology, Sverre Lysgaard used this strategy to identify what he conceptualized as "arbeiderkollektivet", or "the workers' collective", in a study of a Norwegian paper mill (Lysgaard 1961[1985]). Focusing on the positions of the management and the workers, Lysgaard analyzed more informal strategies of workers' resistance within a functionalist framework. The relations and confrontations between various systems - the technical-economical system, the collective system and the human system - were seen as the most important practice-, resistance- and consciousness-generating mechanisms in his theory of work-organization.²² While Lysgaard's work in many ways is a masterpiece within the functionalist tradition, there are also some important shortcomings to his work.

²²For a complete version of Lysgaard's argument, see "Arbeiderkollektivet" (1985[1961]).

With respect to the subject of my own study, one of the major problems in Lysgaard's work is the lack of focus on the historical development of different positions within the factory and in the structures outside the factory gates.²³ This has some important implications for his analysis. First, his lack of sensitivity for the history of the different positions in the organization makes it more difficult for Lysgaard to analyze the reasons for possible position-specific controversies at the *same* levels of authority. Instead, the existence of a general "workers' collective" seems to be more or less taken for granted. It consists of more or less all the production workers.

This, however, will not necessarily be the case. As Korsnes (1983:138-157) has pointed out, the development of a workers' collective, or more precisely, more informal forms of workers' *resistance* towards managerial strategies of labour process organization, can also be seen as a response from the workers to particular *ways* of organizing the labour processes, particularly in situations where the workers have little or no influence over these same processes. As this implies, the perception of who the agents see as "us" and "them" can vary according to labour process control. Second, the role of the agents' past experiences and their reflections on these experiences in relations of opposition and possible conflict are not analyzed at all by Lysgaard. In consequence, the subjective acknowledged group identity easily ends up as the product of present structures alone. Given the subject of this dissertation, this is of course not a plausible analytical strategy. Commonalities in past experiences and in the perception of the past will rather be seen as two potentially important vehicles for the development of any kind of subjective group identity.

Even so, some of the elements in Lysgaard's work are still relevant. In particular, his focus on the agents' use of personal pronouns seems useful, and has also been applied successfully in other fields of study. In this respect, a study of power-relations, stigma and generations in a local community, done by Karl Mannheim's former assistant, Norbert Elias, is of a particular interest. In the book called "The Established and the Outsiders" (a study of the local community "Winston Parva" [co-written with John Scotson]), Elias emphasized the role of past experiences as an integrating mechanism within the groups and also for the relations between groups:

The group of old families of Winston Parva (some of whose members were, of course, quite young) had a common past; the newcomers had none. The difference was of great significance, both for the internal constitution of each of the two groups and for their relationship with

²³In Lysgaard's study, this dimension is only dealt with in a minor section (see 1985:190-91)

each other. The established group of old residents consisted of families who had lived in that neighbourhood for two or three generations. They had undergone together a group process—from the past via the present towards the future—which provided them with a stock of common memories, attachments and dislikes. Without regard to this diachronic group dimension, the rationale and meaning of the personal pronoun "we" which they used with reference to each other cannot be understood. (Elias & Scotson, 1994: xxxvii- xxxviii)

Even though the relations in and outcomes of these processes can be very different from what Elias & Scotson found in "Winston Parva", there is no reason *not* to believe that the same mechanisms might be active inside the gates of a factory, for instance in relations and processes involving old vs. new crafts, old vs. new positions, old vs. new departments etc.

If these relations are to be analyzed in their full complexity, completing Halbwachs framework by simply building on Lysgaards functionalist approach will thus not be satisfactory. Elements from Elias' figurational sociology must be included not only by focusing on the group processes and the "stock of common memories", but also on the social figurations indicated by the agents' use of personal pronouns. The logic in Elias' pronoun model is straightforward and yet analytically complex: none of the pronouns can be understood or treated separately. They always refer to other positions and must thus be understood in relation to these:

...one cannot imagine 'I' without 'he' or a 'she', a 'we', 'you' (singular and plural) or 'they'. The personal pronouns represent the elementary set of coordinates by which all human groupings or societies can be plotted out. (Elias 1970: 123)

Elias argues, correctly I believe, that this also implies that we always must think of people as people in figurations; as interwoven into a network of *interdependent* people and their actions (op.cit.: 127-28). Unlike Lysgaard, Elias also strongly emphasizes the possibility and probability of *restructured* figurations. To quote, at some length:

One's sense of a personal identity is closely connected with the 'we' and 'they' relationships of one's group, and with one's position within those units of which one speaks as 'we' and 'they'. Yet the pronouns do not always refer to the same people. The figurations to which they currently refer can change in the course of a lifetime, just as any person does himself. This is true not only of the people considered separately, but of all groups and even of all societies. Their members universally say 'we' of themselves and 'they' of other people; but they may say 'we' and 'they' of different people as time goes by. (op.cit.: 128)

Analytically, this is of vital importance. From a figurational point of view, social groups cannot be analyzed as static units, but instead must be understood as continuously changing units. With respect to social generations and generation units, this also makes it impossible to treat these entities as *transhistorical* units. Even though some formative events may have shaped the agents' identities in

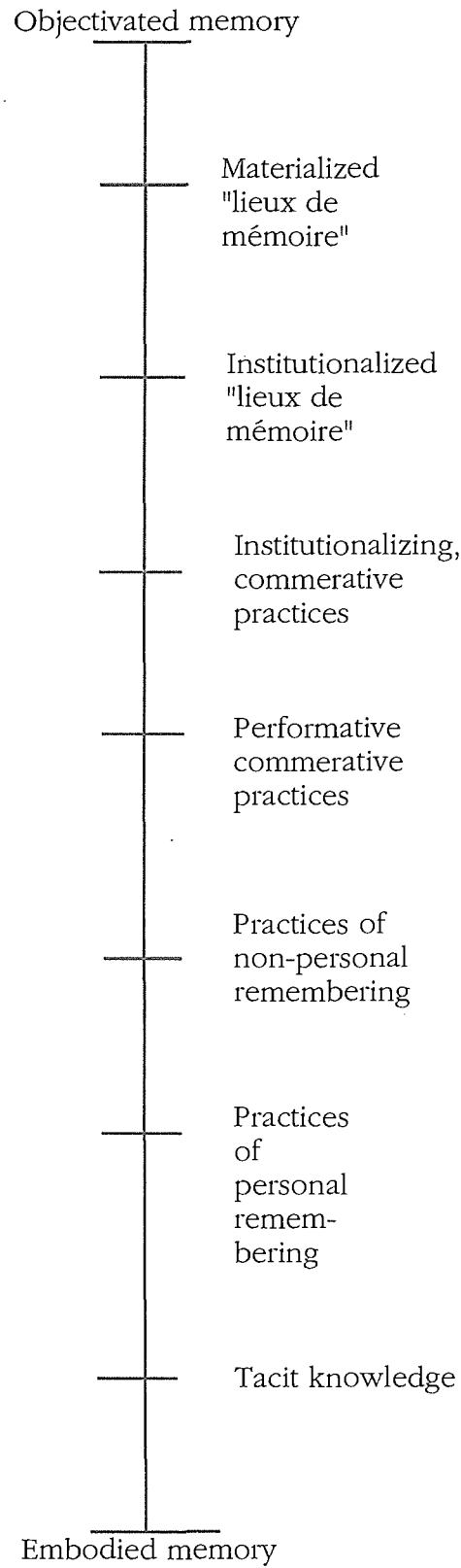
lasting ways, they will still be exposed to and be active in restructuring social processes, processes that also might affect these patterns of social inclusion and exclusion. If this is to be analyzed, we must once again apply a historical-sociological approach, in which the dialectics between past and present structures is seen as central for the social processes that are analyzed. Where possible, we should, of course, also have data about the agents' classifications and mental structures from different periods in time. In this dissertation, this will unfortunately not be the case. It will thus not be possible to draw conclusions on the processual stability or instability of these structures of inclusion and exclusion.

Where does this leave us when it comes to Bourdieu's alternative to more orthodox or objectivistic, structuralist versions of class analysis? What is needed for a theoretically identified social position to become an actual or mobilized social position? In short, if a subjective group identity is to develop both within a field position and/or between two or more field positions, it will not be enough that the agents are located close to each other in the social space, are more or less similar in their positions and actions in and across fields, and that homologies with respect to the structures in habitus can be identified. As an additional criterion, the agents must have commonalities in their perceptions of the past in multiple fields, and have a more or less homogenous understanding of who to include in "us" and who to exclude as "them" in this history. The argument for this being so is straightforward: in order to develop a stable group identity that embraces multiple field positions, the agents that are located in these positions must also have commonalities with respect to their perceptions and understandings of the processes leading to a commonly shared field situation. Because of their relevance in the formation of these identities, this calls for a discussion and a conceptual clarification of the differences between various types of remembering practices, of the various types of "memorial" outcomes, and also of the "internal" relations between these outcomes.

3.6. Practices of remembering and "memorial" outcomes. An alternative conceptualization

As indicated above, and as I have discussed elsewhere (Hjellbrekke 1993), one alternative to the existing sociological approaches to the study of memory is to focus on memorial symbols, commemorative ceremonies and practices of remembering as more or less embodied or objectivated. This focus would provide us with the following continuum:

Fig. 3.1: A continuum of memorial symbols, ceremonies and remembering practices.



In an empirical analysis, these two dimensions and seven categories will of course not be mutually exclusive. As will become clear, the various types of lieux de mémoire, commemorative practices and practices of remembering both can and will co-exist and co-occur. For the sake of analytical clarity, it is, however, necessary to distinguish between more or less embodied or objectivated types of memory, commemorations and symbols.

In its clearest objectivated form, the memory of a given historical process, period, event or person will be inscribed in the physical surroundings of a given group as a material symbol, or what Halbwachs conceptualized as a "*lieu de mémoire*". Loosely defined, this term will encompass all kinds of material symbols that are established or erected by agents, and thus are supposed to commemorate or represent a historical fact that the same agents perceive as important with respect to their social identities. Typical examples of material "*lieux de mémoire*" will thus be historical monuments, buildings, cemeteries, plaques, museums etc. With respect to cycles of creation of material "*lieux de mémoire*", a recent American study indicates that there are cohort-related cycles of 20-30 years from when a given event happened to the commemorative erection of a monument or the making of a movie (Pennebaker & Banasik 1997: 11-14).

In themselves, the various material objects are, of course, of marginal interest. Instead, the analytical focus must be on how power relations have affected the processes and practices that have resulted in their construction. This also means that changing states of consensus, of conflict and of open struggle over these symbols must be analyzed as a part of a field analysis, as must field-specific cycles or periods of monument creation: what agents are dominant or leading agents in these processes and who are possible opponents? The same goes for the various symbols' potential status as capital in the genesis and reproduction of field-specific power relations: What agents "possess" or "control" the symbol, or are involved in the struggles over its "correct" and "incorrect" interpretations?

Empirically, it is relatively easy to exemplify this type of conflict. The political struggles in France over the interpretation and commemoration of the Paris Commune and "La semaine sanglante" of 1871 is one of many examples. For the first ten years after the bloody struggles, all attempts at discussion or commemoration were censored. However, between the communard amnesty in 1880 and the funeral of Victor Hugo in 1885, this changed radically. In a struggle between an alliance of republicans, socialists and anarchists, and the anti-

republicans, "Le Mur des Fédérés", the site where an unknown number of communards were executed in May and June 1871, was gradually established as a *unifying* "lieux de mémoire" for the radical and republican parties in French politics. From 1885 to 1905, this was no longer the case. Instead, an "internal" political struggle between communists and socialists dominated the commemorations (Rebérioux 1984: 619-649). To cut a long story short: the fight over this "lieu de mémoire" cannot be analyzed in isolation from the dominant struggles in the French political field in the same period. Either by trying to censor all references to, or by claiming the right to this past event, the various parties and agents also claim to be heirs to a legacy that legitimates their current positions in the field. The recent past is thus an integral part of the conflict in the political field, and because of its relevance to the struggles for political power, this symbol can be given status as a field- (and later position-) specific type of capital.

As this example also demonstrates, a materialized "lieux de mémoire" will in many, if not most, cases also be a central component in what I will conceptualize as *institutionalized lieux de mémoire*: highly structured, standardized and ritualized commemorative ceremonies for celebrating past events, persons, etc. Typical examples of institutionalized lieux de mémoire are the annual commemorative celebrations of Veterans Day, May Day, the end of World War II and various holidays. In most cases, the elements that are included in these commemorative ceremonies will be relatively stable and the commemorative practices also tend to be organized in ways that reproduce specific traditions: national anthems and/or other political songs and hymns, parades, official raising of flags, speeches, the laying of wreaths in front of monuments and on tombs are usually integral parts in these commemorative ceremonies. In this way, an institutionalized lieux de mémoire will often also serve as a structuring and practice-orienting mechanism. Today, few Norwegians will sincerely question the legitimacy of the 17th of May celebrations, and the practices also tend to be reproduced from year to year. The same goes for May Day commemorations. Even though the political ideologies, coalitions, goals and messages may have changed, and the agents' dispositions to participate in May Day parades have also varied, the commemoration of May Day is relatively stable with respect to rituals and symbols.

Still, it would, of course, be meaningless to portray and analyze these two types of objectivated "lieux de mémoire" as fixed and isolated from social processes and practices. Both will be "memorial" outcomes or products of the same processes and practices. Their contents and symbolic value will also change

over time and according to generational experiences: The Norwegian National Day was, for instance, not an all-integrative commemoration before World War II. After the war, ceremonies celebrating the dead soldiers and civilian victims were integrated into the institution. Furthermore, agents may have conflicts concerning "the ownership" of a commemoration (e.g. May Day). Of course, political changes and struggles can also lead to radically changed or to entirely new ceremonies, e.g. the changes in the May Day celebration in Nazi-Germany from 1933 and onwards (see Vennešlan 1983), the establishing of Masada commemorative ceremonies as a part of Israeli state- and nation-building (see Ben-Yehuda 1995), and also in the building of new material "lieux de mémoire", like the Vietnam Veterans Memorial (see Berdahl 1994 and Wagner-Pacifici and Schwartz 1991).

Analytically, the focus should instead be upon commemorative *practices*, both as institutionalizing and as performative practices. While the former will be central to the creation and restructuring of material and institutional lieux de mémoire, the latter will be central for and secure their reproduction over longer periods of time. Therefore, commemorative practices can also be analyzed as a continuous dialectical process of objectification and embodiment. Through a continuous process of embodiment, knowledge of and experience with commemorative ceremonies and material "lieux de mémoire" can be "located" in what Connerton calls "the bodily substrate" (Connerton 1989: 71), and thus "secure" or reproduce the agents' ability to perform or enact the ritualized practices in a ceremony and also to recognize the symbols and the symbolic content either as valuable and legitimate. Alternatively, these processes of embodiment can "secure" agents' ability to contest their relevance and/or validity. Once again, this will probably vary according to field positions, generations and generation units, and therefore also according to power relations. Needless to say, the agents' performative "loyalty" can in some cases also be "secured" by brute force.

On the other hand, the creation and restructuring of these institutional and material symbols can be analyzed as products of objectification-oriented practices and processes. By creating material and institutional "lieux de mémoire", agents will not only claim that the events and persons they commemorate and represent are of importance for a group or a society to remember. They will at the same time implicitly legitimate their *own* positions by referring to a historical tradition. Thus, these kinds of objectification-oriented practices will partly also be *censoring* practices: The willingness or disposition to commemorate former

and/or present political opponents, troublesome events, incidents and persons is most often not the greatest.²⁴ The guerrilla activity and sabotage actions staged by Norwegian resistance groups during World War II have been carefully documented and repeatedly officially commemorated. However, until recently, the sabotage actions staged by *communist* resistance groups were hardly spoken of or commemorated in official settings. If this fact is analyzed as part of the struggles in the political field, this is not surprising. The exclusion of the communists from this politically legitimizing past coincided with the exclusion of the communists from power in the political field. Political legitimacy and relations of trust, prestige and integrity could thus partly be based on the agents' perception and interpretation of these previous actions, and in this way, the struggle for political power was (and still is) also a struggle about the past.²⁵ As was the case with the Paris Commune in 1871 in French politics, these past events have had status as symbolic capital in the Norwegian political field.

As Fentress & Wickham point out (Fentress & Wickham 1992: x), commemorations are representational in nature. The same is not necessarily true for all types of memory. Remembering and commemorating should therefore be analyzed as two different types of practice. Furthermore, most agents will probably not personally have experienced events that are later commemorated. Even so, they might be capable of "remembering" and of relating them to their own personal experiences at the time they took place, and/or of perceiving them as relevant or irrelevant with respect to their own later, personal experiences and practices. The same goes for events and processes that are not objects of commemorations, but are still perceived as important. Thus, analytically, it is not only necessary to distinguish between commemorative practices and remembering practices. One must also distinguish between practices of non-personal and personal remembering.

While the former will also include the various forms of what Larsen (Larsen 1992) calls "narrative memory" (e.g. oral history) and "world knowledge" (see also Fentress & Wickham 1992: 51-75), the latter will include the agents' autobiographical memories and facts. The most interesting question is, however, whether and if so, how and why agents' similarities and differences in personal

²⁴See for instance Henry Rousso's study "The Vichy Syndrome. History and Memory in France since 1944" (Rousso 1994) or Claudia Koonz (1994): "Between memory and oblivion: Concentration camps in German memory."

²⁵On October 18, 1997, Gro Harlem Brundtland and Kåre Willoch had a harsh exchange concerning what really happened in the 80s. Even though both persons have officially retreated from the political field, the stakes are the same: Who is to be trusted, and who is not?

and non-personal remembering varies according to the same agents' field positions. Similarly, it is of interest to investigate the possible consequences this might have with respect to group formation and symbol creation. If the potential inherent in a field position is to be realized, and if generations or generation units are to develop into subjectively recognized social groups, the structural commonalities and differences in the agents' personal and non-personal memories must not only be mutually reinforced through their remembering practices. There must also be equally mutually reinforcing relations between the agents' practices of remembering (their commemorative practices included) and their "memory-external" experiences and practices in a field. While Larsen's original distinction between a personal and a non-personal memory can thus be adopted in a relational study of memory, his distinction between a contextualized and de-contextualized memory is far more problematic. Instead, the notion of contexts needs to be expanded so that it includes social structures, agents' field positions and other types of field practices also relevant to their remembering practices.

Finally, not all types of memory and memory-related practices are verbally articulable. Building heavily on Merleau-Ponty's philosophy, Edward S. Casey strongly emphasizes that this kind of non-articulable "body memory" is also a matter of habit and habituation, and that this "active immanence of the past informs present bodily actions in an efficacious, orienting, and regular manner" (Casey 1986: 149).²⁶ A complete discussion of the relations between memory and habits, traditions and tacit knowledge is far beyond the scope of this dissertation, partly because all these topics merit *at least* a dissertation of their own, and partly because of a lack of relevant data.²⁷ However, because of its overall importance for the development of position-specific types of skills and knowledge, some reflections are needed on the implications and study of socially structured forms of *tacit knowledge*, a problem that also is closely connected to the problem of body memory and skill acquisition.²⁸

Arguing against a procedural-regulated approach to intelligence and action, Dreyfus and Dreyfus present a model of skill acquisition where the acquisitive process is divided into five stages (Dreyfus & Dreyfus 1986: 19-36): novice, advanced beginner, competent, proficient and expert. At each of these stages, the performance is improved so that the agent can more easily draw conclusions and

²⁶Thus defined, there are important similarities between Bourdieu's notion of habitus and Casey's notion of body memory.

²⁷For a more thorough discussion see for instance Shils (1981), Camic 1986 and Turner 1994.

²⁸The following comments are by no means intended to be exhaustive.

make decisions about what action to perform in a given situation. A major part of this improvement is ascribed to the creative capacity inherent in intuition. The more experienced agents become, the less they depend on formalized, procedural-regulated (algorithmic) reasoning, and the more important experience-based unconscious intuition becomes (i.e. that based on embodied tacit knowledge or memories) with respect to decision-making. Creativity is also seen as "unconventional and unexpected interpretations of past events" (Dreyfus & Dreyfus 1986: 40-41). If taken literally, this also means that creativity can be analyzed as a product of the dialectics between specific types of tacit knowledge, and presently situated, structured and "triggered" practices of personal and non-personal remembering.

In an analysis of relational memory, this skill acquisition model has some interesting implications. First, tacit knowledge can represent an important type of field- and position-specific capital: to become an expert means to embody certain skills and memories so that the agents no longer need to reflect upon them. With respect to epochal classifications, this also means that the agents' autobiographical account of their field history might be structured according to their continuous acquisition of field- and position-specific skills. Furthermore, while *formally* being in the same position, the acquisition of particular skills might also represent a qualitative change in the agents' perception of that position, and ultimately also his or her perception of the field and its history. This, in turn, might affect the agent's creative capacity in the field.

Second, in the fields where these types of skills and knowledge have status as capital, they can also serve as a generational basis for power and power relations. The reasons for this are quite obvious. Particular skills and forms of tacit knowledge may not only take a long time to learn, their acquisition can also depend on more experienced agents' willingness to share their knowledge and experience with other agents. As will be clarified in the empirical analyses, this is probably a phenomenon that can affect some field positions and field practices more strongly than others. As a clear example, field positions based on the ability to perform a specific type of skill, e.g. plating, where these kinds of knowledge will often be an integral part of an experienced agent's competence, will most likely be more affected and therefore also more "vulnerable" to changes than other field positions.

Third, there can also be situations where forms of tacit knowledge might *lose* their status as capital, for instance in periods of rapid technological change, in which certain skills no longer are considered necessary. This development may,

in turn, also be related to generational differences. Once again, one can expect some field positions to be more exposed to these kinds of change than others, and consequently also more vulnerable to the long-term consequences.

Fourth, one cannot rule out the possibility that certain types of tacit knowledge actually might *hinder* an agent's acquisition of new skills. Whenever the agent must acquire a new skill, e.g. changing from driving a vehicle with an automatic gearshift to a vehicle with a manual system, this new skill must also be integrated into the agent's *existing* performative repertoire. If acquiring this new skill means that the original repertoire must be radically changed, one cannot rule out the possibility that the agent might not be able to modify or radically change the "original" forms of tacit knowledge. If so, what originally served as a basis for potential expert performances instead turns into a disqualifying type of embodied memory. Once again, there is reason to believe that this is a phenomenon that can also vary according to social generations and field-positions. All of these questions will be addressed in the empirical analyses to come.

3.7. Some concluding comments

Thus far, the focus has primarily been on theoretical issues and problems in a study of relational memory. Mainly drawing inspiration from Bourdieu's theory of practice, Mannheim's approach to social generations and elements from Norbert Elias' figurational sociology, I have outlined an alternative *relational* approach to what Halbwachs once called 'collective memory'. This kind of eclecticism carries its own risk: the result may be an inconsistent patchwork of mutually exclusive theoretical or methodological positions. As the previous presentation and discussion has hopefully shown, I will argue that this is not the case: Even though important differences may exist, Bourdieu, Elias and Mannheim all emphasize the importance of history for sociology and the necessity that the framework constantly focus on the relations between agents, and not on the agents themselves.

However, little has been said about the methodological principles that will guide the empirical analyses. Thus, the basis of what has been conceptualized as methodological relationism needs to be clarified and discussed in further detail. This is the objective of the next chapter.

4.0. Some reflections on methodology and epistemology²⁹

4.1. Introduction

In a short article, Raymond Boudon has claimed that "...the very notion of methodology is often misunderstood: this is readily confirmed by the fact that in many places methodology courses are actually technology courses" (Boudon 1993: 370). Even though the use of the term varies, most authors will define 'methodology' by referring to a set of basic principles that are seen as characteristic or guiding for systematic research practices and theory construction. For instance, Boudon goes on to emphasize that

Methodology can take form of a systematic criticism of the notions, concepts, inferences from statistical or qualitative data, or models of behaviour proposed by the social sciences. It can also discuss the very nature of explanation in the social sciences. (ibid.)

As this statement indicates, there is usually a clear connection between a methodological position and an epistemological position: while a methodological position builds upon a specific set of epistemological premises, its application has epistemological implications on various levels. Furthermore, Boudon's initial distinction between methodological and technological issues does not rule out the possibility that a methodological standpoint can also have important implications for the researchers' application of specific research techniques. On the contrary, I would argue, that this is often the case. Depending on the analytical goals and principles, certain techniques may even prove incompatible with the premises in a given methodological and epistemological framework of analysis.

In this chapter, I will first recapitulate some of the basic premises of methodological relationism. This presentation will be supplemented by a short discussion of the basic principles in historical epistemology, since this is central to Bourdieu's version of methodological relationism. Some of the implications of methodological relationism and historical epistemology for a sociological analysis will then be discussed in greater detail. In particular, the notion of causality and the possibility of employing causal models in sociology will be considered.

²⁹The basic argument in this chapter has been presented in the obligatory lecture in the doctoral program.

Since the 1960s, in sociology, causal analysis has been closely related to statistical path analysis. A linear model that first was developed within an experimental epistemological framework, based on the assumption of a unidirectional relationship between one or multiple independent variables and a dependent variable, has prevailed (see for instance Berk 1988). Methodologically, this is a research strategy that I find incompatible with methodological relationism. Nevertheless, statistical analysis may be highly important in order to objectivate complex social structures and relations, as the analyses in chapters 7-9 hopefully will demonstrate. For this reason, I will discuss some problems and issues related to the implementation of a given set of epistemological principles, "imported" from experimental epistemology, and the consequences these may have when it comes to the application of specific statistical techniques in the analysis of sociological data.

4.2. Methodological relationism and historical epistemology

As stated earlier, one of the ongoing controversies in sociology concerns the basic assumptions underlying different models of social explanation: while methodological individualists claim that all kinds of social phenomena must ultimately be explained in terms of individuals or individual actions, methodological collectivists will claim that the same phenomena must ultimately be explained in terms of supra-individual factors that have a structuring power over the same actions. The position I will advocate, methodological relationism, claims that this is one of the false oppositions that has had negative consequences for sociology as a scientific discipline.

Even though 'methodological relationism' is a recent terminological innovation, the effort of bridging the gap between methodological individualism and methodological collectivism by applying a relational mode of reasoning is not a new one.³⁰ With his concept of 'figurations', Norbert Elias explicitly states that it is his methodological ambition to overcome this dualism:

It [figuration] makes it possible to resist the socially conditioned pressure to split and polarize our conception of mankind, which has repeatedly prevented us from thinking of people as individuals at the same time as thinking them as societies. (Elias 1978: 129).

³⁰See for instance Karin Knorr-Cetina's methodological situationalism (Knorr-Cetina & Cicourel 1981).

On the most general level, the guiding principle in all versions of methodological relationism can thus be summarized as follows: no analytical level or unity can be attributed *the* ultimate explanatory power with respect to a social phenomenon. Instead, in sociological explanations one must focus on the complex relations existing between (and where possible also within) the various structures, fields, positions, and agents. If this is to be achieved, the concepts used in the analysis must include these relations. The basic ideas in Elias' figurational sociology are thus clearly compatible with the analytical principles of methodological relationism, as is Bourdieu's constructivist structuralism.

As Korsnes (1997: 179-196) has pointed out, Elias and Bourdieu are not the only sociologists that "fit into" this analytical framework. Knorr-Cetina's attempt to overcome the individual-society dualism employing a methodological situationalism also has much in common with this position in its more general methodological principles (Knorr-Cetina 1981: 1 - 48). The relational mode of analysis can also be found in Maurice et al.'s "approche sociétal" (Korsnes 1999). Thus, one can conclude with Korsnes that methodological relationism, as it is defined by Emirbayer, "includes sociologists and sociological analysis that may have otherwise little in common (Korsnes 1999: 8 in draft version).

Moreover, yet another common denominator between Bourdieu's and Elias' methodological positions, is revealed in Emirbayer's (1997: 282-291) identification and criticism of substantialist analytical perspectives. Like Bourdieu, Elias explicitly points out the influence "popular" or "ideological" ways of understanding society has had on social theory:

This conceptual polarization is quite clearly a reflection of various social ideals and belief systems. On the one hand there is a belief system whose adherents ascribe the highest value to 'society'; on the other a belief system whose adherents ascribe the highest value to the individual. (Elias 1978: 129)

While both Bourdieu and Elias call for an eradication of substantialist or essentialist modes of thinking in the construction of sociological concepts and theories, and while both acknowledge the importance of Cassirer's work, Bourdieu's methodological framework seems to be based on a somewhat different epistemological tradition than Elias' figurational sociology.³¹ As Donald Broady's (1990) detailed analysis reveals, Bourdieu is heavily influenced by the

³¹Elias seems to ascribe much of this to the historical development of grammatical patterns in European languages (see Elias 1978, chapter 4). In the American edition of "Den kritiske ettertanke" (Bourdieu & Wacquant 1992: p. 15) Wacquant identifies a common source of inspiration for both Bourdieu and Elias in the work of Ernst Cassirer. See also Emirbayer (1997: 287).

French philosopher Gaston Bachelard and the French school of historical epistemology. This tradition considers essentialist concepts and modes of thinking to be epistemological obstacles that must be overcome methodologically through a dialectical analysis of scientific concepts and principles.

In itself, Bachelard's program and argument may seem rather trivial: based on historical studies of various sciences, Bachelard claims that scientific progress has occurred through a continuous but uneven series of "ruptures" between substantialist knowledge and scientific knowledge about the objects that are studied.³² Scientific knowledge contradicts common knowledge, and the latter constitute one of many possible epistemological obstacles that must be overcome. The other obstacles that are explicitly discussed by Bachelard, include verbal or conceptual obstacles, primary observations and experiences and substantialist modes of thinking (Bachelard 1938). In an effort to overcome these obstacles, Bachelard calls for a dialectical methodology in which the researcher systematically tries to "complete" the concepts that lead to pre-scientific forms of understanding by applying posteriorical conceptual dialectics. For instance, the principles of Euclidean geometry would be dialectically completed by the principles in a *non*-Euclidean geometry. Accordingly, this program was first called a "philosophie du non" (Bachelard 1940, see also Broady 1990). Later, Bachelard (1949) adopted the more precise term "applied rationalism". By employing this program in the study of the history of sciences, Bachelard claims that he has identified four distinct scientific periods or eras: the Antiquity, the Middle Ages, the Modern Age, and the present era of "le nouvel esprit scientifique". The latter era is considered to begin with Einstein's theory of relativity (Bachelard 1938: p.7), and is characterized by the rupture between common knowledge and scientific knowledge, between common experience and scientific techniques (Bachelard 1949: 102).

Two examples might help clarify the methodological implications of this program. When analyzing the history of electric light (Bachelard [1949]1986: 102-18), he contrasts principles of combustion and principles of non-combustion. Until the 19th century, all illumination techniques had been based on the idea that a substance had to be combusted. The technique developed by Edison for the electric bulb did not require combustion. Edison's principle marks a rupture with all hitherto known principles of illumination. It also marked a rupture with existing knowledge, being based on the insights gained by the "conquest" of an epistemological obstacle. The notion that fire, electricity and light were

³²There are thus clear similarities between Bachelard and Thomas S. Kuhn.

substantially equivalent, was rooted in commonsense knowledge that the substance of electricity *was* fire and light, and that the scientific task was to transform electricity into fire and light by adding a substance for the electrical combustion to "feed" upon. The development of scientific concepts and modes of understanding that effectively contradicted this substantialist mode of thinking made it possible to realize the scientific goal: an effective technique for electric illumination. In a discussion that bears a clear resemblance to the argument advocated by Elias, Bachelard also demonstrates how *value*-loaded concepts have constituted epistemological obstacles in the history of sciences: for example in chemistry, most researchers would probably agree that it will be scientifically meaningless to classify chemical substances using positively or negatively loaded concepts and typologies. Moreover, this would also continuously prevent the scientist from formulating more precise research questions. According to Bachelard, pre-scientific chemistry was marked by this tendency. As late as 1777, air was classified by the chemist Priestley as "good" or "bad". The result was a cosmological analysis, in which "good" vegetation was seen as combating all kinds of "malices" (Bachelard 1949: 110-12).³³ In this way, the results of pre-scientific chemical analyses were dominated by commonsensical notions of utility and purposes.

Most of Bachelard's studies were focused on sciences dominated by an experimental methodology. Furthermore, he repeatedly stressed that modern science was founded on a necessary rupture between observation and experiment (Bachelard 1938:19 and 1953: 219). For self-evident reasons, this distinction is somewhat problematic when applied to the social sciences. Even though so-called *quasi*-experimental research has enjoyed a strong position in empirical sociology, few sociological studies can be said to be based on an experimental methodology. When applying the principles of Bachelard's historical epistemology in sociology, this must be taken into consideration. To claim that the *results* of Bachelard's historical work can be generalized to apply to all sciences would not be plausible, but this does not rule out the possibility that his *methodological* strategy may also be relevant in the social sciences. I would argue that an application of Bachelard's program would not only give valuable insight with regard to the analysis of intra-disciplinary epistemological problems, it would also make it easier to identify inter-disciplinary problems. In other words, it may reveal how theoretical positions, methodological frameworks or specific research techniques that are unproblematic within one scientific discipline may constitute important

³³For instance, forests were seen as "correcting" volcanos.

epistemological obstacles in another. I will argue in the following that this is the case if an attempt is made to adapt the epistemological principles in an experimental methodology to a sociological analysis of causality and causal relations.

As earlier indicated, Bourdieu's adaptation of Bachelard's epistemological position can be summarized in the phrase "Le fait scientifique est conquis, construit, constaté". In line with Bachelard's programmatic statement in "La formation de l'esprit scientifique", Bourdieu emphasizes that scientific objects are never to be taken for granted. Instead, they must be systematically constructed by the researcher. For this reason, sociology must also be a *reflexive* science: the limits of the scientific doxa - or the border between what we take for granted and what we are able to discuss in the social sciences - must be constantly and systematically challenged. In this way, Bourdieu's methodology implies that the sociologist will be constantly confronted with the structures of his/her scientific habitus. Moreover, an analysis of the conditions that regulate the researcher's own research practices and object construction may also become feasible. As an advocate of methodological relationism, it is not surprising that Bourdieu considers the classic dualisms between collectivism and individualism as epistemological obstacles that must be overcome. Like Elias, Bourdieu considers these two methodologies to be mainly commonsensical reflections of the social world.

Furthermore, if specific analytical *concepts* lead to the same kinds of pre-construction of research objects, these must also be treated as epistemological obstacles to be overcome. The important underlying argument here is straightforward: if a research object is to be analyzed relationally, it must also be systematically constructed using relational concepts. For instance, the notion of 'class' is seen as belonging to this category of epistemological obstacles. According to Bourdieu, most definitions of 'class' have implied the existence of an actual, mobilized social group. Bourdieu therefore presents his notion of a 'social space' as a conceptual alternative, which defines groups of agents *theoretically* according to their relative positions within this space, on the basis of their positions in various social fields. The positions that are close to each other in the social space can *at most* be seen as *probable*, and not actual, classes (Bourdieu 1992: 229-232).

A relationist methodological position also has important implications for the application of analytical techniques. As is the case with concepts, specific techniques can also constitute potential epistemological obstacles to sociological analysis. When analyzing data, therefore, the interpretative logic of techniques

should also be compatible with a relational mode of analysis. For this reason, Bourdieu's position implies that we must also systematically challenge the limits of what might be called the methodological 'doxa', or the methodological universe of the undisputed³⁴: the principles, techniques and practices that we have come to take for granted for historical reasons, and therefore no longer question in practical data-analysis, may lead to unwarranted analytical pre-constructions of the research object, and must be identified, contested and surpassed.

In this respect, inter-disciplinary problems would be of special interest. For instance, most of the statistical techniques, models and concepts that are used in empirical sociology were originally developed in relation to problems and research questions in the experimental sciences. When imported into sociology, this epistemological framework was modified to produce what has been called quasi-experimental research (see Cook & Campbell 1979) . This proceeded as if the methodological concepts had the same definition in both experimental and non-experimental research, and as if the same rules of causality and causal inference could be applied in principle in the analysis of non-experimental data (see for instance Blalock jr. 1964: 3). As several authors have pointed out (for instance Blumer 1956), this is not necessarily the case.

4.3. Methodological relationism, variable sociology and causality

A single definition of 'causality' is hard to come by, but from a standpoint in critical realism, the British philosopher Roy Bhaskar has defined 'cause' as "typically either an antecedent condition or a generative mechanism" (Bhaskar 1993: 395). I would argue that only the latter part of Bhaskar's definition can be made fully consistent with the Bourdieusian version of methodological relationism. While a habitus may be defined as generative scheme of practice, perception and reasoning, i.e. a generative mechanism in Bhaskar's sense, still, it cannot be analytically isolated from the objective capital structures that historically have developed in a given field, i.e. the structural conditions in which the structures in the habitus are embodied and reproduced, while at the same time contributing to the reproduction of the structures in the field.

In a sense, the field may thus be seen as "antecedent" to the formation of a habitus, but from an analytical point of view, "causality" springs from their interrelationship - relationships between entities that cannot and should be

³⁴See Bourdieu 1977:168.

reduced to each other. To Bourdieu, this has important consequences for the application of specific statistical techniques in field analysis. In short, a relational analysis demands relational analytical tools, statistical tools included:

...if I make extensive use of correspondence analysis, in preference to multivariate regression for instance, it is because correspondence analysis is a relational technique of data analysis whose philosophy corresponds exactly to what, in my view, the reality of the social world is. It is a technique which "thinks" in terms of relation, as I try to do precisely with the notion of field. To think in terms of field is to *think relationally*. (Bourdieu 1992: 96, italics in original)

From a similar position, I will claim that the inherent logic of path-analysis in particular and regression techniques in general, as for instance Schumann and Scott (1989) have used extensively, would neither be consistent with a relationist methodology, for instance as found Mannheim's approach, nor with the principles in historical epistemology as these have been employed in sociology. There are a number of reasons for this inconsistencies. Some of these must briefly be discussed.

Firstly, a methodological relationist position implies that sociological data are always viewed as data about dialectical processes and relations that over time are both structuring and structured by practices. Thus relations between two or more sociological variables are never unidirectional. The sociological implication of a given variable can only be grasped in an analysis of the reflexive relations between the given variable and other variables.

This is not a new insight. From the perspective of symbolic interactionism, Blumer criticized quantitative causal analysis for not being able to grasp sociological processes of interpretation. Blumer's argument was quite simply that the "independent" variable will not often have a direct causal effect on the "dependent" variable. "Variable sociology" is therefore unable to encompass the processual element that characterizes all social actions in its analytical scheme. According to Blumer, therefore, quantitative variable analysis should only be applied in the analysis of social phenomena that are not mediated by an interpretative process, and to visualize patterns of interpretations that cannot be revealed by simple observation of experiences (Blumer [1956] 1986: 132-39).

If the goal of the analysis is purely sociographic³⁵, and no theoretical statements about sociological causality are made, Blumer's claims are not problematic. When employed as purely descriptive co-variation models, the most

³⁵See for instance Østerberg 1988 and Passeron 1992 for a critique of sociographical research practices.

common forms of "Variable sociology", i.e. regression models and path analysis - can, as one of many ways of describing data structures, yield relevant sociographical results. If an attempt is made to integrate them into an analysis of *sociological* relations, it is quite a different story when considered from a methodological relationist position. They may constitute potential epistemological obstacles to the analysis of social processes. Moreover, the basic causal logic that they imply - that variable X must precede Y; that X and Y must covary; that this covariation not is due to spuriousness resulting from other variables - will be hard to reconcile with *socio*-logical notions of causality outlined above.

The argument supporting this position is rather straightforward: if sociological data can only be meaningfully interpreted as data about dialectical and reflexive relations and processes, it is difficult to theoretically define a variable as "independent" of others, and to apply this logic when specifying unidirectional causal models. Of course, this does not mean that temporal sequences are analytically irrelevant, that actions and attitudes can have regressive effects on a person's biological age, or that correlations can be equated with causation. Rather, the argument is that this dualism has become a central element in an analytical disposition which more or less automatically classifies variables when doing practical data analysis, and will for this reason also be an epistemological obstacle to be overcome in methodological relationism. In most cases, the dependent-independent dualism constitutes a more or less taken for granted model of perception: for instance, age would almost automatically be defined as an independent variable. At the same time, we are well aware that the *sociological* implications of age-categories may vary according to ethnicity, gender, educational level, geographical location etc. Thus, sociological theories are based on the assumption that so-called independent variables are not "independent", but only can be meaningfully interpreted by focusing on their reflexive *relations* to other variables. For this reason, a discrepancy arises between the epistemological and the methodological framework of the technical analysis and the theoretical analysis: sociologically, we must always interpret the results as being about reflexive relations. Technically, however, we instead embody a disposition to analyze these same relations as a set of more or less uni-directional causal relations, into which correlating variables are temporally sorted. One of the most typical examples of this practice is evident in the so-called causal analysis based on statistical path analysis.

The latter approach may constitute a major epistemological obstacle to the analysis of sociological causality, both because of the basically commonsensical logic it applies to social processes, and because of the process model that is implicit in the statistical framework. Although some leading empirical sociologists (for instance Davis 1986) have considered the variables' temporal ordering *the* central criterion in sociological analyses of causality, the undeniable fact that some events, states or attributes have happened or arrived on the scene before others cannot be called a unique and important scientific insight. It might be seen as a pejorative judgement, but this must be called a commonsensical and purely sociographical approach to the study of social processes. As a result, the analytical practice would easily be reduced to the mechanized classification of variables, and to the specification of assumed uni-directional causal relations. At worst, the resultant sociological theory would thus be synonymous with, or limited to that which it is possible to specify in a statistical model. When evaluating the quality of this model, the proportion of explained variance is then often used as a central criterion.³⁶

Claims about sociological causality and causal relations would in reality therefore be based on technical results: the path and/or correlation coefficients in the temporally ordered asymmetrical model. These models and the analytical schemes present themselves as clear-cut and readily understandable (and even seductive), and appeal to more spontaneous forms of process understanding and analysis. To cite the statistician Paul W. Holland (1993: 280):

In path analysis, the cold bones of correlation are turned into the warm flesh of causation with direct, indirect, total, and partial causal pathways.

Although this can be a technically complicated process, the logic itself is trivial: temporally, some variables can be ordered before others. At the same time, however, the strategy implies an analytical reductionism: complex sociological problems are reduced to questions of how to identify the supposed explanatory powers of single variables such as gender, class, educational level, socio-economic status on other sets of variables within limits not defined by a sociological but by a statistical model.

As the notion "independent variable" implies, the basic idea is that this variable can constitute a potential cause of the variation in the "dependent" variable: the relation between the variables is asymmetrical. This dualism and

³⁶See for instance Knutsen 1997.

analytical strategy build upon a conceptualization of causality that is borrowed from the experimental sciences. However, the experimental definition of causality is not easily applied in the social sciences, since there are clear criteria regarding what can and cannot be a cause in an experiment. As already John Stuart Mill pointed out in "A system of logic", temporality is *not* a valid criterion for determining whether or not a relation is a causal relation:

We have not yet proved that antecedent to be cause until we have reversed the process and produced the effects by means of that antecedent artificially, and if, when we do so, the effect follows, the induction is complete. (Cited from Holland 1986: 252)

As this indicates, it must be possible to manipulate the values of the variable that is assigned the role as a potential cause in an experiment. Or as Holland has claimed (Holland (1986: 959) "No causation without manipulation." The same argument has also been put forward by Georg Henrik von Wright in "On the logic and epistemology of the causal relation": when analyzing asymmetrical, functional relations, one must distinguish clearly between variables that can be given status as causes and variables that can only be effects in causal relations. Factors that are not manipulable in an experiment can only be given the role of effects. One must, therefore, distinguish between causal explanations and explanations of actions (von Wright 1993[1973]: 118-123). While experimental manipulative causality can be employed within natural sciences, it is highly problematic to try to adapt these epistemological principles to the social sciences as quasi-experimental studies try to do.

Once again, Paul W. Holland has argued this point in a convincing way, with reference to the practice of analyzing attributes of persons as potential causes:

An attribute cannot be a cause in an experiment, because the notion of potential exposability does not apply to it. The only way for an attribute to change its value is for the unit to change in some way and no longer be the same unit. Statements of "causation" that involve attributes as "causes" are always statements of association between values of an attribute and a response variable across the units in a population. (Holland 1986:955)

This highlights the problem even more clearly: most sociological variables that are classified as independent variables will be variables relating to the individual's attributes, and cannot be given status as causal variables in an experiment. Thus, the logic and the epistemology of the experimental situation - that before the researcher can conclude that X is the cause of Y, s/he must be able to manipulate X, and observe that Y changes its value *because* of the

manipulation of X - is not applicable to sociological research. Nevertheless, sociological literature is full of examples in which variables concerning the units' gender, ethnic origin or class location are given status as causal variables in regression analysis and/or path analyses.³⁷ None of these variables can be subjected to manipulation. To cite Holland (1993: 280) one last time: "What passes for a cause in path analysis might never get a moment's notice in an experiment."

Where does this leave us with respect to the application of statistical techniques? Are there *any* adequate statistical tools for categorical data³⁸ which are also reconcilable with a methodological relationist position? Although this topic probably merits a dissertation of its own, some implications seem to be clear: while asymmetrical regression techniques can be used as descriptive tools in purely sociographical studies, where no theoretical statements about sociological causation are involved, their interpretational logic may constitute a major epistemological obstacle to overcome in a sociological study. On the other hand, the interpretative logic of symmetrical descriptive statistical techniques that force the researcher to focus directly on the dialectical relations between categories, variables and sets of variables in the interpretation of results, should also be reconcilable with a relational sociology. Emirbayer (1997: 298-303) mentions network analysis as one research technique that is not only compatible with a relational methodology, but can also provide formal displays of the structures of social figurations. When it comes to identifying latent structures in larger sets of categorical data, Bourdieu will claim that the same is true for correspondence and multiple correspondence analysis: the categories' positions in the low-dimensional space must *always* be interpreted relationally.³⁹ Furthermore, I will claim that if there is a need to identify the strongest pair-wise or multi-wise associations and interactions between categories and/or categorical variables, the interpretational logic in *symmetrical* versions of log-linear and log-multiplicative models should also be consistent with a relational methodology (see td. Goodman 1996 and Gilbert 1993).⁴⁰

Needless to say, it would not be possible in any of these cases to reduce the *sociological* research object to limits defined by these techniques, for example, the

³⁷See for instance Olin Wright 1997.

³⁸As the major part of sociological data consists of.

³⁹See Greenacre 1984, Greenacre & Blasius 1993 and Hjellbrekke 1999 for an introduction to correspondence analysis.

⁴⁰There are however clear problems related to the procedures for deciding which model to accept. These procedures build on an inverse hypothesis-testing logic in the tradition following Fisher.

number of variables in a correspondence analysis or in a log-linear model. This also applies to the interpretation of the results. While a statistician can do scientific investigations on the *forms* of the results, the sociological interpretation of the same results must always refer to a historical context. As Jean-Claude Passeron has pointed out, this has important consequences not only for the possibility of an experimental reasoning in the social sciences in general, but also for the possibility of specific types of statistical reasoning in sociology:

Aucun chercheur en sciences sociales ne peut s'y tenir [(au pôle du raisonnement expérimental)] tout au long de son raisonnement, peut-être même du début à la fin d'une phrase, dès lors qu'il parle de phénomènes historiques. Le statisticien le peut, mais seulement tant qu'il ne raisonne que sur la forme des relations entre ses données. Dès qu'il parle du monde historique, le raisonnement statistique est déjà un raisonnement sociologique. (Passeron 1992: 74-75)

With a few possible exceptions, most sociologists would probably agree to this position. In itself, therefore, it should not be controversial, but where does this leave us with respect to the possibility for analyzing causality sociologically? If the implications of Passeron's statement are to be taken seriously, this analysis must somehow be able to include historical elements. An analysis in which an effort is made to include history in the analytical scheme implies in turn that the notion of 'process' become a central analytical category.

For the analysis of causality, this would have important implications. As Mats Ekstrøm has pointed out, processes can, and typically do, give rise to partly new effects or outcomes. Thus, they cannot be plausibly analyzed if only registered as isolated states on predefined variables and their set of possible values at T1 and T2, as is often the case in variable sociology. Instead, Ekstrøm claims that a methodology consisting of open, flexible and intensive process-oriented case-studies is needed (Ekstrøm 1993: 52). In the analyses of these processes, I would suggest that special attention also must be paid to the dialectics between what might be called creative practices and reproductive practices. While the latter would be the "vehicles" of structural stability, the former would be "vehicles" of structural changes.

The arguments so far presented will have some important consequences with respect to how this processual analysis can be carried out. Firstly, the principles of experimental epistemology and methodology are not consistent with sociological reasoning, because of evident problems related to the possibility of manipulating variables and social settings. Thus, the strategy of adapting these principles by developing a quasi-experimental framework for analysis is not a

plausible one. Furthermore, the widely employed strategy of reducing sociological causality in processes to a matter of drawing inferences from observed regularities at T1 and T2 between temporally specified and correlating variables, would not be consistent with either central principles in Bachelard's historical epistemology or with a methodological relationism.

In the remainder of this chapter, I will argue that, by adapting Bhaskar's alternative definition of causes, we will make room for an approach that not only avoids these consistency problems, but also makes it possible in a plausible way to include history as a dynamic force in the dialectics of past and present that characterize all social processes.

4.4. Some final reflections on some implications of a methodological relationism

In "A Realist Theory of Science", Bhaskar has separated generative mechanisms from causal laws as follows:

The real basis of causal laws are provided by the generative mechanisms of nature. Such generative mechanisms are [...] nothing other than the ways of acting of things. And causal laws must be analyzed as their tendencies. (Bhaskar 1978:14)

However, proof of the existence or endurance of a generative mechanism is not considered to depend upon the observation of a regular pattern of tendencies in open systems of observation. According to Bhaskar, this would only be the case in laboratory settings. In clear opposition to Humean inspired analyses of causality⁴¹, evident in "variable-sociological" statements about causality which are based solely on co-variation of variables in a closed system of functions, the notion of causal powers becomes central in Bhaskar's realist philosophy. These are the enduring powers which enables the generative mechanisms to bring about specific effects, even though these effects are not observed as a necessary

⁴¹Bhaskar further clarifies his position as follows:

"For a generative mechanism is nothing other than the way of acting of a thing. It endures, and under appropriate circumstances is exercised, as long as the properties that appropriate circumstances is exercised, as long as the properties that account for it persists. Laws then are neither empirical statements (statements about experiences) nor statements about events. Rather they are statements about the ways of acting of independently existing and transfactually active things." (Bhaskar 1978: 51-2)

consequence of the existence of the mechanisms. As a result, non-observable entities can also be causes.⁴²

In many ways, Bhaskar's conception of society bears a clear resemblance to the principles in Bourdieu's constructivist structuralism⁴³, and like Bourdieu, Bhaskar rejects a methodological-individualist position in favor of relationism:

Society must consist of an ensemble of powers irreducible to but present only in the intentional actions of men; and men must be causal agents capable of acting self-consciously on the world. They do so in an endeavour to express to themselves in thought the diverse and deeper structures that account in their complex manifold determinations for all phenomena of our world." (Bhaskar 1978: 20)

The following quote stresses the importance of relational analysis, while at the same time emphasizing the centrality of agency:

"Society can only be known, not shown, to exist. It exists only in virtue of the intentional activity of men but it is not the result (or the cause) of their intentional activity. /.../ Sociology is not concerned with masses of individuals or mass behaviour; but with the persistent *relationships* between individuals" (op.cit.: 195-196, italics in original)

While Bourdieu views the structures and relations that regulate and are regulated by social practices as the sociologist's primary object of knowledge, Bhaskar

...regards the objects of knowledge as the structures and mechanisms that generate phenomena; and the knowledge as produced in the social activity of science. These objects are neither phenomena (empiricism) nor human constructs imposed upon the phenomena (idealism), but real structures which endure and operate independently of our knowledge, our experience and the conditions which allow us access to them. (Bhaskar 1978: 25)

How then, is this position to be adapted to sociology? Once again, a full exploration of this question goes far beyond the ambitions of this dissertation. I will therefore limit my discussion to a brief outline of some of its implications for the analysis of generative mechanisms in social processes.

Inspired by Bhaskar, Thomas Brante has outlined an alternative "causal realism" in which non-observable entities are also defined as possible or potential causes in sociology. Furthermore, Brante emphasizes that a generative mechanism has the *capacity* to generate or to bring about an effect, without this being a *necessary* consequence of the existence of the same mechanism. For instance, a person would still have the capacity to work, even though for the time

⁴²I will return to some implications of this position below.

⁴³See for instance "Espace social et pouvoir symbolique." in Bourdieu 1987.

being unemployed. While practices may be empirically observable, and the structural patterns of practices may be objectivated, this will not usually be the case for their generating mechanisms. According to Brante, the main task of sociology therefore must be to identify the social structures containing causal mechanisms that generate, or have the capacity to generate, empirically observable effects, i.e. practices, on different levels of analysis. For Bhaskar, this task also implies that the analysis must focus on the reproduction and transformation of various kinds of social relations (Brante 1997: 311-335).⁴⁴

Conceptualized in this way, the notion of causality acquires a wider definition than has usually been the case in empiricist and/or experimental studies⁴⁵. Furthermore, it must be analyzed processually. As outlined earlier, the structures in the habitus are viewed as mediating, formative and (perhaps most importantly) generative with respect to practices in fields. In the above definition, the habitus would also be the central causal power in Bourdieu's sociology: as the key mediating element between social structures and social practices, habitus would also have the capacity to generate, reproduce and change these same structures. Like the other central concepts and elements in Bourdieu's theory of practices, habitus is not available for direct observation: while some individual attributes may be easily observed, direct observation of historical entities like a field, a social space or a habitus is simply not possible. Even so, the complex relations and the dialectics between these structures generate observable practices, and crucial information about their structures can be obtained by applying an objectivating methodology. Both the structures in the social space and in the fields must be theoretically objectivated, identified and verified in and through the analysis.

For the analysis of causality in social processes, Bourdieu's approach has some important implications. As outlined earlier, practices would be analyzed as future-oriented outcomes of presently situated dialectics between various types of past structures. While the temporal sequences of the different states or events in a social process or a field may be relevant to this analysis, the analytical task is always to analyze the processes in which this dialectic continuously works to generate practices. As a consequence, history cannot be defined and analyzed as a

⁴⁴Brante somewhat modifies Bhaskar's position. Focusing on five analytical levels, *inherent* characteristics in level-specific elements and components are also given special importance by Brante. While Bhaskar without doubt can be called a relationist (see for instance Bhaskar 1989: chapter 1), there is thus, even though it is modest, an element of substantialism in Brante's analytical framework.

⁴⁵See for instance the discussion in Cook & Campbell 1979

static or fixed structure or series of completed events, but rather as an active, practice-generating mechanism. Thus, the relation between the past structures and the present situation cannot be defined as an unidirectional, linear relation, in which the past is considered as more or less determining the present. Analytically, it must be viewed as a reflexive relation, in which the generative mechanisms themselves can also be changed or modified as a result of their exposure to the continuously ongoing social processes. In short, in a sociological study, the causal powers in a generative mechanism would not be given once and for all.

When analyzing potential changes, however, one must be alert to the distinction between creative and reproductive practices, and to the processes of genesis, transformation or reproduction in social relations and structures. While a process may result in changed phenomena, i.e. individual practices, classifications and perceptions, it does not necessarily imply that the social relations and structures have also been changed in the process. Changes of tendencies may be observed frequently and relatively easily, even though the social structures and relations may be basically the same. When analyzing the effects of a generative mechanism, therefore, one should be able to separate analytically these possible processual outcomes. In my opinion, the relational methodology inherent in Bourdieu's analytical framework and his theory of practices enables the analyst to do so.

Chapter 5. Constructing a local social space.⁴⁶ Structural changes in Stavanger in historical perspective

5.1. Introduction

In "La classe ouvrière et les niveaux de vie", Maurice Halbwachs (1912) outlined a Durkheimian synthesis of the Marxist and Weberian class analyses. Focusing on the relations between three different social zones - a zone of production and work relations, a zone of consumption and a zone of family relations - Halbwachs developed a theory in which exploitation is not conceptualized and understood in economic terms, but in social terms. If agents are socially alienated (which Halbwachs understood as lacking the ability to prioritize economically "investments" related to relations in the family), they are also exploited in that they are partly deprived of the ability to fully appreciate social life and social solidarity where it is most intense; in the sphere of family relations. According to Halbwachs, this would be reflected in turn in their patterns of consumption and market behaviour: they would not have as strong a disposition as others to give priority to the family. While Halbwachs' class analysis is primarily of historical interest, and the logic of his argument is flawed and even inconsistent in many ways (see Hjellbrekke 1993), his focus on the distinctions and relations between different social zones, or arenas, is not without analytical value.

The foregoing chapters have all treated theoretical and methodological problems involved in a study of relational memory. As emphasized, a processual approach to the study of the relations between positions in the social space, in the various fields, and generational locations is considered crucial. Furthermore, social processes are seen as unfolding within social structures that affect but are also affected by the same processes. In short, this implies that structures in the social space, in the fields and in the habitus also may (and probably also will) be changed as a result of the ongoing social processes. Where possible, therefore, the outlined approach calls for a historical-comparative analytical approach.

In this respect, Halbwachs' distinction between different social zones, or arenas, and the relations between them, will also be of analytical interest. Major

⁴⁶This chapter relies heavily on multiple works of Lennart Rosenlund. Rosenlund has given me free access to the data-sets produced as a part of the project "Kulturarv, kultur møter og kulturell endring i en oljehovedstad" ("Cultural heritage, cultural meetings and cultural change in an oil capital"), and has also graciously shared his analyses, manuscripts and thoughts with me over the last few years.

structural changes and developments in two zones of activity may take place in different historical periods, and therefore affect the individuals that are exposed to these changes in different ways. Thus, structural changes and processes within a shipyard may also affect or be affected by "large-scale" structural changes and processes in the city where the shipyard is located, and vice versa. Once again, this means that if these processes are to be adequately understood, they must be analyzed relationally. The empirical object of analysis, therefore, must be constructed by focusing on what we might call a double structural history: both the structural history of the shipyard and of the city must be taken into consideration. Furthermore, the relations between these two histories must be analyzed. In the next two chapters therefore I will provide basic information concerning structural developments and potential oppositions within and between the two "zones" of activities that are of vital importance in the later analyses: the historical processes, changes and developments in Stavanger, the city where Rosenberg Verft is located and the historical processes, changes and developments within the shipyard itself.

The goal of the present chapter is to provide a necessary outline of some of the structural developments and oppositions in the city of Stavanger. Given the theoretical approach, the dominant, stratifying structures in what may be called the *local* social space needs to be investigated. Where possible, the *historical* changes of the structures in this space, for example the occupational and educational structures, will be presented and discussed. In an ideal situation, data from different historical epochs would open up for an analysis of changing structural oppositions like these over longer time-spans. Needless to say, complete (or comprehensive) sets of time-series data on the phenomena in question are in most cases hard, if not impossible, to come by. Instead, the analyst rely on numerous, independently produced data-sets from various sources and institutions, which are of varying quality. This, in turn, gives raise to problems of data comparability, both within and between specific points in time. This will also be the case with my analyses.

Furthermore, the historical studies that have so far been carried out have tended to focus on what may be called "the waves of changes" in Stavanger, processes that it is more or less taken for granted had a transformative capacity for most phenomena in the local society. Implicitly, it is taken for granted that these waves are major agents of large-scale structural changes. Thus, patterns of stability, continuity and reproduction tend to disappear from the analyses. As will become evident, several phenomena are characterized by structural stability

rather than by rapid change. With regard to the construction of a local social space, the historians' model of large-scale changes poses problems as to where to "fix" the construction in time. If "fixed" in the middle of a given "wave", the objectivated structures may not be relevant in describing historically important stratifying mechanisms.

For this reason, I have chosen first to focus on the 1930s in the attempt to construct a historical local social space in Stavanger. The first "wave of industrialization" was then more or less finished, and the second wave - the arrival of the oil-industry - lay four decades ahead. The next space construction is not a result of my own analyses, but was carried out by Lennart Rosenlund on the basis of survey data from 1994. Rosenlund has analyzed this space in great detail, and has also written extensively on the structural changes which took place in the period between 1970 and 1995 (Rosenlund 1995a, 1995b, 1998). The results of his work will provide a central point of reference, therefore, for my own discussion in this chapter, as will the numerous analyses of various aspects of the cultural and political field in Stavanger (see Rommetvedt [ed.]1997). With regard to the period before 1945, I have relied heavily on the works of Furre (1990) Bjørnson & Sørli (1987), Bjørnson (1990), Haaland & Norvik, Dyrvik (both in Danielsen [ed.]1987) and Utne (1992).

I have chosen to organize the description in two separate periods: the years before and after 1945. This must *not* be understood as attempt at an historical periodization. I do not claim that 1945 may be seen as a turning point in the structural history of Stavanger, in fact before and after 1970-75 will probably be a far better demarcation in this respect. The choice of these periods was motivated by the changes that took place at the shipyard. As will be described in greater detail in chapter 6, the post-war years not only resulted in major changes on several important parameters for Rosenberg Mek. Verksted (RMV), but also marked RMV's advance to a position as one of the major shipyards in Norway.

5.2. A brief historical overview of Stavanger before 1945

When attempting to construct a *historical* local social space in Stavanger, two major analytical goals have structured both the investigation and the theoretical construction. First, historically important principles of social hiarchisation (i.e. historically important types of capital) must be taken into account. Second, it must be possible to compare the structures in the local social space of the 1930s and the 1990s. As this implies, a retroprojection of the

structures found in the local social space of 1990s, has been a guiding principle when making an "educated guess" as to what these structures were like 60 years earlier. For these reasons, the focus has been on the educational, industrial, economic and occupational structures, and the ways these have changed over the decades.

5.2.1. Educational, industrial, economic and occupational development

Officially founded in 1125, Stavanger was first and foremost a religious center throughout the middle ages. The city did not become a regional administrative and economic center for south-western Norway until the late 19th century. In the 1801-census, Stavanger ranked number 8 of the larger commercial cities in Norway, having 2466 inhabitants. During the next five decades, the city experienced a continuous population growth and the registered population quadrupled.⁴⁷ Located on a peninsula close to one of the best agricultural areas in Norway, the fisheries, in particular the seasonal herring-fisheries, and related commercial and export-import shipping activities seem to have dominated the economic development in the early decades of the 19th century. While Stavanger had a significant population of artisans, craftsmen and apprentices⁴⁸, the industrial sector was virtually non-existent as late as the 1840s; it consisted of three minor shipyards and a printing-house, while a local textile-factory and a distillery were closed down in the same decade.⁴⁹ Due partly to geographical variations in the herring's migrating patterns, but also to the expansion of the city of Haugesund, Bergen overtook Stavanger in the 1850s as the single most important herring exporter in Norway.

However, the local bourgeoisie invested heavily in sailingships. The registered fleet of the city tripled in the twenty years from 1855 to 1875.⁵⁰ An estimated 4500 people were employed as sailors, and with respect to the invested capital, shipping activities had become more important than the annual spring herring fisheries.⁵¹ As a result, there was also a need for shipyards, both to build

⁴⁷However, this is partly due to a regulation of the city borders in 1848. In the decade from 1845 to 1855, the population doubled.

⁴⁸In the 1840s, more than 500 people were registered as craftmasters and apprentices (op. cit. : 21). As late as 1865, the shipbuilders were only a small minority of the registered artisans. (ref. Stavanger Håndverk- og Industriforening 100 år.

⁴⁹Ibid.

⁵⁰See Utne 1992 for further details.

⁵¹"Stavanger by i det 19de aarhundre": 39.

and to perform repair jobs on wooden sailingships.⁵² In the same period, a large number of smaller factories were established⁵³; in 1875, the number of people regularly employed in the city's industrial sector was 473, and this increased to 670 in 1885. Occupationally, the sector was dominated by two branches in the late 1880s. While 300 people were employed in various types of mechanical industry, 170 people worked in the growing canning industry.⁵⁴ During the 1880s, the steam revolution resulted in a temporary economic recession in the city's shipping activities, and all 7 of the shipyards in the city ran into problems. Those engaged in the building and repairing of wooden ships all shut down (Nerheim & al 1996: 24).⁵⁵ Stavanger Støperi & Dok, which was founded in 1871, managed to survive the crisis, but in general, the shipbuilding industry was not a dominant element in the city's industrial sector.

From 1880 onwards, the city experienced both a recession and the beginnings of industrialization. Numerous factories in various branches were established⁵⁶, and by the turn of the century, the city had 107 industrial production sites employing 2 500 people.⁵⁷ As these numbers indicate, most of these industries have probably been small, artisanal production sites. The dominant industrial position definitively belonged to the highly seasonal and fluctuating canning industry. In 1890, the number of canning factories in Stavanger was 10. At the turn of the century, when the total number of inhabitants in the city was registered at 30 000, 1250 people were employed on a regular basis in the thirteen existing canning factories⁵⁸, and during the peak of seasons (summer and autumn), this number was substantially higher.⁵⁹ In 1918, the number of canning factories had increased to 62, and calculations have shown that 60% of all *industrial* employment in the city between 1896 and 1915 took place in the canning industry and its subsidiary industries in the mechanical industry. At the peak of the 1915 season, 5000 people out of a total population of

⁵²Ibid. :40. According to Utne (1992:1), more than 20 smaller yards were involved in this activity. All of them were owned by the commercial agencies involved in the hering trade and export-import shipping activities.

⁵³"Stavanger by i det 19de aarhundre": 45-47.

⁵⁴Reliable figures on the number of people employed by the shipyards have not been found. However, according to op.cit. : 53, only the formen were employed on a regular basis. The craftsmen were employed on shorter contracts.

⁵⁵See also op.cit.: 53-58.

⁵⁶See op.cit.: 82-84.

⁵⁷Utne 1992: 23.

⁵⁸In comparison, the two shipyards in the city, Stavanger Støberi & Dok and Rosenberg verft, employed a total of 460 people ("Stavanger by i det 19de aarhundre":82).

⁵⁹Ibid. In one single factory, the number quadrupled during the peak of the season. Many of these were children. (Johnsen, 1996:64)

approximately 40 000 inhabitants (12,5%) were directly employed in the industry.⁶⁰ Another 1000 were employed in the subsidiary industrial production. While the herring fisheries more or less lost their economic position in the aftermath of a disaster near Iceland in 1884 (in which the larger parts of the fishing fleet went down in a storm), Stavanger had become *the* leading city in the Norwegian canning industry.

For the male population, this boom did not necessarily mean employment in the industry, since the bulk of the employees were unmarried women: calculations reveal that in 1914, only 23% of the total cannery workforce consisted of men (Bjørnson & Sørli 1987: 219). Combined with the overall expansion of the city, an increasing number of new houses were built in the years between 1900 and 1918. There is reason to believe, therefore, that a relatively large proportion of the male population were employed as artisans, construction workers and craftsmen in the building trade.⁶¹

In the early interwar years, the canning industry maintained its position despite major conjunctural problems. In 1924, the number of factories had increased to 69, but the average number of employees per factory had decreased compared to the years before World War I. Furthermore, after 1916 the total number of working days annually per employee fell sharply, and stabilized at a significant lower level for the years to come.⁶² At the same time, the quantity of tinned sardines produced decreased, both in absolute terms and in terms of factory averages.⁶³ Nevertheless, of the 7300 employees working in industry and crafts in Stavanger in the beginning of 1926, 4000 (or 55%) worked in the canning industry. This situation was exacerbated by the international recession in the 20s, and became increasingly difficult, not only for the canning industry, but also for the subsidiary mechanical industries in the city. As a result, Stavanger experienced years of continuous high unemployment and problems of poverty. Furthermore, a financial crisis added to the problems when two of the largest banks, Stavangers Privatbank and Stavanger Handels- og Industribank, declared bankruptcy.

Stavanger Støberi & Dok and Rosenberg Mekaniske Verksted (founded in 1896) both struggled to survive through the international economic depression

⁶⁰Ibid. p. 73, based on protocols from Fabrikktilsynet. A substantial number of these were women.

⁶¹Bjørnson (1987:227) points out that the construction sector in many ways was the opposite of the canning industry. Put simply, the latter was characterized by seasonal variation, and a minimum of skill formalization, the former were more often employing people on a regular basis, and the workers perceived themselves as skilled in the trade.

⁶²See table 51, Bang Andersen 1955:148.

⁶³See table 50, op. cit.:147.

following World War I. After several years of economic problems, the two yards merged in 1931, but the difficulties persisted more or less continuously throughout the decade.⁶⁴ The number of employees varied considerably. At its lowest, in 1923, Rosenberg employed only 33 people, while the number increased to 295 in 1926. On an average, 200-250 people had their daily work at Rosenberg in the years from 1931 to 1940, while a maximum of 480 people were employed at the yard for a shorter period in 1936. Throughout the period, therefore, the yard relied on large numbers of temporary employees, a situation facilitated by the high long-term unemployment rate in the city (Nerheim & al. p. 147). In short, whereas Rosenberg Verft was probably one of the largest *single* industrial employers in Stavanger in the interwar period, the shipbuilding industry cannot be seen either as a dominant economic factor or as a major overall employer in the city in this period. Furthermore, the crisis also resulted in a steady decline in the number of shipbuilding employees. While in 1920, 13% of the industrial workforce were employed in the shipbuilding industry, this was reduced to 4% in 1930, and to 3% in 1936.⁶⁵ As the table below indicates (from Haaland & Nordvik 1987, table A p. 129), employees in the canning industry by far outnumbered all the other industries.

Table 5.1: Industrial sectors in Stavanger, 1920, 1930 and 1936, total number of workers and percentages of industrial workforce employed in the sector.

	1920		1930		1936	
	Total	%	Total	%	Total	%
Canning industry	2506	42	4040	56	5023	64
Tin packing	282	5	119	2	219	3
Iron & metal ind.	1083	18	687	9	715	9
Other industries	2037	35	2430	33	1848	24
Total, ind. workers	5908	100	7263	100	7805	100

Furthermore, in this table, the shipbuilding industry is included in the "Iron and metal industry", and a substantial number of these people were employed in other branches of the iron and metal industry.

⁶⁴For instance Rosenberg Verfts had invested heavily in a completely new yard location towards the end of World War I, with 3 projected berths and a dry dock. The investment did not pay off: only 2 ships over 2500 tdw. were built at the yard in the following 20 years. Throughout the period, the bulk of the contracts were repair jobs (based on Nerheim & al).

⁶⁵See Haaland & Nordvik:157, table 4, .

The problems concerning the city's industrial profile were acknowledged by the Oftedal committee in its report from 1926; since the canning industry was highly seasonal, there was a need for new activities in the industry between the peakseasons. Similar *conjunctural* problems were identified in the shipyard industry. In construction and artisanal work, however, the situation was different, since they constituted "a solid core" (based on Bang-Andersen 1955, p. 149).

Having once been a major economic factor, the city's shipping sector also experienced problems during the interwar years. In the recession following the speculation boom during World War I, the number of dry-cargo ships registered in the city stabilized at ± 60 (at a total of 48-50 000 br.t.) until 1940. However, from 1931 and onwards, the capacity of the fleet of larger *tankers* increased by more than 500%: from 17500 brt. in 1931 to 110 643 brt. in 1940.⁶⁶ Despite the international economic recession, the number of registered sailors in the inter-war censuses (according to Bang-Andersen 1955: table 38 p. 119), also accounted for 10-12% of all employees 15 years or older.⁶⁷ In any case, throughout the period, the number of sailors was substantially higher than the number of shipyard workers.

Comprehensive historical accounts about the employment numbers, the activity profiles and the economic importance of the city's *commercial* sector has not been possible to find for the years before World War II. However, there is every reason to believe that the growth in the city's overall population also was accompanied by a substantial growth in the commercial sector. This also applies to the food industries that directly depended on the agricultural production⁶⁸; a new slaughterhouse was build near the town center in 1900⁶⁹, with additional departments being added in 1903, 1909 and 1932, and the hitherto largest dairyfarm in Scandinavia went into production in 1929. Both investments indicate an increasing activity in these sectors, and also the city's increasing economic importance for the surrounding agricultural areas. Nevertheless, these industries were not major employers to the urban population.⁷⁰

⁶⁶See Bang Andersen 1955: chapter X.

⁶⁷The number varies from 1147 people in 1930 to 1768 in 1930. The basis for Bang Andersen's calculation is not clear. It is not possible, therefore, to say whether people working in the shipping agencies are included in the figures, and whether the percentages refer to the total work force or only male workers 15 years and older.

⁶⁸Since the 1880s, several tons of butter and margarine had been exported annually, and the figures show increasing export of both products. (Stavanger by i det 19de aarhundre:63 and 70.

⁶⁹Located at Østervåg.

⁷⁰See Haaland & Nordvik, 1987: 156, table 3.

5.2.2 Distribution and distributors of educational capital in pre-war Stavanger

Reliable and comprehensive official statistics or data depicting educational structures in the Stavanger area before World War II are not readily available.⁷¹ Survey data from 1994 provide some clues with respect to the educational capital of the fathers of 200 respondents, all born before 1950 and having lived in Stavanger for most of their lives. Of these, 2% had a father with higher university degrees, 9% had fathers with lower university degrees, and 21% had fathers who had graduated from upper secondary school. A similar number had fathers who had graduated from lower secondary school, while as many as 47% had fathers who had finished their schooling after primary school. While these results give us some indication on the skewed distribution of educational capital in pre-war Stavanger, it is problematic to draw inferences from the findings. When trying to get a picture of the relative value of the educational capital and its distribution and distributors, it is usually necessary to rely upon official school histories, and information available from various second-hand sources.

For instance, an investigation of those who graduated at upper secondary general level (examen artium) at St.Svithun School in the years 1923-27 and 1944-48, reveals that the children of doctors, teachers, shop-owners, lawyers, officers, public and private functionaries and master craftsmen dominate. The children of farmers and craftsmen were also to be found. In 1944, the first children with fathers who were registered as workers entered the school, but throughout the period, this category remained very small (see St. Svithun skole 1918-1948: 76-85).

This is not surprising. As educational historical statistics for Norway clearly indicate, a very small proportion of the Norwegian population graduated from university studies before World War II. The number did not exceed a 1000 persons, *all* categories of higher education included.⁷² There is every reason to believe, therefore, that the number of university candidates living in Stavanger was restricted, and that these people were part of a local educational elite. Biographical data on a restricted number of persons also indicate a potential internal educational "opposition", since the owners of shipping companies, canning companies and larger commercial agencies were often educated abroad (see for instance Wyller 1934: 240-243).

⁷¹In many cases, the data archives Norwegian Social Science Data Services do not go further back than 1976. The 1950-census also seems to be the first in which educational data were registered.

⁷²Usually, the annual "output" varied between 700 and 900 candidates. See table 5.17, Historical Statistics 1994, Statistics Norway 1995.

If a persons' aim was to enter university, a general upper secondary school certificate, or *examen artium*, was mandatory. In Norway, probably less than 5% (but a higher percentage in the cities than in the rural areas) of the pupils who entered primary school graduated at this level before World War II.⁷³ On the lower levels, *Middelskolen* ("the Middle School") or "*realskole*" were two of several possible educational paths after leaving primary school: these were chosen by those intending to enter upper secondary schools, or obtain a teaching certificate for primary school. Once again, historical statistics for Norway indicate that only a small proportion of the pupils who entered primary school (less than 10%) graduated at this level in the pre-war years.⁷⁴ In short, secondary school education was not a widely distributed type of educational capital in pre-war Norway.

Stavanger Katedralskole, Kongsgaard, which dates back to 1243, was probably *the* most prestigious secondary educational institution in the city. Since its official foundation in 1824, Kongsgaard School had offered both lower and upper secondary school education, both "*middelskole*" and "*examen artium*". Originally, the school was a private school ("*latinskole*"), and thus not a part of the public school system.⁷⁵ In the official history written to mark its centenary, in the 1860s, this institutional opposition is described in terms of a social opposition: pupils in the public schools were called "*almusklåane*" (a local version of "*klodrian*"; a less gifted or skilled person) by the latin school pupils. Reportedly, fist fights occurred regularly. There are no reliable data on the social origins of the latin pupils, but the official history is dominated by persons who later held capital-loaded positions in the local social space (see Kongsgaard Skole 1824-1924). Stavanger Handelsgymnasium (Stavanger Business School, hereafter SH), was founded in 1921 and provided an alternative upper secondary education, oriented towards commercial activities.

From 1932 onwards (the year the "student's exam" class⁷⁶ started) SH was probably the Cathedral School's strongest field-competitor as a distributor of educational capital.⁷⁷ With the foundation of SH, conflicts in the local political field were converted into a conflict about the legitimacy of institutions in the

⁷³Calculations based on tables 5.4 and 5.11 in Historical Statistics 1994, Statistics Norway 1995.

⁷⁴Calculations based on tables 5.4. and 5.10 in Historical Statistics 1994, Statistics Norway 1995.

⁷⁵For an overview of all the private schools in Stavanger before 1925, see "St.Svithun skole 1918-1948".

⁷⁶An exam required for university entrance.

⁷⁷Another local competitor in the educational field was probably Rogaland Landsgymnas in Bryne, founded in 1924. Normally, *these* schools recruited the majority of their pupils from more rural areas.

local academical field. The socialist representatives on the municipal council were strongly opposed to its foundation, mainly because of ideological reasons; the working class had to feed too many exploiters in the commercial class already. A vote for a postponement of the case was rejected by a margin of only two votes (25 against 27 votes).⁷⁸ The history written to mark its 50th anniversary contains a list of all graduates 1921-1971. In this period, only 5 pupils (the last of whom graduated in 1946) are later registered as employed at RMV: three as leading functionaries, one as an office clerk and one as a secretary. May of the course graduates, later went on to study economics either abroad or at the Norwegian School of Economics and Business Administration (NHH).⁷⁹

On the lowest level of *general* secondary education, was Stavanger Framhaldsskole which was founded in 1899, and until 1940 offered a one year continuation school. Statistics from its first 50 years of existence indicate that the annual number of pupils before World War II normally varied between 100 and 180. Of these, the majority were girls. When the course was extended to two years, (in 1940-41) with the addition of a one-year continuation class in shopkeeping, the female profile became even stronger. In 1949-50, a similar one year continuation class was offered in carpentering, a course which had only male students.⁸⁰

However, the latter's position as a vocational school must not be exaggerated. Several technical schools and vocational schools were located in Stavanger (see Bang-Andersen 1955: 47-57) and constituted an educational complex of their own. Not only were the schools located in the same buildings, but the teachers would often teach classes at several of the schools. To establish a hierarchy between the different types of educations is somewhat problematic (see Sakslind 1998 for a discussion of these structures in pre-war Norway). The highest ranking were surely the Stavanger Tekniske Fagskole (Technical Qualification School) and Stavanger Tekniske Skole (Technical School). Applicants from all over Norway studied at these schools, and graduates were accepted as having the necessary practical qualifications to study at the Norwegian Institute of Technology (NTH), the University for Technical Studies in Norway.⁸¹ There were also maritime schools: Stavanger Sjømannsskole (Seamans' School), Stavanger Maskinistskole (Mechanics' School). On the "basic" level of vocational education, there was Stavanger Verkstedskole (Machinists' School), which

⁷⁸See "Stavanger Handelsgymnasium 1921-1971": 9-10.

⁷⁹Op.cit.: 166-267.

⁸⁰See "Framhaldsskolen i Stavanger gjennom 50 år. 1899 - 1949)

⁸¹However, only a small minority continued their studies at NTH.

offered the most common vocational training as 11 month courses, and Stavanger Lærlingskole (Apprentice School), which was organized as evening classes over 4 years, and offered vocational courses not taught at Stavanger Verkstedskole. While graduation from Stavanger Verkstedskole would earn the pupils status as skilled workers, i.e. "fagbrev" (a training certificate), after the mandatory period of apprenticeship, a graduate of Stavanger Lærlingskole would qualify for "håndverksbrev" (as a craftsman) and eventually also for "handelsbrev" (as a tradesman).⁸² Finally, Stavanger Elementærtekniske skole (Beginners' Technical School) offered 1 year courses for construction workers, and training as craftsmen (see Bang-Andersen op.cit). Unfortunately, reliable figures on the average annual "output" of graduates before World War II have not been found in the literature.

These schools were partly financed by the municipal authorities. Thus, on an economic level, therefore, these educations would be in competition with Stavanger Handelsgymnas. While the latter was not perceived as a politically "correct" education by the socialist parties, the opposite was the case with the vocational schools.

5.2.3. Indications of pre-war structures and positions in the local social space

Accounts of subjective perceptions of the patterns of social stratification in Stavanger in the late 18th century identify three different strata in the city; on top, a small, socially exclusive (and also excluding) group of powerful, wealthy commercial families and official representatives, in the middle, a larger group of smaller businessmen and master craftsmen, and at the bottom, the largest group consisting of a wide specter of workers (Berntsen & Larsen 1925: 5-7).⁸³ In recession periods, poverty was widespread.⁸⁴

Any attempt to construct the pre-war local social space on the basis of the available scarce sources and historical studies of varying quality and depth must for obvious reasons be speculative. Nevertheless, isolated observations give reason to believe that part of the dominant area in this space was occupied by a small number of positions and people who possessed all the most valuable types

⁸²Certification of skills in the crafts and in commerce.

⁸³See also Bang-Andersen 1973: 127-30.

⁸⁴In 1884, 35% of the municipal expenditures was spent on providing basic needs to the poorest inhabitants in the city (Bang-Andersen 1973:129-30).

of capital in the city, including economic, cultural and important social capital.⁸⁵ One of their exclusive arenas of social intercourse was "Det Stavangerske Klubselskap" (a private club), founded in 1784. In the early thirties, the club had ±280 members (Wyller 1934: 206-207).⁸⁶ Without access to the membership lists, it is not possible to draw precise conclusions on the members occupational, economic and educational profiles. However, the official history, written by Trygve Wyller (also chairman of the editing committee of "Kongsgaard Skole 1824-1924") for the club's 150th anniversary (Wyller 1934), give some hints: the chairmen from 1863 onwards, were often consuls and vice-consuls, and the members mentioned are all locally prominent; factory owners, ship-owners, artists and authors, doctors, supreme-court lawyers, higher state- and municipal officials, police officials, bankers, officers and also some upper secondary school teachers and principals. As is often is the case, this category of people would also distinguish itself linguistically. Berntsen & Larsen (1978[1925]) do not go into geographical, sociolinguistic patterns in the city, but emphasize the differences between "folkemål" and "dannet tale".⁸⁷ The difference between the use of "eg" or "je" as personal pronoun (eng: the pronoun 'I') is central: while the former was used by the "lower classes", the more prominent said "je" or "jeg" (op. cit. p.7.). Retrospectively, Eiganes (south western part of the city) and Varmen/Strømsteinen (eastern parts of the city where many canning factories were located) have been singled out as two geographical polarities.⁸⁸

In order to analyze the field of power in Stavanger before World War II, a network analysis would be interesting, exploring the historical relations and "overlaps" between the members of this club, the members of the boards of the more important companies and financial institutions in the city, as well as their political positions, occupations, and family connections and "alliances" through marriages. Unfortunately, this is beyond the bounds of my analysis. A focus on a few individuals (all involved in the struggle for the takeover of Rosenberg Mekaniske Verksted (RMV) in 1943 [see next chapter]) will illustrate both the indications of homogamy within the social elite, and the existence of exclusive and excluding relations of social capital within this small group of people (based on information in Wyller 1934 and Birkemo-Jacobsen 1990).

⁸⁵Isolated observations from 1911 also indicate a structure of major economic inequalities in the city. For instance, one factory-owner (not the richest) had an annual income almost 30 times higher than a male factory worker, who was probably employed at a regular basis (Johnsen 1996:79).

⁸⁶Before a new person could be accepted in this circle, the members would cast a ballot.

⁸⁷"Common language" and "civilized language"/"educated speech patterns".

⁸⁸See "Sølvberget på godt og vondt." 1995

Starting with the losing side, there is Ragnar Bjelland, chairman of the club in 1932, and son of Christian Bjelland, the founding owner of *the* largest canning company in Norway. Ragnar Bjelland, educated in England and Germany, was also chairman of the board of representatives at Stavanger and Rogalands Bank, and vice-chairman in the National Association of Norwegian Canning Industry. In 1931, Bjelland was the owner of 60 of a total of 834 shares in RMV. His brother-in-law, John Norem - former mayor, MP (Conservative) and central in the foundation of Stavanger Handelsgymnasium (SH) - was the highest ranking state representative ("fylkesmann") in Rogaland County. In 1942, he was chairman of the board of Rosenberg Mek. Verksted. In 1931, Norem also had 60 shares in RMV. Johan Marnburg, co-owner of the I.F. Marnburg company and member of the board of RMV in 1942/43, was chairman of the club in the years 1928-32. For a period, Marnburg was the mayor of Stavanger, and he was also central in the foundation SH. Moreover, he was also chairman of Kjøpmannsforeningen (association of tradesmen), member of the board (direksjonen) of Stavanger Sparekasse (Savings Bank), and in 1931 the owner of 40 shares in RMV.

Their opponent, Sigval Bergesen d.y., was the son of Sigval Bergesen d.e., founding owner of the largest shipping company in Stavanger, and Rachel Racine, daughter of Charles Racine, who was originally one the richest men in the city. Sig. Bergesen d.e. and Charles Racine were *the* major shareholders when RMV was founded in 1896. Racine's brother-in-law, Lars Berntsen, owner of the E. Berntsen company and member of the board of RMV in the early years after the foundation, was once considered *the* richest man in the city. In 1915, his son was vice-chairman of the board of RMV. Another son-in-law of Racine's was C. Middelthon, chairman of the board of RMV in 1915, owner of a large commercial company, a shipping company and also a conservative minister in two governments (1920-22 and 1923-24). Sig. Bergesen d.y., was educated in Germany, France and England and married Ingrid Sømme, who was also from a prominent Stavanger family.⁸⁹ Sig. Bergesen. d.y., who was to become CEO and owner of a major Norwegian shipping company, was for ten years also chairman of Stavanger Rederiforening (association of shipping companies), and could vote for 4 RMV shares in 1931. His nearest associate, Erland Bassøe, was educated in Germany, and co-owner of Sig. Bergesen d.y.'s shipping company from its foundation in 1935. Bassøe, member of the board of RMV from 1942, was later to

⁸⁹Probably closely related to Andreas Sømme, owner of a shipping company and his brother Erling Sømme, supreme court lawyer, both of them having been chairmen of the club.

become member of the board of representatives of "Det Stavangerske Klubselskab".

In short, there is every reason to believe that these few capital-loaded positions have been among the most dominant in the social space and in the local power field. Needless to say, their social distance to the working population of Stavanger must have been considerable. Furthermore, they also demonstrated ability which enabled them to detect, initiate, adapt to, invest or get involved in new large-scale economic and educational activities, such as RMV and SH, that would also secure their own positions and overall capital volume. It is therefore reasonable to describe these practices as typical examples of re-creative practices. The types of capital, objects and institutions that are fought over may be recent or new phenomena in the local field of power. While some agents may lose their positions as a result of a reshuffle, the overall structures still seem to be reproduced.

As indicated above, what may be called the positional stability and security varied considerably between positions in the industrial and artisanal positions in the pre-war years. While the canning industry workers and the shipyard workers were exposed to seasonal and conjunctural variation in job stability, the same was not necessarily the case for the construction workers and the craftsmen. In this respect there are indications that a hierarchy of positions and capital-assets exists, not only between the sectors, but also within the different trades and industries. Hence, historical studies of the shipyard industry display a clear positional hierarchy between skilled and unskilled workers within the shipyards (see With-Andersen 1989 and Bjørnson op. cit.). Moreover, while carpenters perceived themselves as belonging to a category of *skilled* workers, and also had a strong union, the same was not true for the workers in the canning industry (see Bjørnson op. cit, Bjørnson & Sørli op. cit). The possibilities of upward mobility, of eventually becoming a master craftsman, were also perceived as favorable in construction work. For the male workers, in the canning industry, there is reason to believe that they saw the jobs as temporary solutions; a position held until they entered construction work (Bjørnson & Sørli 1987: 227-229). Furthermore, a substantial number of new houses were built, and from 1891 to 1930, the number of houses more than doubled. The peak years from 1910 to 1916 alone account for 490 of these. However, when the recession period started in the 1920s, it most probably affected the positional stability and security of the carpenters and the other craftsmen. With the arrival of the thirties, the situation once more improved, and more than 1100 houses were built in the inter-war

years (see Utne 1988 for further details). In conclusion, when locating the positions of industrial workers and artisanal workers and craftsmen in the local social space, it is problematic to merge the two in a general "worker"-position. So, even though these are in proximity to each other, they should be given separate space positions.

Since Stavanger was a commercial city, the number of smaller and larger shops was also considerable. There are no historical studies of or data on this "petty bourgeoisie", and it is therefore difficult to assign a position to the various owners in the social space. Little is written about their global volume of capital, and economic capital in particular. The same applies to their employees. Data from 1953 (Bang-Andersen 1955: 113) indicate that florists, opticians, jewelers, pharmacists, porcelain dealers and fruit & tobacco shopkeepers had the most profitable individual businesses in the early post-war years, while firms dealing in construction goods, firewood and machinery had the highest individual sales. Within this category, the internal variations in the volume of economic capital and educational capital must have been considerable.

Historical studies of the academics' and school-teachers' positions in Stavanger are also lacking. However, the statistical data presented above do not indicate that this involved a large number of people. Not receiving "intra-positional" competition, for example from university teachers, there is reason to believe that their field positions, for instance in the cultural and political field, would be strong. The relative value of their educational capital would also be high. Unpublished studies of their relations of social capital, indicate networks that structurally can be compared to those found among the members of Det Stavangerske Klubselskab.⁹⁰ At the risk of overextending the argument, it is therefore tempting to see this as an indication of an polarity within the dominant sector of the local social space, what Bourdieu calls the field of power.

Although the larger businessmen and owners of shipping companies definitely occupied powerful positions in multiple local fields, it would be wrong to portray their positional power as almighty. The city also had a very strong and highly influential Christian movement and a temperance movement, typical exponents of what is usually called "the counter-cultures" in Norway. Leading positions in these movements were also important positions in the local social space, dominant in the local field of power in general and the political field in

⁹⁰Lecture by Martin Bernsen, spring 1998.

particular.⁹¹ As already stated, clear indications of social capital relations are also to be found within this social grouping. In the years of Lars Oftedal d.e. (1838-1900), Stavanger had been one of the few urban strongholds of Moderate Venstre (the Moderate Liberal Party), a political party which was ideologically based on traditional religious and moral values (Rokkan 1987: 138), and was initially also in opposition to the Conservatives. Oftedal, founder and editor of Stavanger Aftenblad (Stavanger Evening News) and for many years the leading figure in the massive local religious movement, was also a highly influential politician on the national level. His son, Lars Oftedal d.y., was later to occupy a similar position both locally and nationally⁹², but within The Liberal Party (Venstre). His son, C. S. Oftedal, also became editor of Stavanger Aftenblad. In short, in the local field struggles, the capitalist bourgeoisie met with strong "internal" competition.

In the years after 1900, the Labour Party and the unions were also becoming increasingly important and powerful political agents. In 1910, the Labour Party won most seats in the municipal elections. In all the subsequent elections up to 1937⁹³, the socialist parties, either alone or in combination, received the greatest number of votes (see table A in appendix). Reportedly, strikes and political conflicts were heated in the 1920s (see for instance Titlestad 1988).

To sum up, during the first five decades of the century, the city became increasingly politically divided between three major parties - the Conservatives, the Labour Party and The Liberal Party (Venstre) - while parties whose existence was dependent on one particular cause (The Temperance Party) more or less disappeared.

This does not necessarily indicate a tendency for political discontinuity, or that the political, cultural and social significance of the temperance movement was shattered. Instead, the temperance cause became part of the ideological basis of two of the political parties, since both the Labour Party and The Liberal Party included strong advocates for temperance. Thus, in a certain sense, the local political field went through a process of homogenization: the number of institutional agents was reduced, because these agents were able to integrate (or expropriate) the temperance cause in their ideological profiles. Drawing upon Wyller's description of Stavanger in 1934 (op. cit.:10-12), it is evident that the historical opposition between the typical members of "Det Stavangerske

⁹¹See Furre 1990. This biographical study also contains invaluable information about social, political and cultural conditions and structures in Stavanger before 1900.

⁹²For instance, Oftedal d.y. was minister in two governments (1922-23 and 1924-26).

⁹³No election was held in 1940.

Klubselskab" and the members of religious, social and political movements in the city persisted. He claimed the "Klubselskap" was a continuation of the tradition and lifestyle of the novelist Alexander Kielland, its purpose being simply to promote "a healthy purposeless joy" through social intercourse.⁹⁴ In *Wyller's* view, the diametrical opposition to this was to be found in the tradition which originated with Asbjørn Kloster (a dominant leader in the local and national temperance movement): a lack of joy of life, and a high degree of sober sincerity. In short, these were two diametrically opposed world-views and habituses.

If we were to synthesize the foregoing discussion by contrasting the educational and economical capital along one axis, and the global volume of capital along another axis, the following (and still speculative) construction of a *positional* hierarchy in the local social space Stavanger in the inter-war years could be taken as an "educated guess":

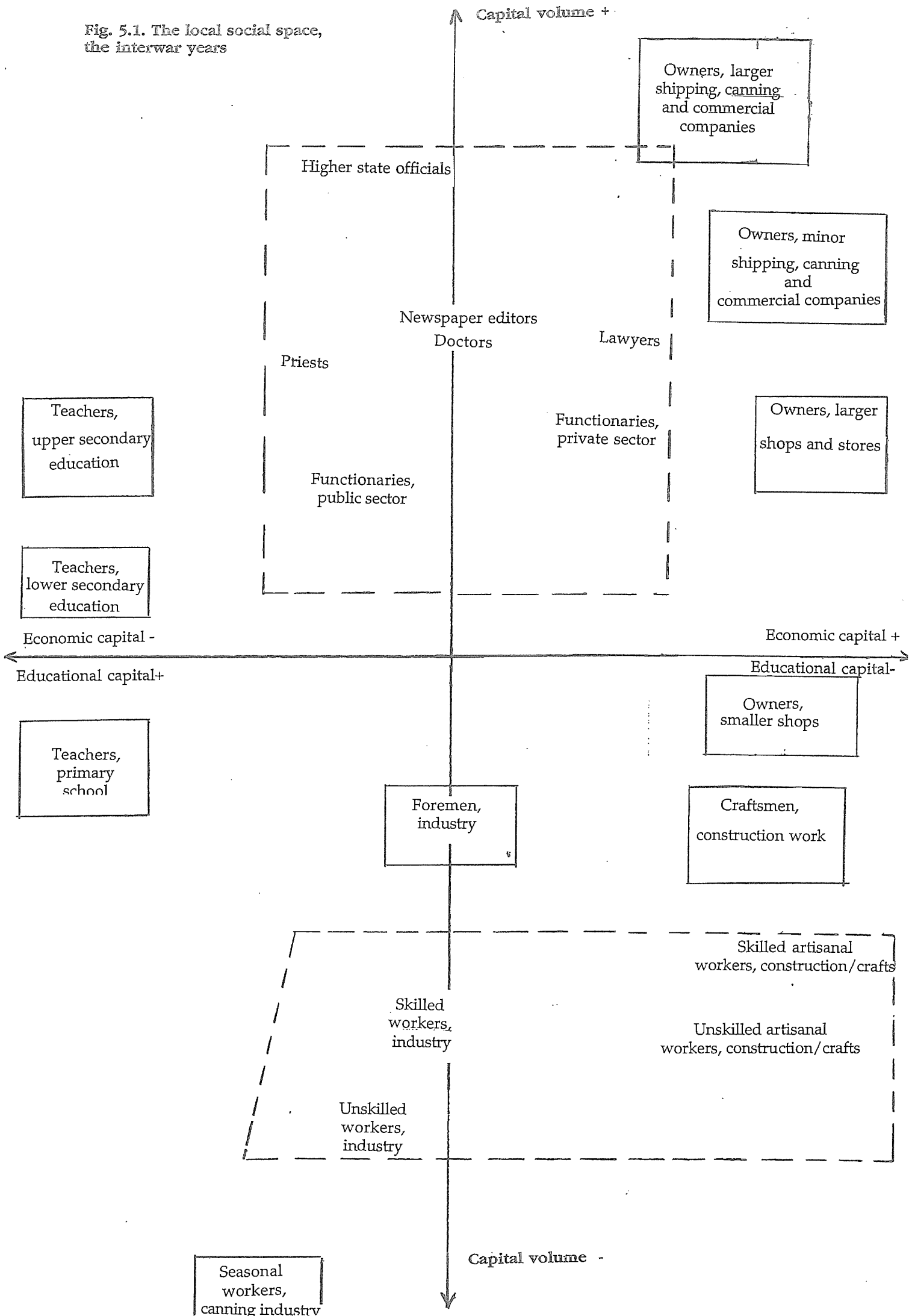
Fig. 5.1. here.

If this space were divided into four idealized areas, one would be dominated by the businessmen, owners of larger and smaller shipping companies, canning and commercial companies; one by teachers with higher education, state-officials and other academics; another one by various artisans, construction workers and craftsmen; and the fourth by the various workers' positions, including these in the shipbuilding industry. The most powerful positions would be localized in the upper sectors of this construction, while the less powerful ones would be localized in the lower sectors. Furthermore, because of gendered wage-inequalities, the majority of female positions would be localized to the left and in the lower area of the construction.

Once again, the tentative character of this space must be emphasized; a number important of positions, including journalists, are not represented in this figure. Its analytical value must first and foremost be judged on the basis of its qualities as a heuristical device; on whether or not it serves as a helpful tool when analyzing pre-war social structures in the Stavanger area. For these reasons as well, the construction cannot be directly compared to Lennart Rosenlund's construction of the present-day local social space (see results and figures presented below).

⁹⁴Historically, there was a opposition between Lars Oftedal d.e. and Alexander Kielland (See Furre 1990).

Fig. 5.1. The local social space, the interwar years



5.3. Structural trends in Stavanger 1945 - 1995

5.3.1. Occupational structures 1945 - 95

In Norwegian history, the postwar period is usually singled out as a historical epoch of its own. In many respects, this epochal classification may be justified. For instance, in the first three decades after World War II, there was a steady and almost linear increase in the number of wage earners in Norwegian industry: while there were 289 000 wage earners in the industry in 1948, the number had risen continuously to reach a maximum of 408 000 in 1974. During the next 17 years (1974-1993), the number declined by more than 100 000. In the shipbuilding industry, the trend was not as linear. Between 1945 and 1955, the total number of shipyard workers stabilized between 23 500 and 25 500, and then started to increase to a maximum of 37 000 in 1970. For the next eight years, the number varied between 35 - 37 000, until the effects of the shipping crisis in the late seventies began to make themselves felt in the industry.⁹⁵

In the local history of Stavanger, this national epochal classification does not necessarily apply. As local historical watershed, 1970 is (for reasons that will be outlined in the tables below) probably more accurate than 1945. For instance, in the first three post-war decades, Stavanger did not follow any of the national occupational trends. Due to the expansion and modernization of RMV, from 1948 to 1953 the number of employees in the shipyard industry in Stavanger increased by more than 46%. However, the *total* number of wage-earners in local industry remained more or less the same, and all the other occupational sectors had substantially higher growth rates than the industry (Bang-Andersen 1955: p. 32-33). Nevertheless, in 1953 Stavanger could still be considered an industrial city; of the total workforce of 21 600, 44% (9500) were industrial wage earners, and during the 50s this percentage increase to 47% (see table 5.4 below). Within the sector, important structural changes had taken place. Whereas the iron and metal industry, including shipbuilding, had employed 9% of all industrial wage earners in Stavanger in 1936, the shipbuilding industry alone stood for 21% of the total industrial employment in 1953. According to "Morgenavisen 1ste Mai" (19.11.1954), the yard also employed 15% of *all* wage earners in the city. In short, RMV had become *the* major industrial employer in the city.

Geographically, the industry was located in three different parts of the city:

⁹⁵Historical statistics 1978 and 1994, tables 43 and 9.5, Statistics Norway .

RMV was located at Buøy and separated from downtown Stavanger by Byfjorden. In order to get to work, city-dwellers had to be ferried to the yard. The major part of the industry was located in the East End (Østre bydel), which also had the highest population density; of the total registered population of 52 000 people (1.1. 1954), as many as 25 000 inhabitants lived within 2.9 km² of the East End. Finally, there was a smaller industrial area to the west of the Main Square, where one of the larger canning factories (Central Canning Co. AS) was located. While the town center near Vågen was a zone of commercial activities, the western parts were mainly housing areas (Bang-Andersen 1955). Thus, the overall majority of the industries were not only located in a zone close to the sea; they were also directly or indirectly dependent on maritime activities.

While the canning industry lost ground steadily, the mechanical industry, RMV included, not only maintained, but even strengthened its position as an *industrial* employer until 1975:

Table 5.2: Number of employees, main industries and oil industry, Stavanger 1960 - 1975.⁹⁶

	Year 1960	% of all ind. empl.	Year 1963	% of all ind. empl.	Year 1966	% of all ind. empl.	Year 1970	% of all ind. empl.	Year 1975	% of all ind. empl.
Oil industry	0	0	0	0	0	0	5	0.04	710	4.9
All food industries, incl. canning companies	3166	26.3	2714	23.7	2466	20.5	2307	19.1	2164	14.9
Graphic industry	1066	8.9	1111	9.7	1185	9.9	1473	12.2	1491	10.2
Construction work and building industry	2250	18.7	2300	20.1	2788	23.1	3091	27.3	4381	30.2
Mechanical industry	3022	25.1	3063	26.7	3206	26.6	3291	27.3	4167	28.7
Total, ALL INDUSTRIES	12022	100	11456	100	12022	100	12063	100	14497	100

As table 5.2 indicates, the oil industry experienced an exponential growth from 1970 to 1975. Furthermore, construction work and the building industry became the largest industrial sector in Stavanger in the early 70s. This trend was closely connected to the increased construction activity in downtown Stavanger, the increase in the city's overall population and the internal migration patterns. With respect to the structures in the local social space, this development further highlights the historical centrality and the continued importance of the positions in construction work and in the building industry.

⁹⁶Based on "Statistikk for Stavanger 1980", Table 5.1. The figures for construction work and the building industry, 1960 and 1963 are estimates.

From the late 1950s onwards, there was a massive migration from the inner city to new suburbs on the outskirts of the city. For instance, in 1953 the Ullandhaug area only had 900 inhabitants; 13 years later, the inhabitants numbered almost 9000, of whom more than 4 000 had moved elsewhere in Stavanger. From 1958 to 1965, the population in 7 of the 8 "old" city areas was reduced by more than 5 000 inhabitants. In addition, in the same period more than 3 000 people moved from within the city boundaries to the neighbouring municipalities of Hetland and Madla (see Bang-Andersen, Leiro, Lexow & Rettedal 1966).⁹⁷ In short, as in many other Norwegian cities, the inner-city zones became increasingly dominated by large office and administration complexes. The reason for this development is in most cases straightforward: with an improved economic situation, families could afford to move to better and larger houses and flats, which were being built outside the original city areas.

However, table 5.2 reveals only a part of the city's occupational history. In these years, the major trend was *not* a process of continuing industrialization. Stavanger not only experienced a major population boom and an expansive job market, but the city also went through a slow process where the industries gradually lost importance. While in 1960, the service sector and the industrial sector were about the same size, 15 years later the service sector had become by far largest employer. Stavanger had become a city in which the industry had started to halt. While the absolute number of employees increase continuously in the service occupations, there is a clear pattern of stability in industrial occupations. In conclusion, the *relative* importance of the industrial occupations was reduced, as is reflected in table 5.3.

Table 5.3: Number of employees, industries and services Stavanger 1960 - 1975.⁹⁸

	Year 1960	Year 1963	Year 1966	Year 1970	Year 1975
Employed , all industries	12 022 (47.0)	11 456 (44.7)	12 022 (43.7)	12 063 (41.1)	14 497 (39.1)
Employed , all services	12 429 (48.6)	13 171 (51.4)	15 037 (54.7)	16 564 (56.5)	22 170 (59.8)
Total number of employed	25 555 (100)	25 644 (100)	27 508 ⁹⁹ (100)	29 339 (100)	37 060 (100)

⁹⁷In 1965, both would become part of the new, larger municipality of Stavanger. While this larger municipality in 1960 had a total population of 75 700 inhabitants, the number ten years later was registered at 81 643.

⁹⁸Based on "Statistikk for Stavanger 1980", Table 5.1.

⁹⁹In the original table, this number is incorrect.

Throughout the sixties, the same pattern applies for the number of employees at RMV. By 1957, the number of production workers had stabilized at $\pm 1\ 000$, and it stayed at this level until 1970. In the following 5 years, RMV once more defied the national trend in the shipbuilding industry, and increased the number of production workers by 40% (to 1400+) before a new reduction took place (Utne & al. p. 280 and 328). During the same period, the city's canning industry disappeared more or less completely. Thus, it seems reasonable to conclude that in the first 25 post-war years, RMV became *the* dominant agent in the local industrial sector. However, this situation was not to last.

5.3.2. Educational structures 1945 - 95 and occupational structures 1975-1995

The 1950 census was the first census in Norway to register the educational level of the respondents. Unfortunately, no tables on the general educational profiles of *municipalities* are given in the 1950 and the 1960 censuses. However, the general post-war trend in Norway as a whole is clear; the secondary schools, the vocational schools and the universities experienced a sharp increase in the absolute numbers of students. From 1957 to 1960, the increase was more than 50% in the secondary general schools, almost 20% in the vocational schools and 14% in the universities.¹⁰⁰

Once again, Rogaland did not follow the overall trend. An examination of data for all the larger cities and the smaller towns in the county, reveals that educational levels in Rogaland county showed a high degree of stability:

Table 5.4: Distribution of general educational capital, towns in Rogaland county 1950-60, all inhabitants 20 years and older. Percentages in parentheses.

	1950 ¹⁰¹	1960 ¹⁰²
Primary school	45 306 (78.6%)	49 586 (81%)
Continuation school	3 032 (5.3%)	Not registered ¹⁰³
Lower secondary education	6 532 (11.4%)	7886 (12.9%)
Upper secondary education	2 660 (4.6%)	3747 (6.1%)
All inhab. 20 years and older	57 530 (100%)	61 219 (100%)

¹⁰⁰See table 5.1, Historical Statistics 1994: 132.

¹⁰¹Data from "Folketellingen 1. desember 1950", vol. 6. table 2. Central Bureau of Statistics.

¹⁰²Data from "Folketelling 1960", vol. 3, table 2. Central Bureau of Statistics.

¹⁰³Primary school was extended by law to 9 years in 1959. Thus, there was no longer a separate continuation school. However, the local implementation of this law would varied in the years to come. In Stavanger, continuation school existed until 1966/67.

The majority of all inhabitants 20 years and older had no general education beyond primary school. Despite a small increase, secondary education was still "reserved" for a relatively small number of people. Compared to the general trend in Norway, therefore, the county "lost ground" with respect to the educational level of its population.

This does not imply, however, that only 1 in 5 continued their education after finishing 7 years in primary school. From 1953 onwards, $\pm 50\%$ of the pupils usually continued their general education by taking the first year of continuation school, and of these, 70% would go on to finish the second year. From 1959 to 1965/66 (when obligatory primary school was finally extended to 9 years in Stavanger), this percentage rose to 80+ (Stavanger Framhaldsskole 1966: 26). As indicated above, a variety of vocational schools were also located in the city. Within this sector, the opportunities were multiple. Nevertheless, even these educations seem to have been attended by a "privileged" minority. The most common trajectory was still to leave school after primary school or one or two years of continuation school.

As table 5.5 indicates, from 1950 to 1960 the percentage of vocationally educated people rose by only 0.6%, from 23% to 23.6% (university educations excluded) in Stavanger:

Table 5.5. Distribution of vocational and higher academic educational capital, Stavanger, 1950 -60, all inhabitants 15 years and older. Percentages in parentheses.

	1950 ¹⁰⁴		1960 ¹⁰⁵	
	Relative to all vocationally/academically educated, 15 yrs +	Relative to all inhab. 15 yrs +	Relative to all vocationally/academically educated, 15 yrs +	Relative to all inhab. 15 yrs +
Mechanical voc. schools	756 (7.9)	1.9%	945 (9.3)	2.3%
"Svenneprøve" (Journeyman's exam)	837 (8.7)	2.1%	977 (9.6)	2.4%
Technical schools	554 (5.8)	1.4%	603 (5.9)	1.5%
Lower level commercial schools	3 401 (35.4)	8.7%	3006 (29.4)	7.5%
Maritime schools	799 (8.3)	2.0%	1048 (10.3)	2.6%
Handelsgymnas	850 (8.8)	2.2%	766 (7.5)	1.9%
Pedagogical schools	329 (3.4)	0.9%	439 (4.3)	1.1%
University and higher ed.	598 (6.2)	1.5%	745 (7.3)	1.9%
Total, all vocational and higher academical educations.	9619 (100%)	24.5%	10216 (100%)	25.5%
Total, all inhab. 15 years and older	39 296	39 296	40 059	40 059

¹⁰⁴Data from "Folketellingen 1. desember 1950", vol. 6. table 4. Only the most popular educations are shown.

¹⁰⁵Data from "Folketelling 1960", vol. 3, table 2. Central Bureau of Statistics. Only the most popular educations are shown.

Here again, these figures indicate a high degree of structural stability. Furthermore, the "internal" profile of the vocational education sector is also relatively stable, with only the lower level commercial schools experiencing more important changes. For the rest, there were only minor changes in a "positive" direction. In conclusion, although we do not have data about the individual intergenerational patterns, the overall educational structures remained the same more or less in Stavanger throughout the fifties. Only a small minority (less than 2%) had exams and degrees from a university or institutions of higher education, while 1 in 4 had a vocational education.¹⁰⁶

While the sixties resulted in a shift towards service industries in the occupational patterns in Stavanger, the educational structures were also about to change. As the studies of Lennart Rosenlund (1995a 1995b 1998) show, the proportion of university educated people with higher and lower degrees within the Stavanger area had risen to 7.6% in 1970. Nevertheless, compared to other large Norwegian cities, Stavanger was still a region of stagnation according to most educational, occupational and economic parameters. Not only was the proportion of people with higher education the lowest of the five largest Norwegian cities, but the proportion of active wage earners was also the lowest (63.9%), and the average net income (1972 data) was the second lowest.

With the arrival of the oil industry in the early seventies, this situation was radically changed. Rosenlund (op. cit) has analyzed these processes in great detail, so I will limit my own description to a short summary of some of his findings, and supplement his results with additional statistical data. In the twenty years from 1970 to 1990, the number of inhabitants increased by 20% (81643 [1970] - 97 716 [1990]). The work force would also increase by almost 40%, and geographically, the city continued to expand outside the original core.

These transformative processes are also reflected in the statistics on local occupational structures. While only 5 people were registered as employees in the oil industry in 1970, the situation was totally different less than 10 years later:

¹⁰⁶These results could have been modified by including the data on the nearby municipality of Hetland and to a lesser degree also Madla. Even if this had been done, the result would only have been a small increase in the percentage of the people having a vocational or a higher academic education. (From 24.5% to 25% in 1950 and from 25.5 % to 27.2% in 1960). Nor would the internal profiles have been affected in any substantial way.

Table 5.6: Number of employees, main industries and oil industry, Stavanger 1975 - 1990.¹⁰⁷

	Year 1978	% of all ind. empl.	Year 1980	% of all ind. empl.	Year 1985	% of all ind. empl.	Year 1989	% of all ind. empl.
Oil industry, <i>adm. jobs.</i>	1948	13.0	2936	20.1	4128	23.9	4020	25.3
All food industries, incl. canning companies	2053	13.7	1801	12.3	2034	11.8	1623	10.2
Graphic industry	1443	9.6	1116	7.6	1646	9.5	1341	8.4
Construction work and building industry	4950	33.0	4092	28.0	4431	25.7	3585	22.6
Mechanical ind.	2984	19.9	3264	22.3	3891	22.3	4354	27.3
Total, oil ind. excluded	11430	76.3	10273	70.3	13142	75.4	11877	74.7
Total, ALL INDUSTRIES	14983	100	14604	100	17240	100	15897	100

In addition, a large portion of those employed both in the mechanical industry and in construction work were more or less directly dependent on the oil industry. For instance, RMV stopped building ships, and instead concentrated its activities on platform decks, while Norwegian Contractors was established to build the enormous concrete shafts for the platforms. The once so dominant food industry (the canning industry) became more and more marginal. For self-evident reasons, Stavanger declared itself "the oil capital of Norway": In January 1980, more than 12 000 people in Stavanger (27% of all wage earners) were directly or indirectly involved in the oil sector¹⁰⁸, a number that had increased to 17 302 (31.6%) in 1989.

Despite the arrival of the oil industry, Stavanger became more and more of a service city throughout this period. In less than 15 years, the relative occupational strength of industry was radically reduced. From being a dominant employer in the early post-war decades, it lost considerable ground in the years from 1975 to 1989:

¹⁰⁷Based on "Statistikk for Stavanger 1980", Table 5.1, and "Statistikk for Stavanger 1994", table 5.6.

¹⁰⁸"Statistikk for Stavanger 1980", Table 5.5.

Table 5.7: Number of employees, industries and services Stavanger 1975 - 1989.¹⁰⁹

	Year 1975	Year 1980	Year 1985	Year 1989
Employed, all industries, oil- industry excluded	13743 (37.2)	11668 (26.2)	13143 (24.0)	11877 (21.7)
Employed, all services	22748 (61.7)	32328 (72.7)	41268 (75.4)	42564 (77.8)
Total number of employed	36896 (100)	44470 (100)	54707 (100)	54688 (100)

This change in occupational structure is not unique for Stavanger. Although the rate of change must be one of the fastest in Norway, the trends have been the same for the country as a whole: compared to all other sectors, the service sector gained relative importance as an employer. A more interesting question therefore is: what are the intergenerational changes and patterns of occupational mobility? Rosenlund's 1994 data makes it possible to address this question in the Stavanger area. Restricting the sample to include only the *presently* occupied respondents, the results are as follows :

Table 5.8: Intergenerational occupational mobility, fathers' and respondents' occupations (sample of presently working respondents). Percentages. Absolute numbers in parentheses. N=880.

Fathers occupation	Respondents occupation						Total
	Unskilled worker	Skilled worker	Functionary other	Functionary, leading	Employer, -5 empl.	Employer, +5 empl.	
Unskilled worker	24%	14%	4%	10%	16%	4%	100
Skilled worker	21%	28%	17%	14%	17%	22%	100
Functionary other	29%	33%	48%	36%	33%	30%	100
Functionary, leading	21%	20%	27%	31%	22%	26%	100
Employer, -5 empl.	4%	4%	2%	2%	9%	13%	100
Employer, +5 empl.	1%	1%	0%	0%	2%	2%	100
Total	100 (160)	100 (304)	100 (117)	100 (151)	100 (111)	100 (46)	100

Chi-square: 71.65.

Prob. chi-square: 0.000

Contingency coefficient: 0.274

D.f: 25

Cramér's V:0.128

In themselves, these results are not particularly illuminating. The value of Cramér's V also indicates that the overall association between the variables is not particularly strong.

¹⁰⁹Based on "Statistikk for Stavanger 1992", Table 5.1.

To analyze the internal mobility structure of table 5.8 more thoroughly, a widely used strategy is to perform a log-linear analysis by specifying a symmetry model, for instance a model of *statistical* independence or quasi-independence (see for instance Clogg & Shihadeh 1994, Gilbert 1993). A model of simple independence produces the following table of standardized residuals:

Table 5.9: Intergenerational occupational mobility, fathers' and respondents' occupation (sample of presently employed respondents). Model of simple independence, standardized residuals.

Fathers occupation	Respondents occupation					
	Unskilled worker	Skilled worker	Functionary other	Functionary, leading	Employer, -5 empl.	Employer, +5 empl.
Unskilled worker	3.52	0.03	-2.65	-1.35	0.93	-1.65
Skilled worker	-0.09	3.59	-1.13	-2.44	-1.18	0.11
Functionary other	-1.68	-0.90	3.36	0.50	-0.35	-0.58
Functionary, leading	-0.78	-1.90	0.96	1.98	-0.39	0.42
Employer, -5 empl.	-0.71	-0.54	-1.54	-0.16	1.92	2.50
Employer, +5 empl.	-0.61	-0.77	-1.14	1.77	0.67	0.68

Log-linear no association model of simple independence: $G^2 = 70.71$; d.f. = 25; $p = .000$.

The interpretation of these results is as follows: absolute cell values $> \pm 1.96$ are not to be expected if the statistical model fits the data well (see Gilbert 1993: chapter 7). Furthermore, if the statistical model fit is good, the difference between the number of degrees of freedom and the value of G^2 should be as small as possible. If the model is accepted as a good description of the data, the p-values will also be $> .05$.

In this case, the model-fit is definitely not good. There are numerous cells in which the values are either close to or above ± 1.96 . Furthermore, the difference between the value of the likelihood-ratio and the number of degrees of freedom is also large. In conclusion, a statistical model of no association between the fathers' occupational positions and the respondents' occupational position does not provide a good description of the structure in table 5.10. In particular, the standardized residuals in the diagonal cells are "off the mark". There is every reason to believe, therefore, that there is a clear, direct association between the fathers' and the respondents' occupational positions, i.e. a clear tendency towards inter-generational occupational reproduction.

Sociologically, this is perhaps not an unexpected result. Next, the analysis proceeds to examine whether the association between the variables persists when

this direct association is eliminated by specifying the diagonal cells as fixed, structural values.¹¹⁰ By doing this, a (statistical) model of *quasi*-independence is specified. The results are as follows:

Table 5.10: Intergenerational occupational mobility, fathers' and respondents' occupation (sample of presently working respondents). Model of quasi-independence, standardized residuals.

Fathers occupation	Respondents occupation					
	Unskilled worker	Skilled worker	Functionary other	Functionary, leading	Employer, -5 empl.	Employer, +5 empl.
Unskilled worker	0.00	1.23	-1.90	-0.48	1.33	-1.51
Skilled worker	1.11	0.00	0.38	-1.21	-0.48	0.34
Functionary other	-0.53	0.15	0.00	0.81	-0.21	-0.55
Functionary, leading	-0.08	-0.84	1.78	0.00	-0.39	0.30
Employer, -5 empl.	-0.36	-0.13	-1.19	0.09	0.00	2.53
Employer, +5 empl.	-0.53	-0.71	-1.05	1.84	0.64	0.00

Log-linear no association model of quasi-independence: $G^2 = 31.43$; d.f. = 19; $p = .036$.

In this model, the intergenerational mobility pattern of interest is specified to include only the intergenerational mobility *out* of a position, and *not* to include intergenerational, positional reproduction. It is immediately evident that this model fits the data far better than the model of simple independence. However, the model fit is not good enough for the model to be acceptable, and the association between the fathers' and the respondents' occupational positions persists despite the operations on the data matrix.

Although the model fit is relatively poor, the pattern of the standardized residuals gives some clues with respect to the patterns of intergenerational positional mobility. For the respondents who have an unskilled worker as a father, the trend is towards a position as a skilled worker or as an employer with less than 5 employees (indicated by the positive values on the standardized residuals), and away from positions as functionaries and main employers. The children of skilled workers show a stronger tendency of either a downward mobility to become unskilled workers, or (far more weakly) towards a lower functionary position or a position as an employer with more than 5 employees. Upwardly, the cell of the leading functionaries seems to have the strongest barrier of admission. Yet, the children of the functionaries tend to change places.

¹¹⁰We lose one degree of freedom for every cell value we define in this way. In this case, this means that the number of d.f.'s are reduced from 25 to 19.

Children of minor employers tend to advance to become main employers, while the few children of larger employers (only 10 respondents) show a tendency to become leading functionaries. In conclusion, the mechanisms of occupational reproduction seem to affect the intergenerational mobility between positions; it is more common to move between *similar* positions, for example from unskilled to skilled worker, than between more different positions, for example from skilled worker to main employer.

As indicated above, the overall changes in the occupational structure in Stavanger have been relatively fundamental. Like most Norwegian cities, the changes are almost as fundamental with regard to the educational level of the population. From 1970 to 1990, the number receiving higher university education doubled, as did the number of school teachers (Rosenlund 1995a: 42). Due to the changes in the educational system, this is perhaps not surprising. Many of these academics did not grow up in Stavanger or the nearby area. Those with the best education were generally "imported" from other parts of Norway and abroad; of those with higher university degrees, almost 60% had come to Stavanger after 1970, and as much as 40% after 1980. In particular, this category dominated the technical and scientific occupations; in 1990, 55% of this workforce was "imported". In contrast, the industrial production occupations were dominated by "lifelong" inhabitants (65%), as was the population segment with the less general education (see Rosenlund 1995a: 24-27). These transformative processes are reflected in the most recent statistics on local educational structures:

Table 5.11: Distribution of registered general educational capital, Stavanger 1990-93, employed inhabitants 16-74 years only. Percentages in parentheses.

	1990	1993
Primary school	6699 (17.4)	5924 (14.3)
Secondary education, voc. & gen.	21203 (55.0)	22675 (54.9)
Lower university studies	8319 (21.6)	9675 (23.4)
Higher university studies	2328 (6.0)	3035 (7.4)
All employed inhab. 16-74 years	38549 (100)	41299

Compared to the situation 20-30 years earlier, the changes in the educational structures appear dramatic. Once again, these figures are not so informative in themselves, since the Norwegian educational system had been radically changed

during the same period. The intergenerational changes and patterns of mobility, based on the analysis of 1994 survey data, are of greater analytical interest:

Table 5.12: Intergenerational educational mobility, father's and respondents' (26 years and older) highest level of education, Stavanger 1994. Percentages with absolute numbers in parentheses. N=1004

Father's highest level of education	The respondents highest level of education					
	Primary school (7 years)	Lower secondary education	Upper Secondary education	Lower deg. university	Higher deg. university	Total
Primary school	69%	50%	36%	22%	22%	100 (362)
Lower Secondary education	13%	20%	23%	18%	8%	100 (204)
Upper Secondary education	9%	14%	24%	28%	20%	100 (241)
Lower deg. university	0%	7%	9%	27%	32%	100 (167)
Higher deg. university	0%	1%	2%	2%	18%	100 (31)
Total	100 (67)	100 (139)	100 (429)	100 (349)	100 (79)	100 (1004)

Chi-square: 210.059.

Prob. chi-square: 0.000

Contingency coefficient: 0.416

D.f: 16

Cramér's V: 0.229

Due to historic changes in the Norwegian educational system, the category "lower secondary schools" in this table includes both 9 years of primary school, continuation school and lower secondary general education with respect to the *respondents'* highest education. For the same reason, upper secondary education also includes vocational education. The sample is restricted to include only respondents 26 years and older for two main reasons. First, students who have not finished their education might "disturb" the mobility structure. The disadvantage of this is that the figures will probably be somewhat conservative. Second, all of the respondents I interviewed (see later chapters) were 26 years or older when the survey was performed. The table provide a relevant description therefore of the interviewees educational mobility structure.

On the basis of table 5.12, some tendencies may already be identified. First, the general educational level has clearly risen from one generation to the next. The diagonal cells indicate a symmetry between the fathers' educations and the respondents' educations: the higher the education of the father, the higher is the education of the respondent, and vice versa. The relation between these two variables therefore seems to be linear.

A log-linear model of simple independence produces the following table of standardized residuals:

Table 5.13: Model of simple independence. Standardized residuals. N=1004

Father's highest level of education	Respondents educational level				
	Primary school (7 years)	Lower secondary education	Upper Secondary education	Lower deg. university	Higher deg. university
Primary school	5.14	3.39	0.80	-4.13	-2.08
Lower Secondary education	-0.96	0.39	1.99	-0.86	-2.47
Upper Secondary education	-2.25	-2.11	0.53	1.98	-0.63
Lower deg. university	-3.18	-2.45	-3.36	4.91	3.34
Higher deg. university	-1.37	-0.98	-1.52	-0.75	7.47

Log-linear no association model of simple independence: $G^2 = 189.28$; d.f. = 16; $p = .000$.

In this case, values $> \pm 1.96$ are found in 15 of the table's 25 cells. As the statistics indicate, the specified model of independence fit very poorly with the data. This result is not surprising. The fact that three large *positive* residuals are located in the leading diagonal of the table, supports the hypothesis that there is a strong association between the fathers' and the respondents' educational level. The data also lend support to a hypothesis about direct educational reproduction, that there is a tendency for the fathers and the respondents to reach the same level of educational capital. In order to analyze this result in greater detail, a model of quasi-independence may be specified, in which this diagonal is omitted from the analysis.¹¹¹ By doing so, it is hypothesized that the association between the variables will disappear once this direct association is eliminated. The results for this model are presented in table 5.14:

¹¹¹In this case, this implies that the number of degrees of freedom are reduced by 5 (from 16 d.f. to 11 d.f.)

Table 5.14: Model of quasi-independence. Standardized residuals. N=1004

Father's highest level of education	Respondents educational level				
	Primary school (7 years)	Lower secondary education	Upper Secondary education	Lower deg. university	Higher deg. university
Primary school	0.0	3.42	0.45	-2.26	-1.28
Lower Secondary education	1.64	0.0	0.56	-0.06	-2.27
Upper Secondary education	-0.22	-2.90	0.0	2.32	-0.57
Lower deg. university	-1.65	-1.31	-1.37	0.0	6.28
Higher deg. university	-0.68	-0.37	-0.47	1.02	0.0

Log-linear no association model of quasi-independence: $G^2 = 78.71$; d.f. = 11; $p = .000$

Even though the model fit is somewhat improved compared to the model of simple independence, the quasi-independence model still does not fit the data well. It is possible to conclude, therefore, that association between the two variables persists even when the direct association is eliminated by defining the diagonal cells as structural zeros. While there are changes in the values of the standardized residuals, there are still many values $> \pm 1.96$ in the table. Although the model fit is poor, these standardized residuals still provide valuable information about the patterns of inter-generational educational mobility. While the children of the less educated fathers have demonstrated a tendency to "advance" to one or two levels above the educational level of their fathers, advancements *beyond* has been far more uncommon. While the children of fathers with upper secondary education have tended to advance to lower university studies, the children of fathers with lower university degrees have shown a strong tendency to conclude their studies by with a higher university degree. These results reveal that there is a clear association between the fathers' and the respondents' level of educational capital. Thus, the indication of educational capital reproduction from one generation to the next is strong.

5.3.3. The local social space in Stavanger, 1994

The arrival of the multinational oil companies and the other newcomers both challenged and changed the established educational, occupational and economic structures in the Stavanger area. While the small, exclusive elite of local capitalists in Stavanger before World War II were lifelong residents of the

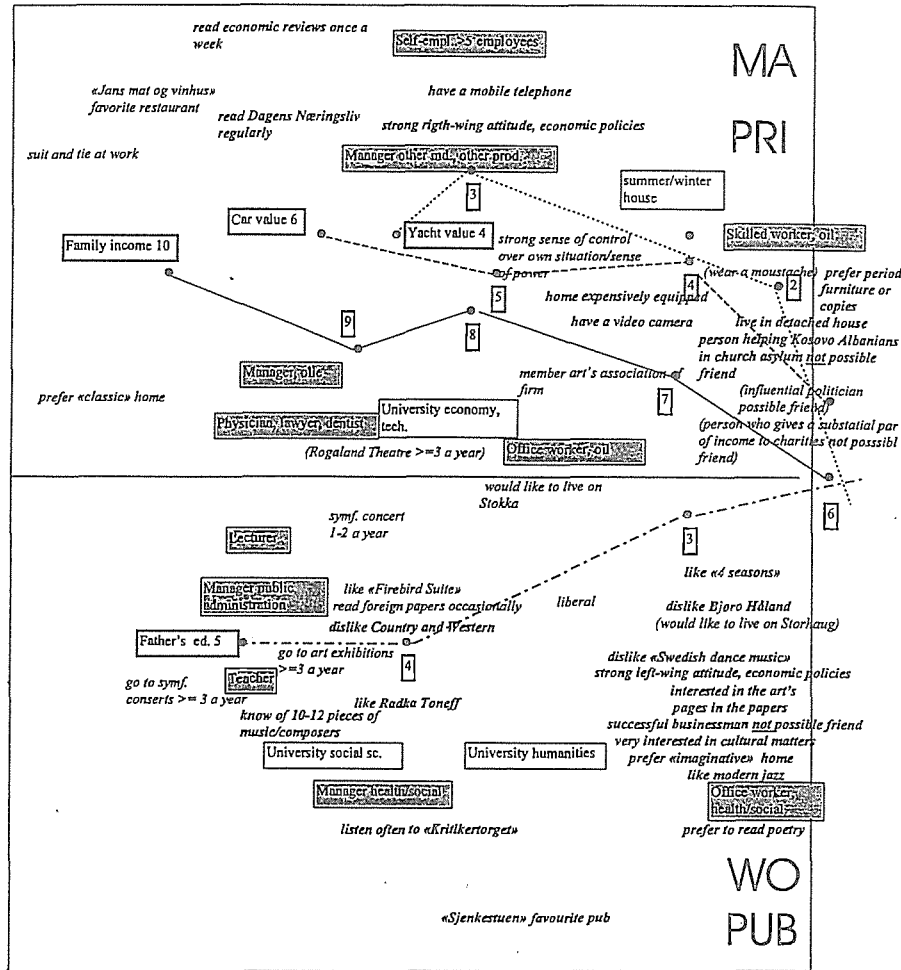
city, the new, local elite in the multinational oil companies did not. The oil sector also affected the structures in the local social space and the local field of power by integrating the Stavanger area more directly in processes that took place on the national and international levels. Put simply, it may be suggested that the space was invaded both by national and international agents.

This resulted in fundamental changes. The average net income in Stavanger had become the highest of all the five largest Norwegian cities by 1980. In addition, the increase in the proportion of wage-earners was the most radical, and by 1990 Stavanger had almost "caught up" with the educational levels of Bergen and Trondheim (both university cities). Furthermore, the large multinational oil companies became major and powerful agents in the political field and in the field of power. They also affected the logic of the academic field - at the primary school level through the establishment of local British, French and American schools, and at the university level through the need for university educated expertise in the oil industry. In the local academic field, the latter resulted in a concentration of oil-related higher education and research activities at Rogalandsforskning (Rogaland Research Institute). In Bourdieusian terms, the local academics encountered new, and often more highly educated field competitors in the academic field, while the capital distributors encountered strong competition from new institutions of higher education. However, there is one arena the newcomers did not conquer, since the positions in the local administrative apparatus are still largely dominated by "local" inhabitants (Rosenlund 1995a).

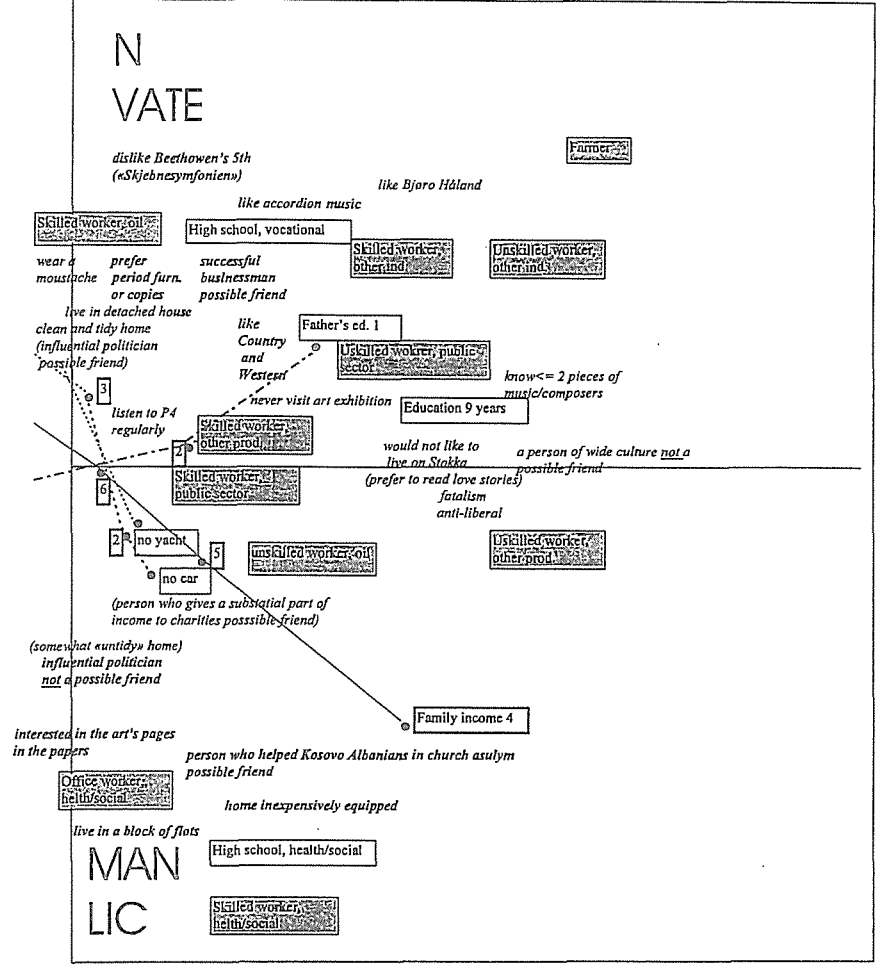
On the basis of a correspondence analysis of nine variables¹¹² from the 1994 data set, Rosenlund (1998: 6-7) has synthesized his findings in the following local social space and corresponding space of life-styles (the two axes displayed summarize 46% of the inertia in the matrix):

¹¹²Educational level, fathers ed. level, occupational position, fathers occupational position, family-income, value of car(s) and boat(s), ownership of leisure house and also municipal origin .

Fig. 5.3 The local social space and the local space of lifestyles. Components belonging to the social space are written in ordinary letters in frames. Components belonging to the space of lifestyles are written in italics. Indicated lifestyle components have either (LEFT PART)



received relative contributions (Cor-values) above 0,12 from the first principle(horizontal) axis, or received relative contributions above 0,095 from the second principle (vertical) axis (written in bold italics). (RIGTH PART)



The figure has been drawn on the basis of two graphs from correspondence analyses. The first has given the positions of the elements belonging to the social space, the second the positions of the elements belonging to the space of lifestyles (supplementary points). In order to improve the view of the latter their co-ordinates have been magnified by a factor of 1,5-2,0.
 Legend: Father's education 1 = less than 9 years, Father's education 2 = 9 years, Father's education 3 = high school, Father's education 4 = university, no MA, Father's education 5 = university, MA.

Family income 4 = 160-200.000 kr., Family income 5 = 200-300.000 kr., Family income 6 = 300-400.000kr., Family income 7 = 400-500.000 kr., Family income 8 = 500-600.000 kr., Family income 9 = 600-700.000 kr., Family income 10 = >700.000 kr.
 Car value 2 = <75.000 kr., Car value 3 = 75 - 150.000 kr., Car value 4 = 150 - 225.000 kr., Car value 5 = 225 - 300.000 kr., Car value 6 => 300.000 kr.
 Yacht value 2=<75.000 kr., Yacht value 3 = 75 - 150.000 kr., Yacht value 4 => 150.000 kr.

The first axis is a global capital volume axis: the further left the social position is located, the more economic and cultural/educational capital it possesses. Since, the axis is structured according to the respondents' fathers' educations, a trend of intergenerational educational reproduction is clear: the children of fathers with the higher educations are located on the left, and the children of fathers with less education are in the right area.

The second axis is a capital structure axis: the further down a position is located, the more important the overall volume of educational capital is with respect to its position, and the higher up, the more important the overall volume of economical capital is. If the local field of power was to be constructed on the basis of this analysis, the positions most to the left in the plane would have to be included. The internal structural opposition within this field would in turn be structured by the second axis: an opposition between cultural and economical capital. Thus, there would also be a potential opposition between the newcomers (who probably hold most of the dominant positions within this field) and the "original" inhabitants.

Compared to the "educated guess" of the local social space and local field of power for Stavanger in the 1930s, the arrival of the oil industry and the general educational development has had an important impact on the structures and the positions in this space. First, the dominant positions of the old bourgeoisie has been "challenged" by the arrival of multinational oil companies. In addition, foreigners, executives and academics from other parts of Norway have arrived on the scene. Thus, the "original" agents' ability to reproduce their power would depend in part on their ability to transform their original capital into new, valuable capital types, their capability to form alliances with the most powerful within the group of newcomers; and to detect and invest in activities related to the oil industry. In this respect, the Smedvig family, historically the owners of one of the largest shipping companies in Stavanger, is success story. Having entered the oil industry by establishing Smedvig Drilling, their field positions are still among the strongest.

Second, the distribution of educational capital is far more widespread than before. Accordingly, the relative value of a university degree is lower than ever before. Or as Rosenlund points out (1998: 15): in 1970, a university degree could easily be converted into economical capital, while this process had become far more cumbersome in 1990. Also, new educational institutions (for example Rogalandforskning and Høgskolen i Stavanger [Stavanger Regional College])

have entered in the local academic field, resulting in a substantial "import" of scientific expertise.

Third, this inflation in educational capital has had a negative effect on the situation for those who have less education. This trend is also evident at a national level in Norway. While in the early period of the oil era it had been relatively easy to obtain work with little or no formal education beyond primary school or continuation school, this is no longer the case. For instance, Norwegian Contractors shut down when the Condeep concept was abandoned. So jobs in this line of construction work no longer exist. Moreover, RMV no longer recruit personnel without vocational educational credentials.

Fourth, the religious and the temperance movements have definitely lost ground. Over the last 25 years, the number of pubs and restaurants in Stavanger have increased radically. Recently (Feb. 1998) "Bethania", originally the meeting house of the Oftedal movement, has been turned into a theatre where alcohol can be served. (See Rosenlund 1998, p. 2-6 and 9-10 for a further discussion of the transformation of these structures and also the space of life styles).

As fig. 5.3. indicates, the positions of skilled and unskilled industrial workers (but not their respective positions in the oil-industry) are located in the upper-right quadrant of the space, where the global volume of capital is low, compared to the dominant positions (upper and lower left quadrants). Furthermore, the relative importance of educational capital is also low, since the quadrant is dominated by agents who have left the educational system after primary school, or have completed a short vocational education. Economically, however, they seem to be better off than skilled and unskilled workers in other sectors.

In the period analyzed by Rosenlund (1970 - 1995) the industrial occupational sector has gradually lost ground in Stavanger. While the 1970 census registered 12 000 persons as employed in industry, the number had fallen to 8 000 in 1980 (construction work excluded). Nevertheless, the census-data do not reflect what was to become a major industrial occupational trend. As had been the case with the canning industry, the conjunctural variation within the mechanical industry and in large-scale construction work has been considerable. According to Stangeland (1980: 115), in 1974-75 more than 2 000 contract workers were housed temporarily in the newly built barracks at Hinnavågen, the construction site of Norwegian Contractors' "Condeep" concrete-platforms since 1973. In the spring of '75, this number had declined sharply to 1000, only to increase to 1400 during the autumn. This increase was followed by an immediate

drop to less than 250 in the spring of 1976. Then, from 1979 to 1980, the number once more increased exponentially to 1600. Thus, the offshore-related onshore industry had become an occupational roller-coaster.

Having won the contract for the Statfjord B-deck in 1978, RMV was exposed to a similar degree of conjunctural variation. In the years from 1979 to 1995 the total number of regularly employed wage-earners at RMV never exceeded 1800. However, in 1980, the *total* number of employees rose to more than 5000, followed by a vertical drop to 2400 in 1981. These ups and downs came and went until 1995 (see Utne & al.: 409). In these years, RMV ceased to be an element of industrial, occupational stability, and became one of multiple local exponents of an industrial, occupational *in*-stability. While trying to retain a stable core force of workers, the firms were also highly dependent on contract labour.

Both the skilled and unskilled workers could benefit from this development. Due to the oil companies' heavy investments and potential losses of profit in case of labor conflicts, offshore wages were substantially higher than onshore wages throughout the 70s and 80s. Reportedly, the rates of job turnover onshore were also higher. Unlike the situation of academics, it not only became easier to convert vocational educational capital into a relatively large amount of economic capital. In many cases, little or no education was needed at all. In fact, it is not analytically important to distinguish between skilled and unskilled workers in the oil-industry, since on this level, formal qualifications were not crucial when trying to obtain a position offshore.

However, the risks involved in offshore work in the seventies were high, work-related accidents were frequent, and the offshore job situation in general also implied long-term stress. In more recent years, the income differences between on-shore and offshore work have been reduced somewhat. Workers on short term contracts and people employed as contract workers also run greater risks of being exposed to conjunctural unemployment than was the case in the 70s and early 80s.

5.3.4. Political structures

On the national political level, the first two post-war decades in Norway were characterized by a high degree of stability in the voting patterns. Although the Labour Party lost its absolute majority in 1961, it remained in power until 1965. The radical change in the Norwegian political landscape was triggered by the

first EU-campaign in 1972. In the aftermath of this referendum, several new parties entered on the political scene. The Liberal Party was split into two, and the Progressive Party entered to the right of the Conservatives. The Socialist Left Party established itself to the left of Labour, as did the new Maoist party AKP-ml.¹¹³

The municipal elections in the first post-war decades in Stavanger followed the trends evident in the national political development in many ways:

Table 5.15: Elected representatives, largest political parties. Stavanger 1951-1995.

Pol. party	Year of municipal election											
	1951	1955	1959	1963	1967	1971	1975	1979	1983	1987	1991	1995
Labour	31	32	32	33	34	30	29	27	27	24	20	21
Conservatives	14	16	16	18	19	19	23	29	25	23	19	19
The Liberal Party	11	11	12	10	12	9	1	3	3	5	3	4
The Christian Popular Party	6	6	6	5	6	10	12	10	6	7	7	8
The Progressive Party	No list	No list	No list	No list	No list	No list	No list	2	8	12	7	14
The Socialist Left Party ¹¹⁴	No list	No list	No list	No list	4	0	2	3	4	4	9	4
Communists (NKP)	3	4	3	3	1	0	No list	No list	No list	No list	No list	No list

While the Liberal Party was almost wiped out in the aftermath of the first EU-campaign, the Conservatives' golden years were from the mid-seventies to the mid-eighties. As in many of the other large cities in southern Norway, Stavanger has produced a relatively large number of votes for The Progress Party since the mid-80s, with the 1987- and 1995-elections as its two best so far. The Socialist Left Party received strongest support in the late 80s and early 90s. Having once been dominant, the strength and the position of the Labour Party was reduced after the 1972 referendum. Throughout the first post-war decades, the communists had a small, but stable core of voters, a core that was later more or less completely wiped out. RV has so far not achieved representation in the municipal council.

To summarize the figures in a few main trends of development, it is reasonable to say that the local tri-polar pattern established in the late 1930s persisted until the late 1960s. In the seventies, this changed in the direction of a

¹¹³From the mid-seventies, the latter also concentrated much of its work on gaining political influence through positions in local union departments, while its political counterpart, the Red Alliance (RV), have taken care of the representation in general and municipal elections.

¹¹⁴Socialist Popular Party (Sosialistisk Folkeparti) before 1973.

bi-polar voting pattern, in which the voters clustered around the Conservatives and Labour. The overall support for the parties in the center decreased. Nevertheless, this bi-polar opposition never managed to wipe out these parties. Since the mid-1980s, the voting pattern has again changed. Increased support for the Progressive Party, the Socialist Left Party, as well as the Centerparty and the Pensionist' Party (Pensjonistpartiet) (the latter two are not represented in table 5.16) indicates a tendency towards a fragmentation in the local political voting pattern. It remains to be seen whether this tendency is temporary, or whether it will be evident in the municipal elections in 1999.¹¹⁵

So far the focus has been on changes in the educational, occupational, political and partly also the economic structures in Stavanger. However, historically, there have been important differences between the various parts of the city on these parameters. In popular memory, the eastern parts of the city used to be a working class district. Buøy, where the shipyard is located, has historically been strongly dominated by yard workers. When walking around in the city, it is easy to identify what must have been historical upper class districts. In short, the hierarchical structures in the local social space have historically also been converted into hierarchical structures in the city's geographical space. In the remainder of this chapter, therefore, I will briefly outline some present-day internal social differences in the city, focusing on educational, occupational, political and economic structures.

5.4. Internal structural similarities and differences in Stavanger

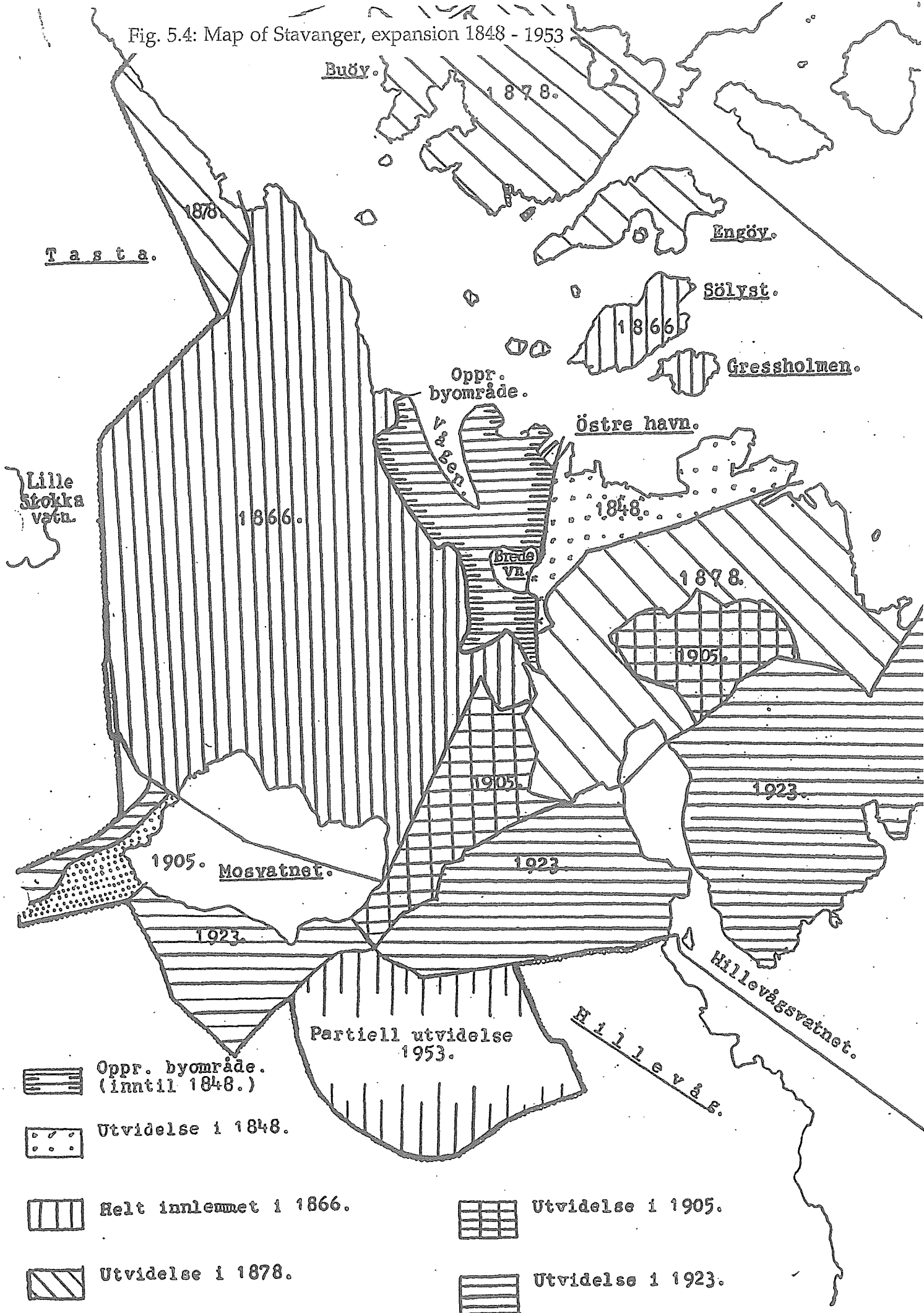
During the last 150 years, the Stavanger city boundaries have been regulated 8 times. As already mentioned, the last regulation took place in 1965, when the neighbouring municipalities of Madla and Hetland were included in the new and larger municipality of Stavanger.

Fig. 5.4: Map of Stavanger, expansion 1848 - 1953 here.

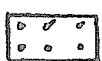
Nevertheless, the area of the city is still the smallest of the five largest cities in Norway. Until recently, Stavanger was administratively organized in 9 urban zones: Øyane, Tasta, Eiganes, Våland, Madla, Storhaug, Hillevåg, Sunde and Jåtten:

¹¹⁵A far more comprehensive analysis of these patterns is to be found in Rommetvedt (ed) 1997.

Fig. 5.4: Map of Stavanger, expansion 1848 - 1953



Oppr. byområde.
(inntil 1848.)



Utvidelse i 1848.



Helt innlemmet i 1866.



Utvidelse i 1878.

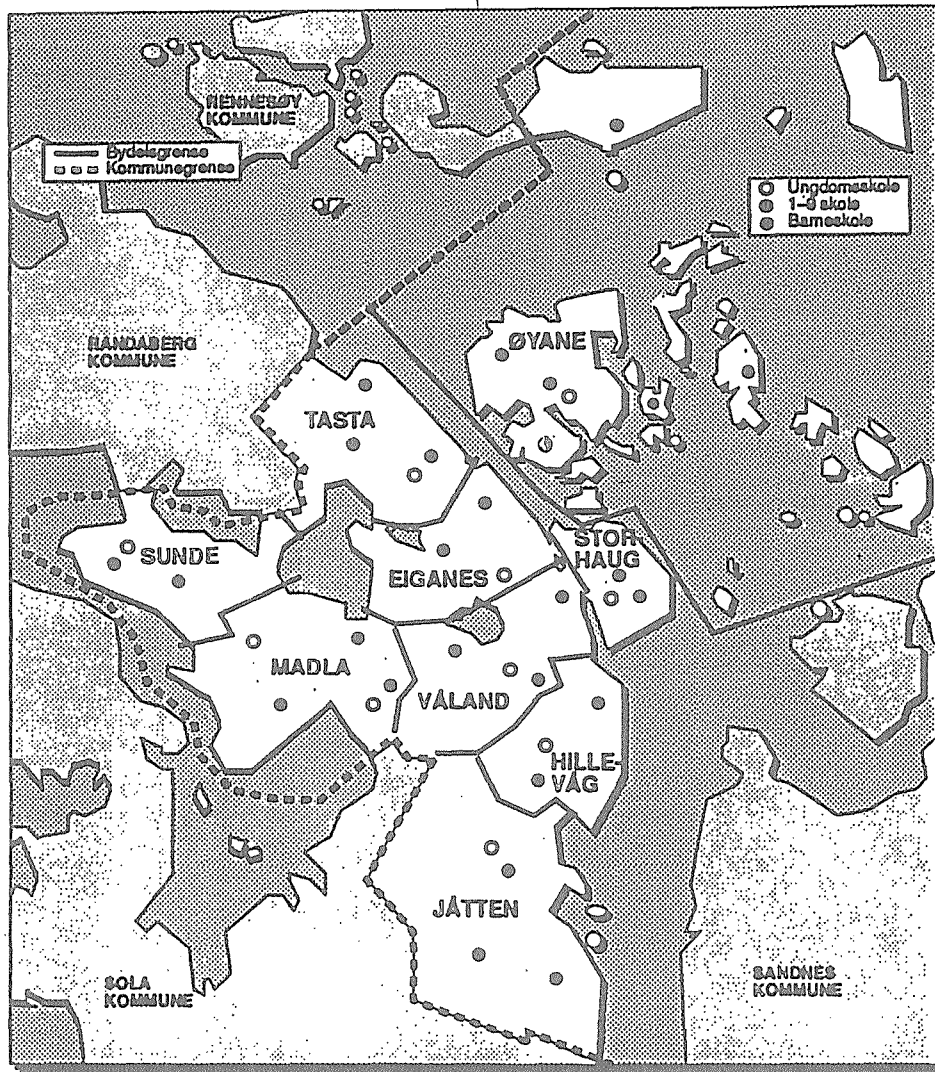


Utvidelse i 1905.

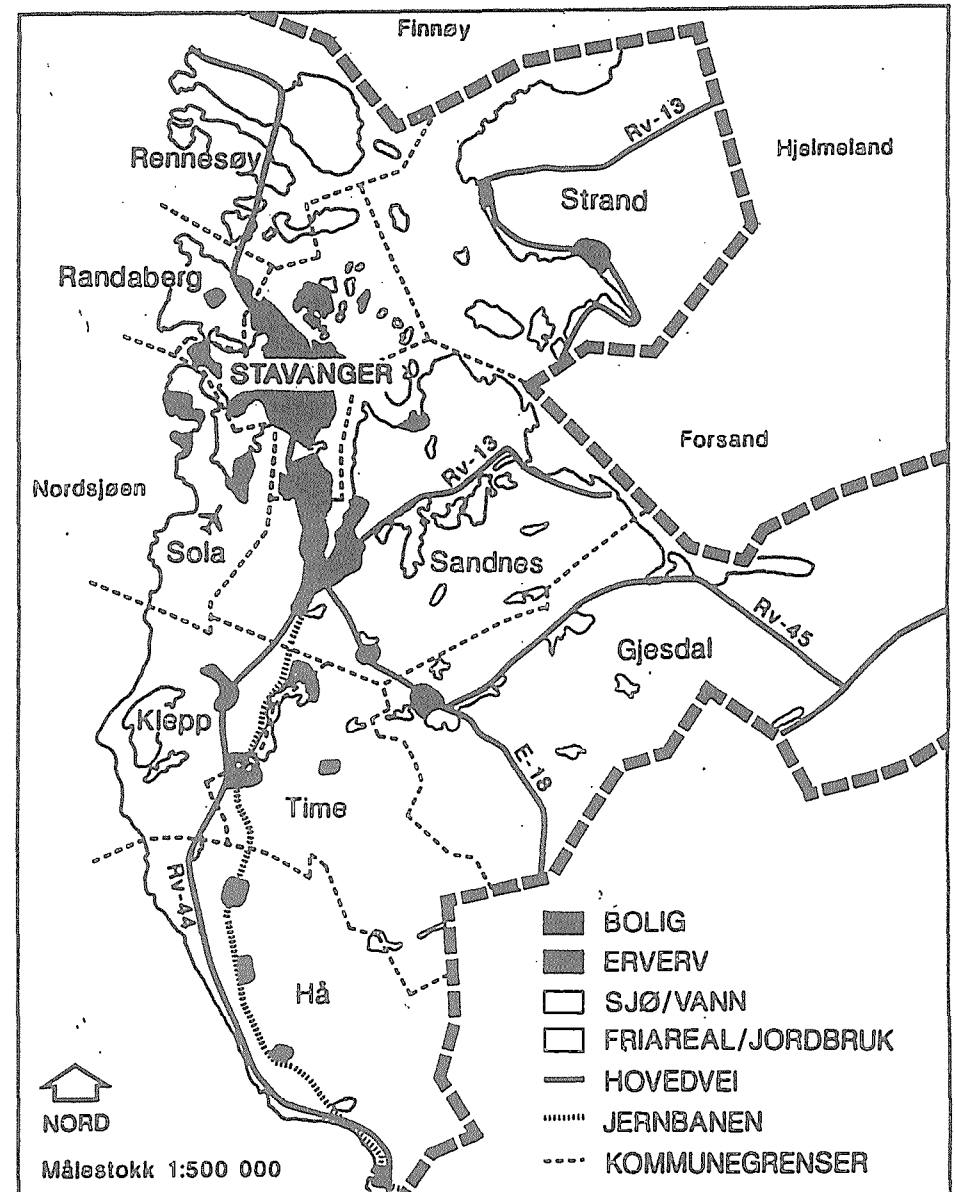


Utvidelse i 1923.

Fig. 5.5: Map of Stavanger, municipal organization, 1996.
Map of the North Jæren municipalities



Kart over Stavanger og nabokommunene



There are no *detailed* historical investigations into the social profiles of the living areas in Stavanger. In a restricted historical study of four different streets from 1910 to 1930, Dyrvik (op. cit) concluded tentatively is that it is harder to identify clear zones of social homogeneity in Stavanger than in many other cities. Nevertheless, in the early fifties, half the population of Stavanger inhabited the eastern parts of the city. Historically, this area was probably also a residential zone dominated by industrial workers. One indicator that supports this conclusion is the fact that the majority of the co-operative shops of "Samvirkeselskapet Nordkronen" were located in this part of the city (Bang-Andersen 1985: p. 83). In studies of the subjective perceptions of the social homogeneity in the city's residential zones, the patterns seems to be more definitive: historically, Eiganes (West End) has been identified as one of the "upper class"-areas , whereas Varmen (East End) has been assigned status of one of the stronger working-class areas. Reportedly, this was also translated into sociolinguistic patterns of oppositions of the above mentioned kind (see Gabrielsen 1983: 48-49).

The latest statistical yearbooks make it possible to provide an updated structural description of the differences and similarities distinguishing the 9 municipal, administrative districts.¹¹⁶ Educationally, the profiles are as follows:

Table 5.16: Educational profiles, 1995. Percentages. Data from NIT-compass.

Ed.level	Municipal district							Stav. total
	Hundvåg	Tasta	Eig./Vål.	Madla	Storhaug	Hillevåg	Hinna	
Primary	28.6%	24.0%	20.6%	23.0%	28.4%	27.9%	20.5%	24.3%
Secondary	53.2%	52.6%	44.8%	49.2%	46.0%	46.8%	49.5%	48.3%
University	14.0%	18.4%	27.2%	22.4%	17.8%	20.8%	24.5%	21.7%
Ph.D. & equiv	0.2%	0.1%	0.3%	0.3%	0.1%	0.2%	0.3%	0.2%
Not indic.	4.0%	4.9%	7.0%	5.1%	7.7%	4.3%	5.2%	5.5%
Total	100%	100%	100%	100%	100%	100%	100%	100%

As this table indicates, the most highly educated segment of the population are far more likely to be found living in Hinna and the Eiganes/Våland than elsewhere, since 1 in 4 of these residents have a university degree. This result supports the popular perception of this area as the residential zone of the strongest

¹¹⁶Group-specific characteristics have been described by Rosenlund's construction of the local social space.

capital holders in Stavanger. At the opposite end of the scale, is Hundvåg, where the shipyard is located. However, the results shown in table 5.17 must be read with some caution. The official coding is based on the administrative units, and is probably not the best way to identify similarities and differences between the parts of the city. For instance, it is problematic to combine Eiganes and Våland, as was done in this case, since on some parameters, the internal variation in these two categories is considerable.

Politically, the overall results in the municipal elections in 1991 were the following:

Table 5.17: Political profiles, 1991. Percentages, columns.

DISTRICT	POLITICAL PARTY							
	Labour	Conserv.	Chr. Pop. P	Centerp.	The Left P.	Soc. Left. P	Progress P.	Pensionists' P.
Øyane	30.5	20.4	6.5	6.5	2.7	13.3	9.8	7.4
Storhaug	26.8	17.3	8.7	4.6	3.3	15.3	9.0	9.2
Våland	27.0	20.9	7.6	4.4	3.8	14.3	7.8	9.6
Eiganes	23.5	28.8	7.7	4.1	3.8	9.1	7.2	9.7
Jåtten	21.4	27.0	9.8	7.7	3.9	10.8	10.1	5.6
Hillevåg	25.4	24.9	10.2	4.7	3.9	9.8	8.9	8.6
Madla	22.3	32.0	10.9	4.5	3.9	7.4	8.8	6.9
Sunde	26.9	24.0	8.5	7.2	3.7	10.9	10.3	5.7
Tasta	26.6	22.4	8.7	5.3	3.7	12.5	10.5	6.5
Stav.Total	25.1	24.4	8.7	5.1	3.7	11.6	8.9	8.1

Once again, these figures do not provide a full description of the internal political differences between the various parts of the city. In both of the *original* districts, Eiganes and Våland, Labour (19.5% and 19.3% respectively) showed relatively poor results, and the Conservatives (32.5% and 30.7%) good results. The same applies for Stokka (administratively part of Eiganes), where the figures are 21.1% and 35.0%. For Kampen, included in Eiganes, and Ullandhaug, administratively defined as a part of Våland, the balance was reversed: Labour won 30.8% and 34.3% of the votes, while the Conservatives only obtained 17.5% and 14.6%. The best overall district for Labour and the socialist parties was Øyane, the area where the shipyard is located. Politically, therefore, the old industrial zone is electorally

dominated by the socialist parties: Kampen, Storhaug and Øyane all showed good results for these parties.

Economically, the story partly seems to be the same. Based on data from 1992, the municipal statistical service has provided the following table:

Table 5.19: Equivalent income 1992, all inhabitants. For Stavanger N=101 403

Income	Municipal district							Stav. total
	Hundvåg	Tasta	Eig./Vål.	Madla	Storhaug	Hillevåg	Hinna	
0-49'	4.6%	5.6%	7.6%	5.6%	8.4%	5.2%	5.4%	6.2%
50-99'	33.2%	30.2%	30.4%	30.1%	39.9%	36.7%	28.1%	32.3%
100-149'	41.3%	40.0%	31.7%	38.0%	31.9%	37.6%	39.3%	36.8%
150-199'	15.6%	17.5%	18.6%	18.1%	13.5%	14.7%	18.1%	16.8%
200-299'	4.7%	5.5%	9.4%	7.0%	5.3%	5.0%	7.3%	6.6%
300' +	0.6%	1.3%	2.4%	1.3%	0.9%	0.9%	1.8%	1.3%
Total	100	100	100	100	100	100	100	100

Once again, Eiganes/Våland is located at the capital-loaded end of the scale; 11.8 % of the inhabitants have annual incomes above 200 000, and almost 30% are registered as earning more than 150 000 kroner a year. Only Madla and Hinna obtained similar results, and the distribution profiles for these three areas are the "flattest". Nevertheless, the internal variation is considerable: Eig./Våland also displays the second highest percentage in the *lowest* income category. Storhaug emerges as the zone in which the equivalent income is by far the lowest; almost half of the population is registered as having an income of less than 100 000 kroner. Furthermore, the internal variation in this area is not particularly strong, since it does not reach the Stavanger average in any of the other categories.

To summarize the results in these tables in a few sentences, it should be noted that Eiganes, despite a high degree of internal variation, not only has the highest overall volume of capital, but also has the highest scores on indicators of both economic and cultural capital. Politically, it is also one of the strongholds of the Conservatives. In contrast, Hundvåg/Øyane, where the shipyard is located, the educational level of the inhabitants is the lowest in all of Stavanger. Politically, the area is one of the strongholds of the Labour Party. Economically, however, Storhaug is the "worst off".¹¹⁷

¹¹⁷As indicated above, the oil-activities also brought many immigrants to Stavanger. In the statistics from 1995, almost 14% of all inhabitants are registered as immigrants. Once again, there

What about the socio-linguistic differences in the city mentioned earlier? Focusing on for instance "jeg/je" vs. "eg", "ikke" vs. "ikkje" (eng: 'not') Gabrielsen (1983) identified stratified linguistic patterns in the city. However, the number of respondents was as low as 30. Rosenlund's data from 1994 provides partial support for his claims. If the sample is restricted to only include people who have lived in Stavanger most of their lives, the pronunciation of the above mentioned words varies according to income categories and occupational positions but first and foremost according to age groups. What Mandius & Berntsen (op. cit) called "dannet tale" (i.e. the language of the upper class) is spoken by a minority - 20% use the mentioned forms - and is more often used by the elderly (50 years+), those in high-income categories and the functionaries and employers. Nevertheless, while being sociolinguistically clear, few of the expected associations proved to be *statistically* significant. If this is a valid result, the sociolinguistic patterns in the city are not as definitive as Gabrielsen claims (1983: 143).

5.5. Structural changes - a short summary

Historical studies of the structural development and changes in Stavanger have tended to focus on "waves" of fundamental structural changes. The first industrialization of Stavanger was closely connected to the fishing industries, and so the dominant canning industry and its subsidiary producers were highly dependent on the seasonal variations in fisheries. Between the peakseasons, the industrial activities in the city were few. While of great importance, this is still only a part of the picture. The artisanal occupations provided an important element of occupational stability, and enjoyed a more stable long-term occupational situation than the canning-occupations.

During the inter-war years, the shipbuilding industry was characterized by a low level of activity. The number of employees varied considerably. With the approach of World War II, this situation was about to change. The amount of repair work increased dramatically, but the "lift-off" came in the early postwar years when Rosenberg Mek. Verksted specialized in building large oil tankers for its owner, Sigval Bergesen d.y. Since the canning industry had begun to falter, the shipbuilding industry now became one of Stavanger's most important

are interesting differences between the different parts of the city: Storhaug is registered as having the highest overall percentage of immigrants. The number of immigrants from Asia and Africa is also by far the highest. Eiganes and Våland are again at the opposite pole, where the Americans, Brits and French are the dominant immigrant groups.

industrial employers for the first 25 post-war years. Having been exposed to conjunctural variation, the shipyard now became an exponent of occupational stability: work was to be found at Rosenberg.

While the city became increasingly dependent on the service sector, the on-shore industrial activities, including the shipyard, became increasingly dependent on the oil industry's off-shore activities. The arrival of the latter transformed the local occupational structures in fundamental ways, and Stavanger was baptized "the oil capital" of Norway. Nevertheless, there are clear tendencies towards intergenerational occupational *reproduction* in the present-day Stavanger area. In this respect, therefore, it would be wrong to conclude that the arrival of the oil industry also radically changed or challenged the patterns of occupational reproduction.

Educationally, the majority of the inhabitants in pre-war Stavanger left school after primary education. The scanty information that exists on the social origins of the pupils in upper secondary education indicates that access to the more valuable types of educational capital was strongly stratified socially. In the first two post-war decades, the educational structures were characterized by a high degree of structural stability: the educational level of the population did not change in any important way. With the arrival of the oil industry, this changed radically. The number of inhabitants with university degrees increased dramatically, and many of these were not originally from the city. Thus, an educational elite was imported to Stavanger, resulting in changes in the local structures. Despite these structural changes, the mobility tables indicate that there is still a clear tendency towards intergenerational educational reproduction in the present-day Stavanger area.

These processes have changed the structures in the local social space and in the local field of power. The local field of power in pre-war Stavanger seems to have been dominated by the position-internal and position-external oppositions between a small number of powerful and wealthy factory owners, shipping-agency owners and their various associates, the adherents and representatives of the so-called "counter-cultures", teachers in higher educations and upper local officials: the situation today is totally different. The power and the field positions of the old capitalist elite have been challenged by the arrival of the large multinational oil companies. New educational institutions have entered in the local academic field. Furthermore, the relative capital-value of a university degree is no longer what it was 30 years ago. The power of the religious and the temperance movements is also clearly reduced.

As would be expected, and as Rosenlund's analyses have revealed, the skilled and unskilled industrial workers are not in dominant positions within the social space or within the field of power. In the next chapter, the focus will be more directly on the historical development and changes in these positions at Rosenberg Verft, the largest mechanical-industry employer in post-war Stavanger.

Chapter 6. The Shipyard and the Shipyard Workers. Structural and positional developments and changes

6.1. Introduction

Processes that transform the structures of and the relations in a given society may also have the capacity to transform the structures and relations within a company, for example, an overall increase in the educational and qualificational level of a population will in most cases also be reflected in an increase in the educational and qualificational level of a company's workforce. Likewise, a given company may also be affected by or have a strong transformative capacity on structures that are "external" to the company itself. As we have seen in chapter 5, the arrival of the oil companies affected the local structures in the Stavanger area. At the same time, these companies also had to adapt to a Norwegian context. There is every reason to believe that this would also affect the organizational structures of the companies themselves. The relation between the structures in a given company and the structures in a given society therefore is also a relation that should not be analyzed as unidirectional, but rather as a reflexive relation: in order to be understood, neither of the constituents in the relationship can be reduced to the other.

This must also be taken into consideration when trying to identify what have been defined earlier as significant or formative events and processes: what are the social positions of those affected by a particular set of formative events and processes within a given company or in the larger society? In what *ways* are they affected and how does this relate to their subjective understanding of themselves as a member of an age group or a generation/generation unit? And how can this make them different from agents and positions that are not exposed to the same processes at all, or alternatively, not affected by the events and processes in similar ways?

In chapter 5, the focus was on large-scale structural changes on what might be called a local societal level. When trying to construct a local social space, both historically and in present, inequality-generating capital structures have been given a pivotal position both theoretically and empirically. On the basis of survey-data from 1994, the positions of skilled and unskilled industrial workers outside the oil industry were also located in the dominated area of the larger social space. Nevertheless, it would be wrong to portray these positions as "weak"

or as "stripped" of any kind of valuable capital: the value of a specific type of capital must be analyzed in relation to the field in which it is invested.

In line with the analytical aim stated in chapter 5, therefore, I will continue by outlining the structural history of these field positions and capital types within a specific company - Rosenberg Mek. Verksted (Rosenberg Mechanical Works). The analysis will focus on the structural history of the yard, and, following the logic in a field analysis, on four key positions in the industrial production: the platers, the plumbers, the welders and the mechanics. This will constitute the first step towards a field construction and an identification of position specific and field specific types of competences, knowledge, skills and formal as well as informal qualifications, what might be called an industrial, cultural capital. Furthermore, *potentially* formative, company-internal events, processes and changes will also be included. In this way, social structures and events that there is reason to believe may be important with respect to the formation of the habituses of shipyard workers will be examined in greater historical detail. In the yard history, the four above mentioned positions have not only been central. Their positional histories at the yard have been different, although their trajectories in the occupational field have been the same. In the analysis in chapter 7, therefore, they will be assigned status as potential position specific frameworks of memories when remembering yard-internal events, processes and changes.

As was the case in chapter 5, I will rely heavily on the work of others. Svein Michelsen's (1990a, 1990b, 1990c, 1990d, 1990e) numerous studies of educational and qualifical policies and structures at RMV have been a key source. When it comes to the general history of RMV the work of Jøssang (1990) and Nerheim, Utne and Jøssang (1996) has also been of vital importance. Given the numerous historical studies that have already been done of RMV, my own historical description will be in no way comprehensive. Instead, I will limit my account to the topics that will be most relevant to my own study for theoretical reasons.

Having ended chapter 5 with an outline of social differences between various parts of Stavanger, I will take up the thread again outside the gates of the shipyard. In order to integrate the shipyard workers in the descriptions given in chapter 5, the initial focus will be on areas in which the majority of the shipyard workers live.

6.2. The Residential Areas of Shipyard-workers in Stavanger

As indicated earlier, half of the population in Stavanger lived in the eastern parts of the city as late as 1950. It was also possible to identify two main industrial enclaves in the city, and a smaller industrial area in the western zones. On the basis of the original data sheets from the 1930 and 1950 censuses, Silja Arvola (1995: 62-63) has studied both the place of birth and the addresses of the Rosenberg workers in 1930 and 1950. Due to the seasonal and conjunctural variations in the employment figures presented above and to Arvola's randomization procedure for the 1950-data, it is somewhat difficult to draw definitive conclusions from these data. Nevertheless, the main zones in which both the workers and the functionaries lived were also close to the industrial enclaves in Stavanger: In 1930, almost 40% of the workers were living in Øyane, close to the shipyard's location at Buøy. A further 20% were to be found in the eastern parts of the city (Varmen and Storhaug) where the majority of the Stavanger industry also was located, almost 30% lived close to the *former* location of the shipyard (Kampen and Straen) in the industrial zone in the western parts of the city.¹¹⁸ Few of the workers owned their own houses: according to Arvola's calculations, 59% rented their apartments, 18% lived together with their parents and only 21% owned their houses. The figures were more or less the same for the functionaries and the foremen. In only one category - the machinists and turners - were the home-owners in the majority (Arvola 1995: p. 61). Economically, therefore, the shipyard workers were therefore not among the stronger capital holders in Stavanger.

20 years later, these structures had changed somewhat, but a pattern of social homogeneity still persisted in the residential zones. The same three areas of the city accommodated the overall majority of the workers and the functionaries at RMV, although the distribution had changed: only 20% of the workers were to be found in Øyane, 18% in Kampen and Straen while Varmen and Storhaug account for 40%. In short, more people living on the mainland had become workers at the shipyard, and had to be ferried to work on a daily basis. Their place of residence was still in Stavanger's industrial zones.¹¹⁹ Given the overall increase in the number of employees at RMV, this was not surprising. In the category of functionaries, there was also one important change. Eiganes had

¹¹⁸In the category of workers, N=191.

¹¹⁹In the category of workers, N=251.

gained popularity, and 9 out of 39 *lower* functionaries, and 4 out of 7 *leading* functionaries lived there.¹²⁰

Given the trends outlined in chapter 5, one would expect that this structure changed from the late fifties onwards. Data from internal archives for 1957, 1968 and 1972 also modify Arvola's picture. Even so, in 1957, the RMV workers lived in three main areas. Of a total of 1141 employees, 20% were registered as living in Buøy/Hundvåg, 24.5% in the eastern parts of the city and 27.6% in the western parts of the city. Våland/Hillevåg accounted for 7.7%, and other areas accounted for far smaller percentages. The relative importance of these areas had changed somewhat in 1968: Øyane, including Buøy/Hundvåg, had increased its "share" and accounted for 29.3% of the registered workforce (N=1032), while the eastern and western parts of the city had reduced their percentages to 20% and 15.8% respectively. Given the changes described in chapter 5, it is also not surprising that Tjensvold/Bekkefaret, which are nearer to Ullandhaug, now accounted for 10.2% of the workforce. This tendency continued in 1972. Of a total of 1251 workers, 32.7% lived in Øyane (28.9% in Hundvåg/Buøy). 13.9% live in the eastern parts of the city, 18% in the western areas (including Tasta), while 11.5% live in the larger Ullandhaug areas. While the overall trend indicated an increasing "spread" to new residential areas in the city, there remained considerable concentration near the yard. One possible reason for this might be related to the question of transportation: 840 workers, or 67%, had to be ferried to work, while those who lived near the yard were not dependent on this means of transportation on a daily basis. In 1977, this problem was eliminated by the construction of a bridge, "Bybrua", linking Buøy and Hundvåg to the rest of the city.

Nevertheless, this has not radically changed the current housing patterns of yard workers. 30% still live in Buøy/Hundvåg. Based on the survey data, the following distribution of Rosenberg workers in the various parts of the greater Stavanger area can be identified¹²¹:

Table 6.1: Housing patterns of Rosenberg workers, 1998.

Hundvåg	Hillevåg /Hinna	Stavanger	Sola	Jørpeland	Randaberg	Sandnes	Rennesøy	Klepp, Time, Hå	Other
33%	4%	24%	8%	5%	6%	10%	2%	3%	5%

¹²⁰Arvola has not done any calculations on the ownership of houses in 1950.

¹²¹Unfortunately, the postal codes are not overlapping with the administrative units in the city. For this reason, a direct comparison cannot be made.

As the table reveals, the majority (61%) still live in the three areas that are relatively close to the yard (Hundvåg (including Øyane/Buøy), Stavanger and Hillevåg postal zones, see maps 5.2 and 5.5), whereas 24% live in the neighbouring counties (Sola, Sandnes and Randaberg). In conclusion, these figures indicate a clear tendency towards structural stability in the yard workers' housing patterns.

So far, little has been said about the shipyard itself, the historical development, the processes and the structural changes that have taken place. Focusing mainly on the post-war years, a first step in this direction will be taken in the next section.

6.3. Rosenberg Verft - a brief historical overview¹²²

Founded in 1896, Rosenberg Mek. Verksted was originally located on the city side of Byfjorden. The main investors were all members of the local elite of capital holders described in chapter 5: Cornelius Middelthon, Sig. Bergesen d.e., Fredrik Racine and Erik Berentsen. Already in 1898, some of the shipyard's activities were moved to Buøy, the present location of the yard. For Norwegian shipping companies and shipowners, World War I led to a radical improvement in the profit rates. The increasing demand for new tonnage, also resulted in improved economical conditions for the shipbuilding industry. In 1915, the owners of RMV therefore decided to move all activities to Buøy, and to invest heavily in a new, larger and more modern shipyard facility. Their aim was to establish Rosenberg Mek. Verksted as *the* large-scale shipyard in Norway (see Skjæveland 1994). By the time the new facilities were completed in 1921, the industry had entered what was to be a long period of economic recession. For RMV, this had serious consequences. Throughout the interwar years, the yard more or less ceased to build ships (only three ships were built), and had to concentrate instead on minor and major repair jobs. As indicated earlier, the number of employees also varied considerably throughout the interwar years. Many of the skilled workers left RMV and found jobs at other shipyards (see Nerheim & al 1995: p. 147-154).

During World War II, the number of repair jobs, the profits and the number of employees increased sharply. RMV had employed 244 workers in 1939,

¹²²This section draws upon Nerheim & al. 1996, multiple, unpublished papers by Michelsen and information given to me in interviews with RMV-employees. For a detailed historical account of the yard's history, see Nerheim & al. (op.cit)

while six years later the number had risen to 553. In 1943, RMV was taken over by the shipowner Sigval Bergesen d.y., who was to own it until 1970. This change triggered moderate investments in new welding equipment during the closing years of the war (ibid.:186).

As With-Andersen (1989) has pointed out, the introduction of welding technology led to a radical large-scale change in the organization of the industrial production and labour processes in the shipbuilding industry. The basic unit for riveting had been a team of four men. The introduction of welding meant that the work groups no longer centered around the riveters. Furthermore, fordist ideas were implemented in the production of hulls: work operations became more specialized, larger sections of the hull were built separately and also parallelly, and thereafter fitted together in the berth. In principle, the production of hulls came to resemble an assembly line factory production, and became less artisanal than had been the case in the days of riveting.

Despite this reorganization in direction of an assembly line model, it would still be inaccurate to describe the changes in terms of processes that transformed skilled, artisanal workers into a semi-skilled or de-skilled assembly line workers who could easily be replaced by others. As Brown & Brannen (1970) pointed out in their studies of the British shipbuilding industry in the late 1960s, shipbuilding could at this point still be described as a 'craft' industry. Skills had to be acquired over a longer period of time, and if a person was to obtain *status* as a skilled worker, this required at least five years. The ships still had "individual" solutions, and many craftslike jobs continued to exist; the occupational diversity in the yards was vast.

Brown & Brannen's description is in many respects also valid for RMV. Despite the standardization implied by the fact that RMV built several series of oil tankers in the years from 1950 to 1970, the first tanker in each new series also implied new solutions at numerous levels. Moreover, the ships within a series could also have minor individual differences as a result of improvements made from one vessel to the next. While the overall production process was structured according to an assembly line organizational model, the occupational and departmental diversity remained vast. In 1950, 24 different departments or job locations were registered in the internal statistics at RMV: at the end of the Bergesen era in 1970, this number remained unchanged. Although major changes had taken place within some of these positions (for instance in the number of model carpenters and riveters), most of the major departments found

in 1950 were still operative 20 years later.¹²³ As will be clarified in later chapters, individual platers and plumbers would in many cases follow the production of a hull section from the steel plates in the store all the way to its fusion with other hull sections in the dock. In short, these workers would follow the work piece all along the assembly line, which implied a great diversity in the individual worker's tasks. When it came to the fitting of the hull, the artisanal character of the jobs was even more marked. (The entire process has been described in great detail by Nerheim & al.: 263-273.)

This does not, of course, mean that the processes described by With-Andersen did not affect the principles for hull-production at RMV. Historians (Nerheim & al. 1996) refer to the period from 1945 to 1950/51 as the years of radical transformation and modernization. During these years, Rosenberg Mekaniske Verksted was transformed from one of several minor Norwegian shipyards to the shipyard building the largest ships in Norway. Starting with the launch of "M/S Berge Bergesen" in 1951 (16000 tdw.), the size increased steadily to 33000 tdw. in 1954, 51000 tdw. in 1961, 91000 tdw. in 1963 and reach a maximum of 162000 tdw. in 1970 with the last of the large Sig. Bergesen d.y. oil tankers. In order to achieve this radical increase in production scale, it goes without saying that the size of the ships itself demanded heavy investments in new technology, new production halls, a new and stronger berth, new cranes, a new dock and new departments at the yard. The production techniques were also radically changed: in 1950, section building had become part of the normal production organization. Nevertheless, riveting was still carried out in the late sixties when the stern section of the largest oil tankers was still being *riveted* onto the hull.

An examination of the statistics on the number of employees reveals three clear trends in the period of Bergesen's ownership of the yard (1943-1970). First, there was an employment boom in the early postwar years, involving the employment of unskilled workers in particular. While the number of skilled workers remained the same at the end of the boom in 1948/49, the number of unskilled workers (in particular the "helpers") was greatly reduced. Secondly, between 1949 and 1970, there was a steady and approximately linear increase in the number of skilled workers (from 350 in 1950 to \pm 500 in the years after 1962-63): the numbers of unskilled workers and apprentices show a similar trend, but the conjunctural variation is clearer.

¹²³The internal statistics do not distinguish clearly between different job categories within the departments. The yard's school for apprentice school is excluded from this figure.

Thirdly, the ratio between the skilled and unskilled workers remained more or less 1:1, throughout these 20 years. In other words, half the workforce at RMV was constituted by people having status as skilled workers, while the other half was constituted by special workers, helpers and apprentices. In this respect, the decades from 1950 to 1970 can be described as a period of a steady, but moderate increase in the number of workers. Whereas the *yard area* was radically transformed, expanded and modernized (see maps in the appendix), the number of workers increased slowly and the ratio between skilled workers, unskilled workers and apprentices was relatively stable. The increase was far more significant for the functionaries. From 1950 to 1960, the number was almost doubled (from 100+ to 200), and thereafter stabilized at ± 200 until 1969 (see Nerheim & al. : p.278-80). Employing ± 1300 workers (according to internal statistics), the ratio between functionaries and workers thus stabilized at 1:6.5.

Nevertheless, these figures conceal a major trend at RMV which prevailed not only during this period, but also after Kværner took over the yard in 1970: while the jobs at RMV were stable, the turnover rate remained high. January 1. 1962, the workforce consisted of 1140 people. 12 years later, on the 1.1. 1974, this number had risen by 249 to a total of 1389 people. During this period, 2739 new employees (including holiday replacements) had started to work at Rosenberg, while 2490 had left. This mean that of the total of 3879 workers employed during this period, 64% (!) had left the yard.

Most years, the turnover rate was close to 1:5. Of course, the fact that this number also includes holiday replacements disturbs the picture. But even when the two months with the most frequent job exits (usually August and September) are excluded, the ratio still generally range from 1:10-1: 6, with the odds in favor of a rise in the number quitting towards the end of the period.¹²⁴ Furthermore, Michelsen's (1990a: 30) study of the apprentices at RMV between 1959-89 reveals that 36.5% left the yard before their apprenticeship was completed. In the 1970s, more than 60% of the employees probably had less than 4 years of job-experience at RMV (ibid.: 10). As this indicates, the turnover rate at RMV was high, and the yard was heavily exposed to personnel changes. Although the jobs at the yard were safe, they were not necessarily the most popular or attractive jobs in the Stavanger region. Nor was RMV a place where people usually worked until their retirement at the age of 67. Data for 1965-1975 show that only a minor portion - usually $\pm 5\%$ - of those who left the yard did so in order to retire.

¹²⁴In his study on turnover rates in the early 1970s, Gjelsvik (1974) finds a rate of 1:5 in 1966.

The entrance into offshore production triggered other major, and more permanent changes at the yard. The contractor of the Statfjord B-deck, Mobil Exploration, intervened directly in the supervision of the construction of the deck. This implied the arrival of a new corps of inspectors. The number of hours per job and the ratio between foremen and workers were also specified in great detail by the contractor: the latter should not exceed 1:10. Formal qualifications, for instance welding certificates, became far more important, and the planning, inspection and supervision of production more systematic. In consequence, the quality control experts gained a very powerful position in production, as did the technicians and engineers. Thus, Nerheim et al. conclude (op. cit. p. 404-405) that production at RMV lost some of its former artisanal character, and consequently, the degree of freedom the individual workers had to shape their work was also reduced. In short, the change from shipbuilding to offshore production meant that on every level, production became far more bureaucratized and controlled. Many of the artisanal elements involved in shipbuilding were also lost when building larger platform decks.

New organizational positions such as "overformann" (a *head* foreman position), were also established, and the number of functionaries rose sharply. In 1969, 220 employees were registered as functionaries. This number more than doubled in the next ten years, and reached a peak of 650+ in 1993. While the ratio between functionaries and RMV workers employed on a regular basis was 1:6.5 in 1969, this had changed to 1: 1.5-2.0 towards the mid-1990s.¹²⁶ Not surprisingly, technicians constituted by far the largest group of functionaries at the yard.

The level of formal educational of the yard's *total* workforce has risen dramatically recent years. There are more employees in management positions who have higher education, such as civil engineering degrees from the Norwegian Institute of Technology, compared to the situation in the shipbuilding era. A devaluation of social capital relations since the 1960s has meant that the yard will in most cases ask for, or even demand, formal qualifications, i.e. certificates of vocational education when employing new apprentices and workers.

This general description of historical events, processes and changes that have taken place at Rosenberg Verft provides an overview of the different epochs in the yard's history. However, in order to analyze how specific agents, positions and departments have been affected by or exposed to these processes, either directly or indirectly, it is necessary to consider in more detail the internal

¹²⁶When I did the interviews (february-april 1996) the ratio was 1:1.5.

structural, positional and departmental changes. Focusing on the postwar years, I will first describe these changes on a general company level, and thereafter focus more directly on specific departments and positions at the yard.

6.4. The Educational and Qualificational Level of the RMV-Workers

There are no historical studies available on the level of general education among the shipyard workers or the functionaries at RMV. Nor has it been possible to find studies or data on the number of workers with vocational education, including apprenticeship training and certificates. However, given the general educational patterns identified in chapter 5 and information obtained in qualitative interviews, it seems improbable that the majority of the workers before 1970 had any general or vocational education beyond primary or secondary school.

Measuring the level of qualification at the yard by examining the proportion of skilled to unskilled workers (apprentices, specialworkers and "helpers") produce a different picture. As already mentioned, studies have shown that the ratio of skilled to unskilled workers was $\pm 1:1$ in most years up to 1970 (Nerheim & al: op. cit). Compared to other Norwegian shipyards, this ratio was one of the lowest (Michelsen 1990a: 11). It is reasonable to conclude, therefore, that the yard lacked qualified personnel. However, it must be emphasized that the *formal* qualifications perceived as necessary for obtaining status as a skilled worker has not been clearly defined in the industry. In the Norwegian context, this qualification category must instead be analyzed as constructed by the relations between formal education, work organization and work experience/practical skills/education (see for instance Michelsen 1990d and Korsnes 1997).¹²⁷ For this reason, it is also problematic to draw inferences about the formal education of skilled RMV-workers. Before 1970, for instance, the yard did not only differentiate between skilled and unskilled workers in its wage policies: within these categories, there were also subcategories for those having more than 10 years of work-experience, those having more than 5 years and those having less than 5 years. In this way, an attempt was made to include practical skills in the wage scheme. Furthermore, individual workers might also receive additional pay.

The internal educational policies at RMV have been studied in great detail by Michelsen (1990a, 1990b, 1995). Throughout the postwar period, the lack of skilled workers was perceived as a problem. Of those accepted as apprentices at

¹²⁷See also Maurice, Sellier & Silvestre (1986) for a similar approach.

Implicated in the takeover by the Kværner Group in 1970 were important changes on several parameters. RMV became part of a larger industrial complex also including Moss Verft & Dokk. Consequently, the name was changed to Moss Rosenberg Verft a.s., and the two yards had a joint administration. Rosenberg also stopped building large oil tankers, and concentrate instead on building LPG/LNG gas tankers from 1971 to 1977. While this meant a reduction in tonnage-size compared to the oil tankers, these ships were far more complex constructions than the oil tankers. For instance, the material and the welding seams in the gas tanks had to be able to withstand temperatures as low as -162 C°, and the technical solution developed by Kværner and Det Norske Veritas was new (1970). Expertise and qualified workers were hard to come by, and in the beginning, the RMV-workers had little to do with the construction of the tanks. The use of new material (aluminium) also meant that new welding techniques (MIG) had to be learnt, and that quality control became far more systematic. For the welders, this meant that they had to qualify for new certificates, and that the welded seams were x-rayed far more often than had been the case in the Bergesen era. In short, the yard and the workers went through a process of what might be called upgrading of skills (or re-qualification) and the positions of the inspectors became more dominant.

Kværner also invested heavily in new office buildings, production halls, and equipment and in recruiting new personnel. In 5 years (1970-75), the total number of employees (all categories) increased by almost 40% from 1300 to 1800. With an additional 160 contract workers (a new phenomenon at the yard) and people working for sub-contractors (for instance in electronics), the number of employees inside the yard gates exceeded 2000.

From 1971 onwards a new wage system was implemented for the workers. Piece wages and individually set piece rates were replaced by fixed wages, which varied according to the workers' qualifications, job experience and job category. This brought to an end a controversy that had started in the late 1950s, which had originally split the workers and resulted in internal conflicts in the local union.¹²⁵ In later chapters, this conflict also will be related to a more general political conflict between the Labour Party and the Socialist Popular Party (SF). From the mid-1960s onwards, this issue had also resulted in an increased level of tension between the management's representatives and the union.

¹²⁵Adelsten Solvik, chairman of the union in 1961 was clearly against a new wage system. One of his main opponents in the union, Kurt Nordbø, was later (1968) elected chairman and held the position for 10 years.

At the same time, the structural changes described in chapter 5 also affected RMV. With the arrival of the oil industry, competition increased both when it came to recruiting new skilled workers, and keeping the skilled workers already employed at the yard. The wages offshore were substantially higher than onshore, and skills acquired at the yard could easily be employed in offshore work: a knowledge of welding, plating and plumbing was needed in the oil industry. According to Nerheim & al (op.cit.: 325), there was a net reduction of 76 skilled workers at the yard in 1974, a period in which the yard was in desperate need of skilled workers for the construction of gas tankers. In consequence, the yard experienced increased turnover problems. At the same time, it also had to meet the higher standards set by the new customers. According to Nerheim, one way of dealing with this problem was to change the ratio between foremen and workers. However, their statistics (p.329) do not support this conclusion. While the number of functionaries show an overall increase, the foremen had even *more* workers to supervise.

When the market for gas tankers declined after 1975, Kværner had to look elsewhere for work for the group's shipyards. Heavy investments in the oil production in the North Sea, meant that the offshore sector offered a new opportunity for Rosenberg. The yard had carried out repair work for the offshore industry since 1968, but had not focused on this market until the shipping crisis hit the yard in 1976. In 1978, the Kværner group won the contract for the Statfjord B-deck in intense (and harsh) competition with the Aker group. This was a change that triggered new investments in the yard facility, and a massive expansion (see maps in appendix). Moreover, the size of the Statfjord B job (later calculated at 4 *million* hours) and the expertise needed to construct the deck required far more workers and functionaries than the yard employed on a regular basis. Contract workers and firms therefore became a dominant element in the everyday workforce at Rosenberg.

At times, the contract workers would far outnumber the "regulars". While the "core force" remained *relatively* stable between 1979 and 1994 (usually varying between ± 1500 to ± 1700), the number of contract workers varied considerably. 5 waves can be identified - 1980, 1983, 1988/89, 1992 and 1995 - years when major projects were either under way or near completion. In 1980, more than 3000 contract workers (twice the yard's total number of employees) were employed by Rosenberg, and in 1988/89 the number was almost 2500 (see Nerheim & al.: 409 for further details).

RMV in the years from 1959 to 1986, only 73.5% finished their apprenticeship (ibid. p.30). A substantial number of people in this category also left RMV for jobs elsewhere. In 1987, less than 40% of the apprentices who *completed* their apprenticeship between 1970 - 1977 were still working at RMV. The departure rate varied considerably within this period; for example, of those who joined the firm in 1975 as apprentices, only 25%, or one in four, was still employed at the yard 12 years later. (Annual report, Rosenberg Verft's Klubb 1987: 51).¹²⁸

This high turnover rate was characteristic not only for the apprentice positions. Michelsen's study of the turnover rates in the years from 1966-82 (Michelsen 1990d) reveals that the shipyard also experienced major problems keeping *skilled* workers at the yard for longer periods. As mentioned earlier, an annual rate of 20% of RMV's total workforce would leave throughout this period.¹²⁹ Thus, the company was totally dependent on its ability to recruit new personnel, and skilled workers were hard to come by. In all of these years, the number of skilled workers who left was far higher than the number who started. This trend was particularly marked during the "oil boom" in the 1970s. From 1966 to 1982, 75% of the *newly* employed production workers were registered as unskilled workers. A large proportion of these newcomers also left RMV after only a short period (usually less than 9 months). The remaining 25% of the new production workers were divided into two numerically equal categories: half were new apprentices and half were skilled workers. This overall trend continued into the 1980s; at its most extreme, in 1985, a total of 81 skilled workers left RMV while only 7 new were employed to replace them. In conclusion, those who left the yard were usually replaced by apprentices. This problem was exacerbated by the fact that an additional 25 skilled workers advanced to positions as foremen, according to the annual reports of the union at RMV. Judging from the workers' formal qualifications, therefore, it seems reasonable to conclude that the yard's workforce in these years experienced a period of de-qualification.

These figures also indicate that historically, a job at RMV has not been a preferred field position for agents to convert educational or qualificational capital into economical capital, i.e. paid work, in the Stavanger-area. Furthermore, many of those who accumulated educational capital at RMV - either by obtaining a vocational education at the shipyard's own school, or by gaining work experience, specific skills or status as skilled workers - later left the shipyard. The

¹²⁸In the 1980s, the situation improved. Not having data from the 1990s, however, it is not possible to compare the figures from the 1970s and the 1980s.

¹²⁹It is not clear whether this number includes holiday replacements.

representation of the shipyard as an exponent of occupational stability (see chapter 5) must therefore be modified. One of the reasons why jobs were available at Rosenberg throughout the post-war decades, was the fact that these jobs were not the most popular: the positions at RMV might remain "stable", but the agents who occupied them were not necessarily the same.

Statistics from 1968 indicate that more than 50% of those who *passed their exams* at the shipyard's vocational school in the years between 1950 and 1967 later left the yard. Throughout that period, the drop-out rate *during* the school year was also high: in some years (1952, 1954, 1959-62 and 1965-67) more than 35% of the trainees who started RMV's one-year vocational school quit before their final exams.¹³⁰ While RMV was a distributor of vocational educational capital in the local educational field, the shipyard was not able to profit fully from the capital it distributed. From 1945 onwards, therefore, RMV can be considered a net "exporter" of vocational educational capital in the Stavanger area.

The present level of *general* education among the RMV-workers is as follows:

Table 6.2: Level of general education, a comparison of the results in Rosenberg survey and Stavanger survey 1994.

	Rosenberg sample 1998 ¹³¹	Stavanger sample 1994
7 years "folkeskole" (elementary school)	17%	5
"Framhaldsskole" (1-2 years advanced elementary school)	17%	◦
9 years "Grunnskole" (compulsory official schooling)	69%	14
"Folkehøgskole"	2%	◦
"Realskole"	2%	◦
Ex. artium, 3 years advanced school	7%	43% ¹³²
Higher and lower university studies	<1%	37%
Total	≈113%	100%

Not surprisingly, the differences between the two samples are very clear. While the overall majority (80%) of the respondents in the Stavanger survey had either 3 years advanced school, or higher or lower university studies, only 8% of the respondents in the Rosenberg sample had the same. Moreover, the overall majority of Rosenberg workers finished their *general* education after the obligatory 7 or 9 years of general education, while only 19% of the Stavanger

¹³⁰Based on statistics in internal archives, RMV.

¹³¹Being a multiple response variable, the total adds to more than 100%.

¹³²This result also includes vocational education.

sample had done so. In terms of cultural capital, therefore, the Rosenberg workers are clearly located in the capital weak sectors of the local social space.

At the same time, however, these figures may be misleading. A consideration of the level of RMV-workers' *vocational* education and their formal qualifications, reveals a radically different picture. Only 5% of the workforce have no vocational education whatsoever, and the overall majority have either completed their vocational education in the school system, or have enough work experience in a company to have qualified themselves as skilled workers:

Table 6.3: Level of vocational education/qualification level, data Rosenberg survey 1998.

	Rosenberg sample 1998 ¹³³
No vocational education	5%
Basic (1 year) vocational education in school	55%
2-3 years vocational education in school	27%
Status as skilled worker, §20	28%
Status as skilled worker, following ed. in school and apprenticeship in the company	35%
Teknisk fagskole (Technical college)	5%
Various courses in the company	36%
Other kinds of vocational education	29%
Basic vocational education at RMV	14%

Being located in a sector of the local social space where the level of cultural capital is generally low does not mean that these positions are deprived of cultural capital. In fact, these positions score high on a field-specific type of cultural capital that might be called *vocational* cultural capital. Within specific sectors of the local occupational field, this capital may be of vital importance.

This leads to the next structural changes that must be examined: changes in the yard's internal occupational, qualificational and economic structures.

6.5. Occupational, qualificational and economic structures at the yard

By the end of 1995, six job categories predominated in the workforce at Rosenberg: the welders constituted 28.6% of the regular workforce, the platers 20.3%, the plumbers 15.9%, the mechanics 4.7% and painters/shotblasters ("overflatebehandlarar") 10% (89 persons). 12% (107 persons) had other jobs, for instance in transportation or in the steelstores. Compared to the distribution of

¹³³Due to the multiple response variable, the total is more than 100%.

job categories found at the yard in the late 1950s, the change has been substantial. Based on wage statistics from company archives, annual reports from the local union and other sources, these changes can be described in greater detail. In table 6.4, the focus is on changes in specific departments and job categories.

Table 6.4: Changes in the occupational space at Rosenberg Mek. Verksted 1958-1995. Number of *regularly* employed workers in each category/department.¹³⁴

Departments/ Job categories	Number of people employed in department by year					
	1958	1963	1971	1980	1990 ¹³⁵	1995 ¹³⁶
Carpenting shop ("tømmere")	38	36	33	63	Not ind.	Not ind.
Joining shop ("snekkere")	24	21	13	°	°	°
Model carpenters	5	5	3	°	°	°
Dock & berth	46	49	40	35	Not ind.	Not ind.
Riggers/stagers/"dockers" (sjauarar)	38	37	25	24	Not ind.	Not ind.
"Burners"	43	47	35	32	Not ind.	Not ind.
Welders	130	185	242	160	283	254
Plumbers	64	83	65	75	156	141
Turning shop/turners	40	37	32	No inf.	°	°
Machine shop(also incl. machine workers and mechanics)	No inf.	No inf.	59	21	59	42
Fitters and mounters ¹³⁷	115	98	66	61	Not ind.	Not ind.
Shipwrights /platers	271	340	283	250	182	180
Painting/Shotblasting/Surface work	2	°	3	12	67	82
Various cleaning personnel	16	°	°	31	Not ind.	Not ind.
Catering department	°	°	°	24	Not ind.	Not ind.
Cleaning department	14	27	22	48	Not ind.	Not ind.
Stores	27	33	30	55	Not ind.	Not ind.
Electricians shop/electricians	10	14	13	26	Not ind.	Not ind.
Toolstore, shipbuilding	27	35	25	32	Not ind.	Not ind.
Toolstore, machineshop	23	17	12	°	°	°
Riveters	38	35	25	°	°	°
Boilermakers	13	14	11	°	°	°
Plumbing/Plating (comb.) ¹³⁸	°	°	°	°	°	64
Crane operators/Chauffeurs ¹³⁹	58	81	83	106	Not ind.	Not ind.
Guards	12	15	7	18	Not ind.	Not ind.
Boatsmen	4	6	4	°	°	°
Coppersmiths	19	17	°	°	°	°
Blacksmiths	6			°	°	°

¹³⁴Data from 1958, 1963, 1971 and 1980 come from internal archives. 1990 and 1995 come the annual reports of the local union. Some categories have been merged in the 1990 and 1995 columns, which explain some radical changes from 1980 to 1990. A "°" means that the category/departments no longer is listed: In 1980, model carpenters, joiners, riveters, boatsmen are no longer mentioned in the internal archives from the yard.

¹³⁵1990, 19.7% are registered in "other trades" in the annual reports. (1990: 23)

¹³⁶1995, 12.1% are registered in "other trades" in the annual reports. (1995: 38)

¹³⁷Registered as "filar & montør" in the statistics.

¹³⁸Not registered before 1994.

¹³⁹Includes 15 berth workers in 1963.

As this table indicates, the occupational diversity at the yard was vast in the late 1950s: 25 different job categories or job locations were listed in the internal company statistics. Some of these are based on "internal" variations within a trade, for example the distinction between carpenters and joiners. Despite the large scale implementation of welding technology, 38 employees were still registered as riveters.

In many ways, the table also speaks for itself when it comes to describing the overall changes at the yard: while there was a wide diversity in positions and departments during the shipbuilding era, several jobs and departments either ceased to exist or were clearly numerically reduced as the period of offshore related production approached. A closer examination of the table reveals an additional tendency: the jobs/departments that were either reduced or shut, were almost all "artisanal" in character, as illustrated by the reductions in joiners, model carpenters, blacksmiths and turners.¹⁴⁰ The rest were usually positions held by people who were waiting to retire: cleaning personnel, guards etc.

From the dominant categories at present, it is also easy to identify certain main trends: painters, shotblaster and "surface workers" have clearly gained importance, and become "independent" positions. Formerly, this kind of work would often be done by other job categories, depending on where a hull was in the building process. Furthermore, the number of plumbers doubled in the ten years from 1980 to 1990, which is not surprising, given the amount of pipes on a modern platform deck. However, the internal differentiation within this category must be emphasized; while people working in instrumentation plumbing and in industrial plumbing are registered in the same category, there are fundamental differences between the two trades. While the former deal with the complex hydraulic systems that control various systems at the deck (i.e. *small* pipes organized in highly complex systems), the latter deal mostly with larger industrial pipes, often more than 20 inches in diameter. Both categories are classified as plumbers, but there are vast differences between the jobs. Those registered both as skilled platers *and* plumbers generally work as industrial plumbers. The reason for this is straightforward: the differences between plating and industrial plumbing are not perceived as fundamental, since both categories deal with large steel constructions. The difference is mainly due to the *shape* of the steel, and not the way it is dealt with.

¹⁴⁰Those working as installers (montørar) are for instance included in the "turning shop" category from 1990 and onwards.

As would be expected, the shipwrights constituted the largest category of workers at the yard in the shipbuilding era. The platers dominated this category. As table 6.4 indicates, they later lost this position to the welders when Rosenberg became a part of the offshore-related mechanical industry. In this transformation, plating also lost some of its artisanal character: on the platforms, section building is the dominant part of the job. The production process also changed to a basically assembly line-like model.

In some respects, the welders have experienced the opposite trend. Their job still involves the fusion of metal and metal sections, and the assembly line model also applies to their work organization. Even so, the technical variation is greater and the number of certificates has increased. In consequence, this position is occupied of people who have a wider range of certificates, for instance qualifying them to weld titanium, aluminium, pipes etc. etc. than was the case in the days of shipbuilding. From this point of view, therefore, the position of welders has therefore become less homogenous.

In his study of the construction of the category of skilled worker in Norwegian mechanical industry, Korsnes (1996) has pointed out that an analysis of this social construction demands an analysis of the relations between an organizational space, a qualificational space and a space of work relations. Central elements in Korsnes' approach will also be relevant to the present analysis. This is because, in order to analyze how specific positions *within* different departments at the yard have been exposed to potentially formative events and processes, and the potential *oppositions* within and between departments, job categories and generations, it is essential to grasp the relations between these analytical categories. While changes in the space of work relations have been described in broad terms, and the figures in table 6.4 give some indication of departmental and organizational changes at the yard in the postwar years, (i.e. changes in *potential* social frameworks of memory), nothing has been said about the changes that took place in the structures of qualifications and wages at RMV within and between departments and categories. In order to analyze the formation of position specific habituses, further information about these structures is required.

I have stated that the qualificational level of RMV's workforce was low, compared to other Norwegian shipyards. This is not necessarily the case, however, when compared to the historical figures for these structures in the *Norwegian* industrial qualificational space (see Korsnes op. cit: 412-443). In 1954, 43% of the workers in the Norwegian mechanical industry were registered as

skilled workers (decreasing to 40% in 1973), 28.1% as special workers (increasing to 38.8% in 1980) and 28.9% as helpers (decreasing steadily to 8.5% in 1989) (ibid.: 426). Based on internal company statistics for 1958, the following occupational and qualificational structures prevailed at Rosenberg:

Table 6.5.1: The occupational and qualificational space at Rosenberg Mek. Verksted 1958. Departments and specific job categories. Number of *regularly* employed skilled workers, helpers and apprentices in each job category/job location.¹⁴¹

Job categories/job locations	Total	Employed as (percentages in parentheses)		
	1958	Skilled	Helpers	Apprentices
Carpenting shop ("tømmermenn")	38	24 (63%)	13 (34%)	1 (3%)
Joining shop ("snekkarar")	24	24(100%)	0	0
Model carpenters	5	4 (80%)	1 (20%)	0
Dock & berth	46	2 (4%)	44 (96%)	0
Riggers/stagers/"dockers" (sjauarar)	38	14 (37%)	24 (63%)	0
"Burners"	43	35 (81%)	8 (19%)	0
Welders	130	112 (86%)	17 (13%)	1 (1%)
Plumbers	64	38 (59%)	25 (39%)	1 (2%)
Turning shop (also incl. machine workers and mechanics)	40	30 (75%)	8 (20%)	2 (5%)
Fitters and mounters	115	67 (58%)	41 (36%)	7 (6%)
Shipwrights /platers	271	104 (38%)	81 (30%)	86 (32%)
Painting/Shotblasting/Surface work	2.	2 (100%)	0	0
Various cleaning personnel	16	0	16 (100%)	0
Avslagningsloft	15	9 (60%)	0	6 (40%)
Cleaning department	14	0	14 (100%)	0
Stores	27	0	27 (100%)	0
Electricians shop/electricians	10	6 (60%)	4 (40%)	0
Toolstore, shipbuilding	27	10 (37%)	16 (59%)	1 (4%)
Toolstore, machineshop	23	5 (22%)	17 (74%)	1 (4%)
Riveters	38	17 (45%)	21 (55%)	0
Boilermakers	13	5 (38%)	8 (62%)	0
Crane operators/Chauffeurs ¹⁴²	58	47 (81%)	11 (19%)	0
Guards	12	0	12 (100%)	0
Boatsmen	4	0	4 (100%)	0
Coppersmiths	19	13 (68%)	6 (32%)	0
TOTAL¹⁴³	1092	574 (52.5%)	418 (38.3%)	100 (9.2%)

¹⁴¹Data from from internal archives.

¹⁴²The category was divided into chauffeurs, cranedriviers and helpers. While being registered as chaffeurs and cranedriviers in the statistics, they were paid the same wage as skilled workers.

¹⁴³The percentage of skilled workers included all chaffeurs and cranedriviers. When corrected for this group (where the majority was classified as special workers in 1971), this percentage was reduced to the more accurate 48.3. Even so, the average wage of the cranedriviers was almost as high as the wages of groups of skilled workers, for instance the electricians and the joiners.

As this table indicates, the yard distinguished between three main qualificational categories in its internal wage system: skilled workers, helpers and apprentices. This is somewhat surprising, given the fact that the category of "special workers" was included in the negotiations that took place at a national level between LO and MVL/TBL from 1948 onwards. At RMV, none of the workers were defined as special workers even 10 years after this agreement. The qualificational hierarchy established at a national level was therefore not applied at Rosenberg.¹⁴⁴ There are at least two plausible explanations for this. One possibility already mentioned is that RMV recruited the overall majority of its workforce from people without any kind of vocational school education (see *ibid.*: 435), and was not therefore able to apply the standard agreed upon on the national level. If this is correct, the qualificational level of the Rosenberg workers must have been much lower than for the Norwegian mechanical industry in general. Furthermore, most RMV workers would probably also start out as helpers and could, if they stayed at the yard, in time advance to become skilled workers.

However, although the category of "special workers" did not exist in RMV's *internal* wage statistics, the yard reported having special workers employed in its quarterly reports to MVL. We can only speculate as to the reasons for this discrepancy. Yet another possible explanation may be that the management at the yard did not want to apply the qualificational categories agreed upon by LO and MVL in its *internal* wage policy because for some reason this was perceived as a "Trojan horse" for the implementation of a new wage system not based on piece rates but on fixed hourly wages. In 1958, this question had already been raised at some yards, and this system also had its supporters in the workforce at Rosenberg.

The majority of the apprentices were found among the shipwrights. According to the union's annual report in 1971 (p. 7), the apprentices spent half the day in the company school and the other half in production for the first year. When studying the internal wage variation among the apprentices (see figures 6.1 -6.3 below), this must be taken into consideration.

Nevertheless, the 1958 qualificational profile of the yard's workforce was close to the national average registered in 1945, in which 56.5% were classified as skilled workers, 4.5% as special workers, 39% as helpers and 9.3% as apprentices (*ibid.*). At this stage, it is tempting to pose a tentative hypothesis that processes that either took place or were initiated at a national level, affected Rosenberg

¹⁴⁴As Svein Michelsen has pointed out to me, Rosenberg Verft's extensive use of the category "helper" was not unique. Other yards did the same.

Mek. Verksted at a relatively late stage in the overall process. This also applies to processes and/or changes that were initiated by other Norwegian shipyards.¹⁴⁵ As will be explained below, this was also the case with the implementation of the new wage system: while Akers Mek. Verksted (in Oslo) changed its wage system in 1957 (from piece rate wages to fixed hourly wages), RMV did not do the same until 1971, after the Kværner group had bought the yard. If this hypothesis is correct, the Stavanger area was not only a backward region with respect to the average educational and economic level in Norway at this point in the postwar period. RMV, the city's most important industrial employer, was only reluctantly adapting to the structural changes taking place in the Norwegian industrial qualificational space in general and in the ship-building industry in particular.¹⁴⁶

When examining the internal variation in job categories and job locations, perhaps the most surprising distribution is in the category of the shipwrights. Although the core activity of the yard was to build oil tankers, and although RMV was building some of the hitherto largest Scandinavian tankers, only 4 in 10 shipwrights had status as skilled workers. Often working in pairs or trios in production, the figures indicate that most skilled workers were accompanied by or led one helper and/or one apprentice in their daily work. If this is correct, it also indicates that much of the practical education and skill acquisition took place on the shop floor with the skilled shipwrights as the apprentices' "teachers". Thus, the status of a skilled worker was not only a matter of qualifications and wages; it could also entail relations of authority in the practical work organization. In the analysis, therefore, it is also important to ask how this might have affected the formation of these workers' habituses, and whether these relations count among the important memories of their work situation.

Focusing only on the total distribution of skilled vs. unskilled workers at the yard would give a somewhat misleading picture of the qualificational level of the workforce employed in production. In some job locations, almost 100% were registered as helpers, for instance the guards, the boatsmen, the cleaning personnel and those working in the stores or as tool handlers. In many ways, this is not surprising. Decades of work as a plater, burner, boilermaker, welder etc. would often result in longterm physical exhaustion and/or longterm exposure to hazardous substances and working conditions. As mentioned, few workers retired directly from a job at Rosenberg. When a person could no longer perform

¹⁴⁵There is however one exception: RMV was among the first to establish a company-led vocational school.

¹⁴⁶However, to claim that Rosenberg Verft was "backward" in both of these respects would probably be to overextend the argument. The point is rather that Akers Mek. was clearly in the lead.

his ordinary production job, an alternative was sought which would ease his situation towards the end of his work career, for instance by employing him as a cleaner or a guard. While this would not necessarily imply a wage reduction (individual solutions could, and would often be found), it still meant that the person would be classified as a helper, if only in the yard management's *internal* wage statistics. When examining the figures in table 6.5.1., this must be taken into account.

When considering the locations directly involved in production, it is evident that in these job categories (with the exception of the shipwright-category), the skilled workers were in a clear majority: for both the burners and the welders, the percentage of skilled workers was +80. This rate was consistent for most of the more artisanal jobs (the carpenters, joiners, plumbers etc.), while the plumbers and the fitters and the mounters had almost 60% of the workforce classified as skilled. Thus, the qualificational hierarchy of job categories at the yard seemed to parallel the distinction between indirect or direct involvement in production. There were two exceptions, however: the rigger/stager and the dock worker categories are both dominated by helpers. Nevertheless, this does not alter the overall tendency, since both may be considered auxiliary positions in relation to the other jobs in production.

The next question to be address, concerns how these qualificational categories were related to wage differences within the yard's workforce. In fig. 6.1. the variations in wages are juxtaposed with the job locations and job categories:

Fig. 6.1. here.

In this figure, the horizontal axis differentiates between the formal qualifications of the given category, while the vertical axis shows the variation in the net hourly wages. The width of the category indicates the relative proportion of the total number of production workers in each category (1% of the registered workforce=0.6 cm). The variation in wages has been calculated on the basis of employees with more than 1000 hours per year.

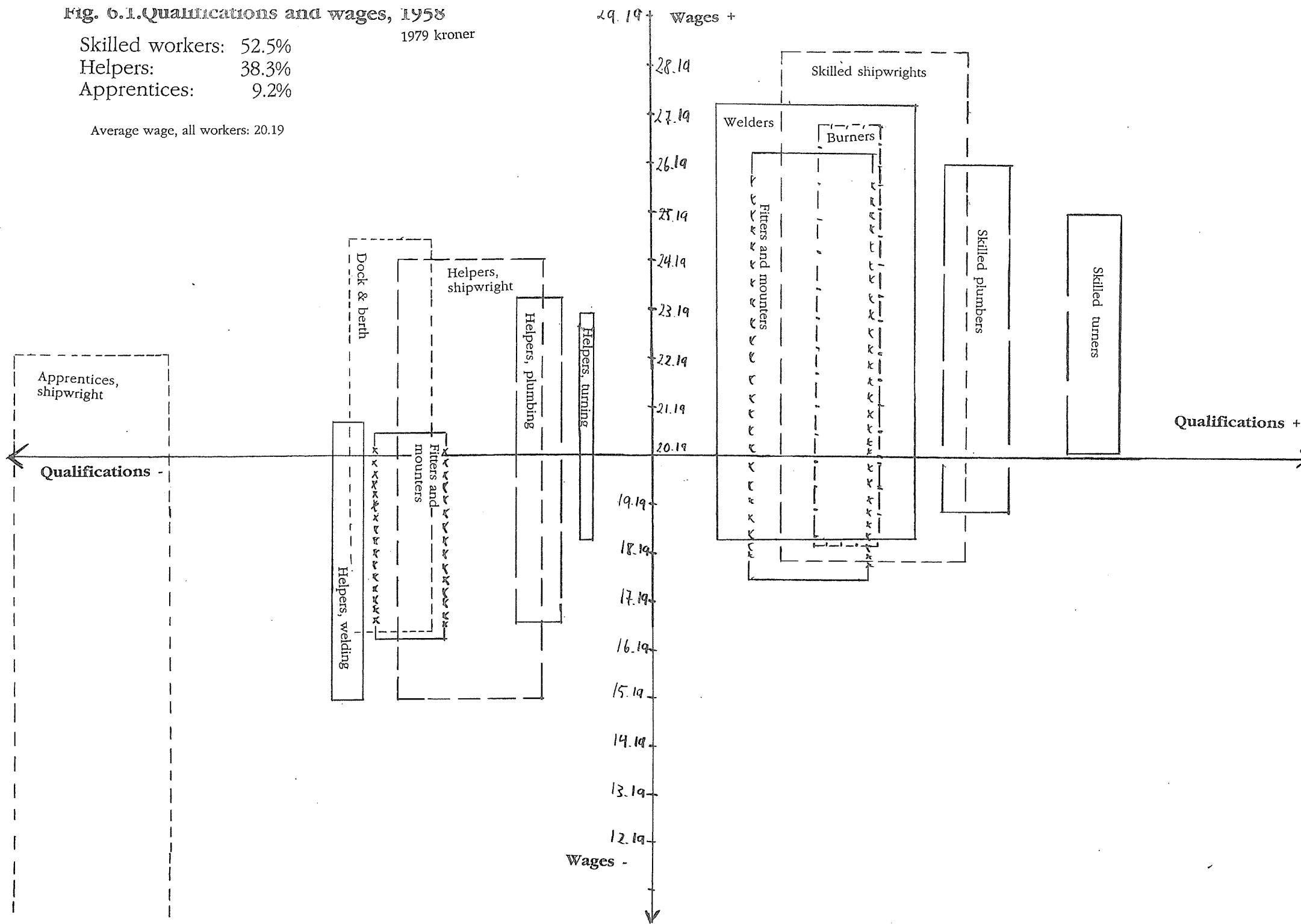
It is perhaps surprising that the position of skilled shipwright, which implies certain responsibilities (although limited) for directing or supervising the work of others in production, was not marked by substantially higher wages than the position of the welder, which generally meant working alone. Furthermore, the internal variation among the shipwrights was larger than in any other

Fig. 6.1. Qualifications and wages, 1958

1979 kroner

Skilled workers: 52.5%
 Helpers: 38.3%
 Apprentices: 9.2%

Average wage, all workers: 20.19



category of skilled workers. This said, the shipwright category was probably also more heterogeneous than the other registered job categories at the yard. Consider, for example, the turners, who possessed a special competence in high precision machine work. Nevertheless, this competence could not be converted into higher top wages than other skilled workers received. Instead, there was a "raised floor"; all turners received more than the net yard average pay of 20.19 kroner per hour.

When comparing the skilled workers and helpers, it is evident that formal qualifications mattered most for the welders and the fitters and the mounters. The top wages within both these categories exceeded those for the other categories by 5 kroner+ per hour. For the others, the difference was in the area of 3-4 kroner per hour. Once again, the turners' position proves to be the most homogenous, displaying a difference of approximately 1.80 kroner per hour. At the opposite end of the scale were the shipwrights, with a difference between the top wage for the skilled shipwrights and the lowest registered wage for the helpers as high as 13 kroner per hour, indicating a difference in annual income of 26 000 kroner (or 70 000 1997-kroner). It is hard to explain the surprising fact that apprentices' wages could be substantially higher than those paid to many of the helpers and even some of the skilled workers. One possible reason might be the fact that this category also included the yard's own pupils at the internal vocational school, and that apprentices having this education also earned higher wages.¹⁴⁷

In conclusion, figure 6.1 indicates that while formal qualifications were reflected in the wage hierarchy, these were not definitive. Other factors, for instance individual work experience or the kind of work the person was assigned, must also have influenced the wage distribution at the yard.

At the end of 1958, RMV had been building large oil tankers (16 - 33 000 brt) for almost a decade. 5 years later, in 1963, the size of these tankers had increased to 91 000 brt. In itself, this apparently radical change did not necessarily imply an equally radical change in the workforce or in the work organization. Basically, the production principles were more or less the same. In many ways, this is also reflected in table 6.5.2. (below). Compared to the structures described in table 6.5.1, the overall trend is stability. Nevertheless, within this overall structure some significant changes are easily recognized. First of all, the percentage of skilled workers had apparently risen dramatically. But since this number also includes the cranedrivers, this is somewhat misleading. Even so, compared to the qualificational level in the Norwegian mechanical industry as a whole, RMV for

¹⁴⁷When the change from piece rates to fixed hourly wages was made, this 1-year education would for instance count for two years of production experience.

the first time had a higher percentage of skilled workers than the registered average for 1961 (40.7%, see Korsnes 1996: 426):

Table 6.5.2: The occupational and qualificational space at Rosenberg Mek. Verksted 1963. Departments and specific job categories. Number of *regularly* employed skilled workers, helpers and apprentices in each category/department.¹⁴⁸

Departments/ Job categories	Total 1963	Employed as (percentages in parentheses)		
		Skilled	Helpers/ specials	Apprentices
Carpenting shop ("tømmermenn")	36	21 (58%)	15 (42%)	0
Joining shop ("snekkarar")	21	20 (95%)	1 (5%)	0
Model carpenters	5	4 (80%)	1 (20%)	0
Dock & berth	49	3 (6%)	46 (94%)	0
Riggers/stagers/"dockers" (sjauarar)	37	14 (38%)	22 (58%)	1 (4%)
"Burners"	47	47 (100%)	0	0
Welders	185	166 (90%)	19 (10%)	0
Plumbers	83	45 (54%)	31 (37%)	7 (9%)
Turning shop (also incl. machine workers and mechanics)	37	27 (73%)	8 (22%) (specials)	2 (5%)
Fitters and mounters	98	49 (50%)	44 (45%)	5 (5%)
Shipwrights /platers	340	170 (50%)	112 (33%)	58 (17%)
Cleaning department	27	0	27 (100%)	0
Store	33	0	33 (100%)	0
Electricians shop/electricians	14	7 (50%)	6 (43%)	1 (7%)
Toolstore, shipbuilding	35	12 (34%)	12 (34%)	11 (32%)
Toolstore, machineshop	17	7 (41%)	9 (53%)	1 (6%)
Riveters	35	17 (49%)	18 (51%)	0
Boilermakers	14	3 (21%)	11 (79%)	0
Crane operator/Chauffeurs ¹⁴⁹	81	81 (100%)	0	0
Guards	15	0	15 (100%)	0
Boatsmen	6	0	6 (100%)	0
Coppersmiths	17	14 (82%)	3 (18%)	0
TOTAL	1232	716 (58.1%)	430 (34.9%)	86 (7%)

Another change was that 8 turners were now registered as *special* workers, a category which was not found in any of the other positions at the yard. Furthermore, the percentage of skilled shipwrights had risen by 12 points to 50%. Even so, the ratio of skilled to unskilled workers was still in the area of $\pm 1:1$ in this highly important production task. In absolute terms, the number of shipwrights had also increased by almost 70 people compared to the 1958

¹⁴⁸Data from internal archives. Once again, the percentage of skilled workers included all chauffeurs and cranedrivers. When corrected for this group (where the majority was classified as special workers in 1971), this percentage was reduced to the more accurate 51.5.

¹⁴⁹Includes 15 berth workers.

numbers. An interesting phenomenon can also be identified with regard to the tool handlers: the 11 apprentices in the tool store in most cases later entered the production. The tool store was one of the arenas in which skills and knowledge about the shipwright trade were gained.

In other positions directly involved in production, a similar trend was to be found: the number of welders had increased, and the percentage of welders having status as skilled personnel had risen (if marginally) by 4 points. While the overall number of plumbers had also risen, there had been a slight decrease in the ratio between skilled and unskilled plumbers. As expected, the number of crane operators had also increased, while the more artisanal job locations had stabilized at the same level as before (in terms of the overall number of people found in these categories). In short, the categories and locations directly involved in hull construction or steel-related outfitting, for instance plumbing, had expanded, while the others had either stagnated or been reduced (see for instance the fitters and the mounters). Despite the observed changes, the general picture was still characterized by structural stability. The changes cannot in any way be called fundamental.

More interesting changes had taken place with regard to the wage system. Still based on piecework rates, the tendency towards a homogenization within the positions seems clear. However, the differences between the top wages seem to remain the same:

Fig. 6.2. here.

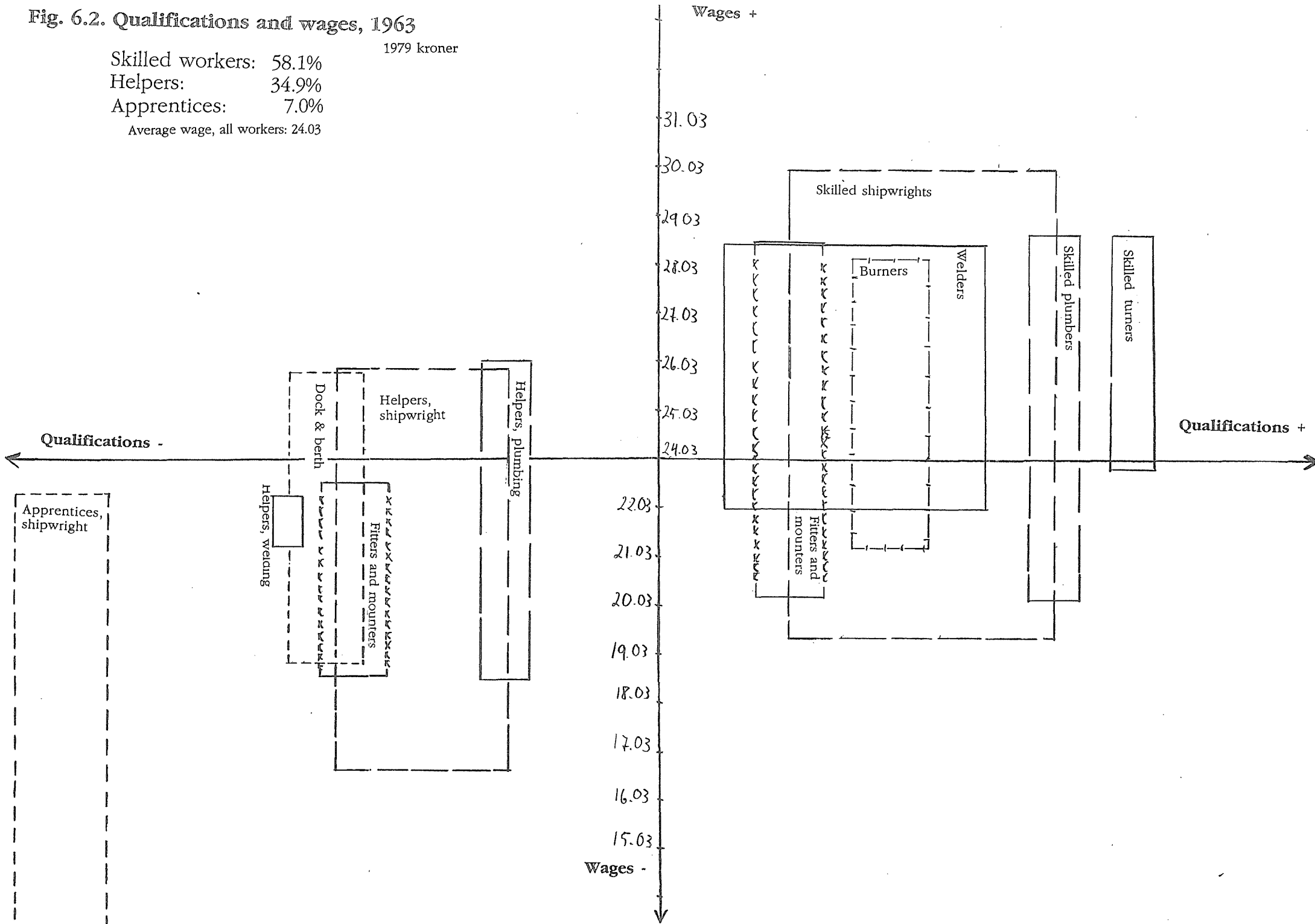
While the overall variation was still largest in the category of skilled shipwrights and lowest among turners, the top wages for all the other skilled workers were more or less within the same range: the top wages of the welders, the plumbers, the turners and fitters and mounters were almost equal, while those of the burners were fractionally lower. Nevertheless, variations in wages were to be found of these categories. Although it is not clear how job experience is reflected in the 1963 wage system, a reasonable hypothesis would be that the income differences *between* the categories declined the more experienced the workers became. If this is correct, the variations at the bottom is a product of varying *initial* wages when recruiting new personnel to the categories found at RMV.

The same tendency was evident in the category of helpers, but the variation between the graphically represented categories in this case was somewhat larger. The top wage for three of the five represented categories was

Fig. 6.2. Qualifications and wages, 1963

1979 kroner

Skilled workers: 58.1%
 Helpers: 34.9%
 Apprentices: 7.0%
 Average wage, all workers: 24.03



± 26 kroner. For both the welders and the fitters and the mounters the top wage was substantially lower. However, the internal variation in the categories was the same. Once again, apprentices could be better paid than both skilled workers and helpers. Thus, formal qualification have not been *the* fundamental criterion when determining the wages of the employees in the production. Other factors complicate this picture in ways that must be examined in the chapters to come.

As indicated above, the Kværner group took over Rosenberg Mek. Verksted from Sigval Bergesen d.y. in 1970. This marked the beginning of a new period of investments in the yard's infrastructure. Moreover, the wage system also underwent radical changes. The following figure of the wage pattern for 1971-1972 reveals the new system initiated January 18th, 1971, and renegotiated thereafter to correct various problems and injustices:

Fig. 6.3 here.

Compared to the earlier structures described above, the formal changes represented in this figure are clear. Not only had job experience become an integrated and regulated part of the wage system, but the differences between the job locations had been erased by focusing strictly on the formal qualificational status of the worker when setting the wages. Thus, while the qualificational hierarchy became clearer, the wage differences between the categories were reduced. In 1958 and in 1963, the differences between the top wages for the helpers and the skilled workers were greater than the differences found in 1971: approximately 3.70 kroner in 1958, 4.00 kroner in 1963 and approximately 1.30 kroner in 1971.

Figure 6.3 also reveals that the wage differences between the qualificational categories tended to be slightly reduced as the workers gained job experience. In other words, when wages were set, job experience tended to weight *fractionally* heavier than the initial formal qualifications. The cleaning personnel and the cranedrivers are the exceptions to this rule. When compared to the others, both these categories would "loose ground" economically as they gained more experience in their jobs.

However, the changes in the qualificational hierarchy at RMV were even more fundamental than this. While 8 turners were registered as special workers in 1963, a total of 188 people (or 16.6% of the total workforce) were registered as special workers in 1971. The same number of people had the status of helpers, while 584 people (51.7% of the workforce) were registered as skilled workers.

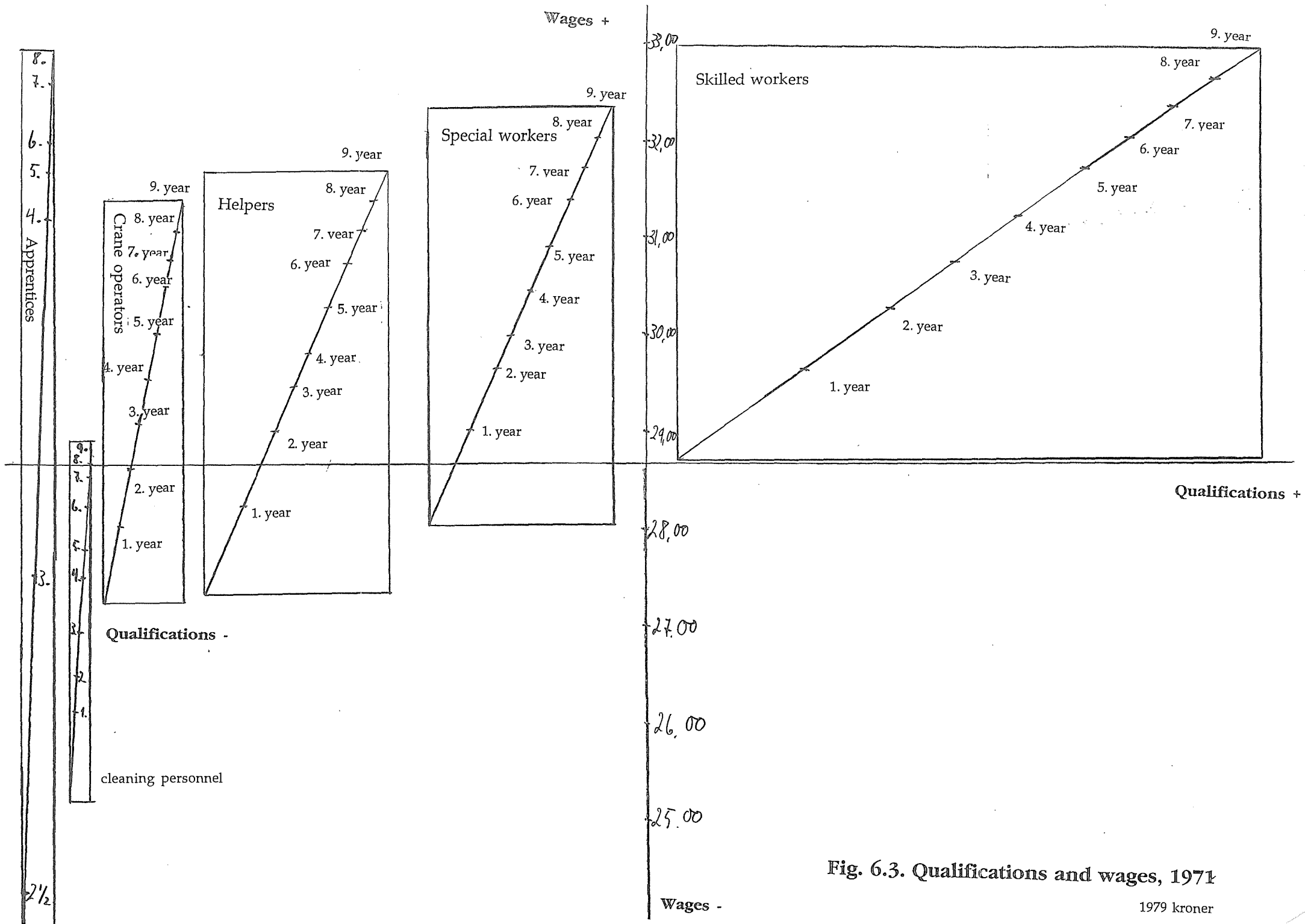


Fig. 6.3. Qualifications and wages, 1971

1979 kroner

Compared to the 1973 average for the mechanical industry in general, RMV still had a larger proportion of skilled workers (51.7% vs. 40%, [Korsnes op. cit]):

Table 6.5.3: The occupational and qualificational space at Rosenberg Mek. Verksted 1971. Number of *regularly* employed skilled workers, special workers, helpers and apprentices in each category/department.¹⁵⁰

Departments/ Job categories	Total	Employed as (percentages in parentheses)			
	1971	Skilled	Specials	Helpers	Apprentices
Carpenting shop ("tømmermenn")	33	19 (58%)	14 (42%)	0	0
Joining shop ("snekkarar")	13	13 (100%)	0	0	0
Model carpenters	3	3 (100%)	0	0	0
Dock & berth	40	1 (2.5%)	30 (75%)	8 (20%)	1 (2.5%)
Riggers/stagers/"dockers" (sjauarar)	25	11 (44%)	14 (56%)	0	0
"Burners"	35	31 (89%)	4 (11%)	0	0
Welders	242	191 (79%)	25 (10%)	26 (11%)	0
Plumbers	65	52 (80%)	0	13 (20%)	0
Machine workers	59	38 (64%)	0	20 (34%)	1 (2%)
Turners	32	26 (81%)	1 (3%)	2 (6%)	3 (10%)
Fitters and mounters	66	No inf.	No inf.	No inf.	No inf.
Shipwrights /platers	283	147 (52%)	12 (4%)	98 (35%)	26 (9%)
Painting/Shotblasting/Surface work	3	No inf.	No inf.	No inf.	No inf.
Cleaning department	22	0	1 (5%)	21 (95%)	0
Store	30	No inf.	No inf.	No inf.	No inf.
Electricians shop/electricians	13	11 (85%)	2 (15%)	0	0
Toolstore, shipbuilding	25	No inf.	No inf.	No inf.	No inf.
Toolstore, machinshop	12	6 (50%)	6 (50%)	0	0
Riveters	25	No inf.	No inf.	No inf.	No inf.
Boilermakers	11	No inf.	No inf.	No inf.	No inf.
Crane operators/Chauffeurs ¹⁵¹	83	6 (7%)	77 (93%)	0	0
Guards	7	No inf.	No inf.	No inf.	No inf.
Boatsmen	4	2 (50%)	2 (50%)	0	0
TOTAL	1131	584 (51.7%)	188 (16.6%)	188 (16.6%)	31 (2.7%)

Perhaps the most interesting information in table 6.5.3 is found in the column showing the distribution of the special workers. As the table indicates, the clear majority were found in what has been called auxiliary job positions in production (i.e. dock & berth workers, riggers, stagers and dockers), in what remained of the artisanal trades (the carpenters, a job category slowly but steadily declining in importance) but above all in the category of the crane operators (41% of all special workers).

¹⁵⁰Data from from internal archives. 13.4% are not classified because the needed information is lacking in the archives.

¹⁵¹Includes 15 berth workers in 1963.

The job locations that were dominated by the helpers, showed the opposite trend. Locations that were directly involved in hull construction or in hull outfitting dominated. The shipwrights alone accounted for 51% of the category, and these heavy steel trades (i.e. plating, burning, welding and plumbing) accounted for 73% of the total. Finally, the cleaners account for most of the remainder

In conclusion, the introduction of a "new" qualificational category - special workers - and a modified hierarchy at RMV, served mainly to separate the auxiliary or the "service" trades from the other job categories. The qualificational structures in table 6.5.3 reveal that the heavy steel trades dominated not only the category of helpers, but were also the highest ranking categories: $\pm 80\%$ of the plumbers, the welders and the burners were skilled workers. Once again, the shipwrights were in a special position. It must be born in mind, however, that the possibilities of *becoming* a skilled worker were better in these job locations than in the others.¹⁵² *Within* the heavy steel trades, the qualificational hierarchy was however still based on the "old" distinction between skilled workers, helpers and apprentices. With regard to the shipwrights, therefore, it is reasonable to hypothesize that the authority relations described above persisted: a skilled worker would still hold a leading position in the actual production work, and would be the stronger in a relationship that entailed differences in responsibility and social honor in the field. However, compared to the situation in the early 1960s, the income differences had decreased. This "new" system in which qualifications, job experience and wages are linked has more or less persisted until today, although the departmental structure and the relative importance of specific job categories have changed over the years.

During the 1970s, the increase in the real wages in the Stavanger region was substantial. As discussed in chapter 5, this affected both the local and the regional labour market in important ways. Work was available elsewhere, also for RMV workers, and the company was one of several which came "under pressure" being in danger of loosing their personnel. It is therefore not surprising that the real wages also increased at Rosenberg. As seen in fig. 6.6, the top wage per hour for a skilled worker in 1971-72 was approximately 33 kroner. At the beginning of the new decade, this had increased by more than 20%:

¹⁵²This can partly be related to the fact that the turnover rate was the highest for these positions. (Information given to be by Svein Michelsen). In order to maintain the ratio of skilled vs. unskilled workers, the promotion rate also had to be maintained.

Table 6.6: Wages, skilled workers, special workers and helpers. 1975 and 1980 (in 1979 kroner).

	Beg. wage 1975	Top wage 1975	Beg. wage 1980	Top wage 1980
Skilled workers	33.37	36.77	37.66	40.54
Special workers	32.86	36.26	37.31	39.70
Helpers	32.37	35.77	36.97	39.35

Once again, the differences between the categories were larger than the differences within the categories. Job experience therefore was still more heavily weighted than formal qualifications. Despite the important and major changes that took place at the yard, the 1970s was a period of stability; although the increase in real wages was substantial, the institutional arrangements and their effects remained more or less the same.

This does not mean that the relative proportion of the tariff categories also remained stable. Based on information found in the annual reports of the union, table 6.7 reveals how the qualificational structure changed between 1.1. 1978 and 31.12. 1987¹⁵³, i.e. the years when RMV went from building gas tankers to building platform decks. When compared to the structures found in table 6.5.3, important changes were about to happen:

Table 6.7: Changes in qualificational structures, RMV 1978-1987. Regularly employed skilled workers, special workers, helpers and apprentices.¹⁵⁴

Year	Qualificational status (percentages in parentheses)				
	Skilled workers	Special workers	Helpers	Apprentices	Total
1978	755 (62%)	220 (18.1%)	182 (15%)	60 (4.9%)	1217(100%)
1980	528 (45.6%)	309 (26.7%)	229 (19.8%)	92 (7.9%)	1158 (100%)
1984	717 (72.7%)	147 (14.9%)	36 (3.7%)	86 (8.7%)	986 (100%)
1987	598 (70.7%)	78 (9.2%)	24 (2.8%)	146 (17.3%)	846 (100%)

As these figures indicate, the special workers and the helpers were gradually replaced by an increasing proportion of both skilled workers and apprentices. In this respect, RMV went through a period in which the total workforce's *formal*

¹⁵³The reports changed later, and from 1988 onwards this information is not given.

¹⁵⁴Only people registered in these four categories are included in the total:

skills were upgraded. The high percentage of apprentices indicates that the workforce was getting younger: usually, apprentices are either teenagers or in their early twenties. In 1987, 1 in 6 workers were in this age category. At the same time, the yard also initiated a program which offered early retirement to workers born in 1926 or earlier (i.e. workers +60 years of age). In 1985-86, a total of 220 union members accepted this offer. Thus, the average age of the RMV workers was drastically reduced.

An examination of the real wages between 1983 and 1995, reveals some quite surprising changes. While the overall formal qualificational level of the workforce rose, the real wages did not:

Table 6.8: Changes in wage scales, RMV 1983-1995. Skilled workers, special workers and helpers. Wages per hour in 1979-kroner.

Job exp.	Skilled workers				Special workers				Helpers			
	1983	1987	1991	1995	1983	1987	1991	1995	1983	1987	1991	1995
8 yrs	38.23	40.56	39.18	37.96	36.59	39.10	37.74	36.67	35.60	38.20	36.96	36.00
6 yrs	38.23	40.56	39.18	37.60	36.59	39.10	37.74	36.30	35.60	38.20	36.96	35.63
5 yrs	37.90	40.28	38.95	37.23	36.26	38.85	37.51	35.93	35.27	37.92	36.73	35.26
4 yrs	37.25	39.75	38.49	36.82	35.93	38.55	37.26	35.71	34.94	37.64	36.48	35.04
3 yrs	36.59	39.20	38.03	36.41	35.60	38.30	37.05	35.52	34.61	37.39	36.27	34.86
2 yrs	35.93	38.67	37.57	36.00	34.94	37.78	36.59	35.15	34.29	37.12	36.04	34.64
1 yr	35.27	38.15	37.13	35.60	34.29	37.24	36.15	34.74	33.63	36.59	35.58	34.23

Compared to the wages in 1980 (see table 6.6), the tendency has clearly been for real wages to either decrease or stabilize just below the 1980 level. Furthermore, the job experience "ladder" has been changed back to the system employed in the 1970s. While maximum reward for job experience was reached after 6 years in the 1980s, it is presently reached after 8 years. Moreover, the top wages have been reduced in real terms. Without going into detail, this trend is the opposite to that which has prevailed in the Norwegian shipbuilding industry in the same period (see table 10.3, Historical Statistics 1994). Even though the statistics are not directly comparable, the *average* hourly wage in this industry was 37.29 kroner in 1975, and had increased to 41.68 kroner in 1991.

However, tables 6.6 and 6.8 do not reveal the whole story. The rate of pay may also be affected by various forms of compensations and bonuses. At RMV, a compensation for working nightshifts (from 3 pm. to 11.30 pm.) has been an

integral element in the local wage system since the late 1970s. However, this does not change the overall trend evident in the tables. (Once again, all wages are recalculated into 1979 kroner). In 1980, nightshift compensation was set to 9.78 kroner, giving a maximum hourly wage of 50.32 kroner for skilled workers with 6 years experience. In 1983, the compensation was reduced to 7.70 kroner. With the added annual bonus of 1.25 kroner, the maximum wage for the skilled workers amounted to 47.18 kroner, a reduction of 3.14 kroner. In 1987, the compensation was set at 9.48 kroner (no bonus) giving a maximum wage of 50.04 kroner), in 1991 8.82 kroner (no bonus, max.wage=48.00), in 1995 6.64 kroner +5.63% of the hourly wages (+ a bonus of approximately 0.50 kroner, max.wage=47.21 for skilled workers with 8 years experience).

Since this dissertation is not about the development of the wages in the Norwegian shipbuilding industry, I will not go into detailed speculations about the possible explanations for this development. The reasons may be numerous. In general, the shipbuilding industry experienced major problems during the 1980s, and in periods RMV did as well. Given that the wages in the shipbuilding industry had in general increased, local factors at the yard or factors related to the Kværner Group must have been more important.

This hypothesis is also supported by the results found by Rosenlund (1995a: p. 33) in his analysis of census data for 1970, 1980 and 1990. The main trend is for a radical increase in real wages from 1970 to 1980, followed by a reversion from 1980 to 1990. However, there are important variation between job categories, occupational positions and sectors of the labour market. Offshore workers, employed in jobs often sought after by RMV workers, almost tripled (!) their income from 1970 to 1990. While this increase might seem dramatic, located within the capital strong sector dominated by private employment and offshore work, the average increase in real wages for positions in this sector was 267% from 1970 to 1990. In contrast, the capital loaded sector dominated by public employment showed an overall increase in real wages of 45%, and the sector dominated by private service work showed an increase of 33%. The lowest rate of increase, 25%, was in the sector where the RMV workers are found. In short, Rosenlund's analyses indicates that work at RMV has not constituted an economically privileged position during these two decades. In this respect, the oilboom has actually showed the shipyard workers onto the sideline.

6.6. A brief outline of the positional histories

So far, the focus has mainly been on economic, educational and qualificational changes that took place at the yard. Yet, this is only part of the yard's history. Over the years, the shipbuilding industry in general has experienced major changes. Radical changes in metal fusion techniques and principles for hull production, have altered the relative importance of specific job categories described in the tables above. The various job categories found at the yard have experienced these changes in slightly different ways. Some trades have been exposed to major *technological* changes, while others have been subjected to major work *organizational* changes. In almost all the occupations at the yard, formal vocational education has become more important over the years. A comprehensive historical account of these technical, educational and organizational processes and their various outcomes would be far beyond the scope of this chapter. These topics will also reappear in chapters 7-10 in the analyses of the various agents' accounts and perceptions of the changes they have experienced while working at the yard. The present description will therefore be restricted to some of the more important overall changes that have taken place in four of the *presently* dominant positions in the industrial production at RMV: the platers, the welders, the plumbers and the machinists/turners. (See Jøssang 1990: 59-68 for a more detailed description of changes affecting platers, plumbers and welders.) Constituting some of the most powerful production positions at the yard, these positions will also be in focus in the chapters to come. In selecting this particular sample of positions theoretical considerations also played an important part: in an attempt at a field analysis, it is necessary (if not sufficient) to include these four positions in the field construction. Focusing mainly on the period between the mid-1950s and 1995 (the period when the interviewees have been working at the yard) the major changes will be considered. A short description of the basic tasks involved in the each job will also be provided.

6.6.1. Platers

For obvious reasons, the platers became one of the major occupational categories when the shipbuilding industry went from building wooden hulls to

building metal hulls.¹⁵⁵ Technically, however, plating has not been exposed to any fundamental or revolutionary changes in the last three or four decades. The majority of the work is done inside the larger production halls, and consists of cutting, shaping, combining and fitting steel plates in the construction of smaller or larger metal sections of a ship. Needless to say, the size and weight of the plates and sections can vary considerably. Since the individual plates must somehow be "rigged" or mounted, the platers' job also involves the simplest forms of welding - point by point welding to keep the mounted plates in place. The final welding of the plates and the sections is left to the welders. Cooperation between the platers and the welders is therefore needed. When the individual sections are finished, they are joined together, or mounted. This work has most often been done outside in the dock or at the berth.

The platers must be able to read technical drawings, since a set of job instructions and drawings usually accompany each job. Practical knowledge of how to handle and shape steel may also be crucial: the individual plates can change shape and direction when heated, for instance when welded. The limits of variation are usually clearly specified, and the steel plates and sections must be within these limits before being joined with other sections. Since this cannot be done by simply applying brute force, practical knowledge of steel handling may be required. Thus, experience may be a major asset on the job. Vocational training for platers has also been covered by the apprenticeship legislation since 1952 (see Michelsen 1995: 36).

While the trade itself has not undergone radical changes in the basic work operations, organizational changes have been important. At RMV, assembly line production principles have been implemented more directly, giving the individual plater a more restricted area of responsibility than had been the case earlier. New technology has also "erased" some positions, for instance that of the burners, who used to cooperate with the platers in production. Consequently, the platers' contact with the other positions in the production has been reduced over the years.

¹⁵⁵The characteristics involved in prewar shipbuilding have been described in With-Andersen (1989) and in Venneslan (1989) and will not be repeated here since none of the interviewees experienced this period.

6.6.2. The Welders

The basic principles of welding are fairly simple. In electric arc-welding, electrical energy is transmitted from one point to the other, and converted into heat energy that is used in the fusion of metallic materials. In gas welding, the heat energy is obtained by the combustion of a gas. In both cases, a metal welding thread is usually also added in the seam where the two pieces of metal are to be fused. The technical complexity of this job is usually regarded as low, and the basic work operations are also repetitive. Compared to the platers, who usually work in pairs, the welders usually work alone. This does not mean, however, that there is no cooperation between the welders or between the welders and other positions in the production; after sections or pipes have been mounted by the platers or the plumbers, the welders must complete the job by welding the plates, sections or pipes together. Since the limits of variation in the breadth of seam are strictly specified, hasty work by the platers or the plumbers also affects the welders' job.

Until World War II, arc welding was not the main metal fusion technique in the shipbuilding industry.¹⁵⁶ In 1932, Det Norske Veritas (the leading Norwegian maritime classification society) would only accept welding on less vital hull structures (Nerheim 1983: 59), and skepticism of this new technique was widespread. In the shipbuilding industry, welders were also few and far between compared to riveters. According to reliable sources, RMV had only two regular welders - "Uncle" and "Bergen" - as late as in 1943.¹⁵⁷ During World War II and the early post-war years, welding generally replaced riveting as the main metal-fusion technique. At RMV this process, described by With-Andersen as a change from a British to an American way of building ships, accelerated from 1943-45 onwards. As indicated in the tables above, the welders now constitute the largest category of production workers at RMV.

Technical innovations have had direct and important consequences for the welders' work. Since the mid80s, semi-automatic gas welding ("rørtrådsveising"), has not only increased the effectivity in the production, but also resulted in changes in the basic work operations: while the welders had previously had to "feed" the welding thread manually, it was now fed automatically from a reel in a welding rig. In theory, a welder can work continuously until the reel is empty or

¹⁵⁶According to Roberts (1992:19), the first all welded sea-going ship was built in 1920 at Cammel Lairds, Birkenhead, UK.

¹⁵⁷Interview EC.

the gas runs out. Since there is less variation in the task, the work position has consequently also become more static than before.

As mentioned, the changes in and diversification of welding techniques have also resulted in a wide range of specialized welding certificates. This complexity is further increased by the introduction of new steel qualities and materials like aluminium, titanium etc., and has resulted in a need for qualificalional "upgrading" in the corps of welders in periods. The transition to offshore related production has also had important consequences; for instance, pipe welders now hold a position of their own, having a specific certificate.

From the late 1960s onwards, the inspection of the welders' work has gradually grown stricter. This is partly due to major offshore accidents, such as the "Alexander Kielland" accident in the North Sea in 1979.¹⁵⁸ Today, all welded seams are x-rayed or tested by ultra sound. Subsequently, the welding inspectors are directly involved in the supervision of the individual welders' work and have become one of the more important categories of functionaries.

Qualificationally, the welders have a history that is different from the platers. While the welders have been accepted as skilled workers in the wage agreements for several decades, the occupation was not included in the apprenticeship legislation until the 1980s. Separate courses in welding were not available in the vocational school system. Instead, most welders took shorter courses, often arranged by employers. Until the 1980s, therefore, the majority of newly recruited welders were not given the status of apprentices but rather as helpers. Over time, they could advance to skilled workers as job experience was gained, and/or when new courses and certificates were taken.

6.6.3. Plumbers

As revealed in the tables above, the number of plumbers has increased sharply at RMV since the late 1950s. Furthermore, in 1995, more than 60 people were registered both as skilled plumbers and platers. This is a rather recent phenomenon. Historically, industrial plumbing has derived from the craft-like plumbing done in construction work (Michelsen 1995: 36). While this kind of plumbing (VVS) has been taught in the vocational school system for decades, *industrial* plumbing was not included in the apprenticeship legislation until the

¹⁵⁸A platform lost one of its legs, and subsequently turned upside down, resulting in the death of more than 130 people. Afterwards, questions about the welding quality were raised.

1980s. Not surprisingly, several of the plumbers presently employed at RMV have a vocational education based on the craft-like VVS-plumbing.¹⁵⁹

In the shipbuilding era, the plumbers were mainly involved in hull outfitting once the hull was launched from the berth. In simple terms, the process was as follows: pipe material, pipes and bends were taken from the stores to the pipe shop for prefabrication, shaping and eventually also the construction of a pipe system. Next, the workpiece was shotblasted and painted. Finally, the pipe system was mounted in the hull, and welders would complete the job. As was the case for plating, the ability to read and understand drawings was considered important, since a "packet" of technical specifications and drawings provided the specifications for each job. At RMV, plumbing has undergone similar changes to those experienced in welding and plating. While the basic work operations have not changed radically, the organizational changes have been important. With the implementation of an assembly line model, the responsibility of the individual worker has become more restricted than it used to be. At the same time, the transition to offshore related industry also meant that the plumbers had to deal with a wider range of materials, each with special properties which requires special treatment in the work process. In some ways, this diversity can be compared to the differentiation that took place in welding. Since the welders and the plumbers cooperate in their work, this is not surprising: systems mounted by the plumbers are welded by the welders

At present, the craft is divided in two main categories at RMV; industrial plumbing and instrumentational plumbing. As already mentioned, there are fundamental differences between the two. Put simply, the latter category deals with smaller diameter pipes mounted in highly complex hydraulic systems on a ship or a platform deck, while the former mainly deals with the larger pipes through which oil, gas, chemicals and other liquified substances are transported.

6.6.4. Machine workers/"turners" and mechanics

Responsible for various machines, winches and pumps onboard the ships, the machine workers and the turners historically held one of the most important and strongest positions in the workforce at RMV. The machine- and turning shop made parts for the engines, turned the axles, made valves and bolts and also constructed and installed propellers. The variety of production was therefore greater than in the other trades outlined above. Compared to platers, welders or

¹⁵⁹Information given by plumbers in interviews at RMV.

plumbers, a higher degree of precision in the actual work was (and still is) required of a turner or a machinist, even though the work pieces, for instance the axles, might be large. Knowledge of larger naval engine systems was also needed, since the installation and balancing of the ships' engines and engine systems was one task undertaken by these job categories at the yard. Not surprisingly, many of the machinists had work experience as chiefs or chief assistants in the merchant navy. In short, working as a turner or as a machinist demanded technical insight into the operation of the tools required in the practical work, into the functioning of the product that was made, and also into the specific techniques employed to produce a given work piece or to carry out tasks of considerable technical complexity. As with plating, vocational education for mechanics has been included in the public vocational school system for decades, either as classes in mechanics or as part of the vocational education for chiefs. Since 1957/58 the trade has also been covered by the apprenticeship legislation.

The main tool in the turning shop is of course the milling machines. Throughout the shipbuilding era and during the first 10-12 years of offshore related production, these were manually operated. Thus, the individual turner had to guide the turning process manually, and directly supervise and take part in the process. With the introduction of numerically controlled (NC) machines and/or computer-numerically controlled (CNC) machines, the work situation changed. The operators of NC or CNC machines have to know how to program these tools, but once this is done, the machines will carry out the work procedures on their own. When compared to the pre-NC/CNC period, in which turners were responsible for planning and guiding the work process, the work of the turners places much stronger emphasis on the planning of the machining process. Once the job is started, the machines will finish it automatically. While insight into the overall production process provides an element of continuity, the more "theoretical" knowledge of how to write the software programs that guide the process is a relatively new phenomenon.

The variety of pumps, winches, valves, engines and various kinds of machinery found on a platform deck is immense. With the transition to offshore related industry, therefore, the amount of installation work increased. At present, this category is therefore divided in two: those working in the turning shop, and those working with installation and machinery outfitting. The difference between the two jobs is evident; while the machine workers in the turning shop will manufacture machine products, the latter install the equipment. Nevertheless, both categories must be able to read complex drawings and follow

detailed installation procedures, and precision is still a common denominator when characterizing this work.

6.7. Social capital relations and patterns of intergenerational mobility at the yard

Presently, more than 860 people are employed as production workers at the yard. Before entering into the more detailed analyses, it is necessary to consider the yardworkers' trajectories in the local social space compared to the other inhabitants in the Stavanger region. Bearing the structures outlined above in mind, this chapter closes with a brief examination of social capital relations and mobility patterns among the workers at the yard.

Historically, relatives working at RMV were considered an important asset when trying to get a job at the shipyard: family relations could have status as valuable social capital in the labour market. The precise extent of this phenomenon is not clear, since it has not been studied and there is no comprehensive data to make it possible to examine this hypothesis in greater historical detail. It is clear, however, that relatives at the shipyard could be of vital importance when applying for a job.¹⁶⁰ This was also one of the criteria applied when deciding whom to accept or reject as a pupil at the RMV vocational school in the 1950s.¹⁶¹ In his studies of the recruitment trends, Michelsen concludes that this policy had gradually changed from the 1960s onwards: formal school qualifications increased in importance, while social capital relations gradually declined in importance. This process was completed in the beginning of the 1980s (1990b: 20-24), when the official policy was that an applicant had to have completed at least a one year vocational education in the public school system. As this indicates, the importance and the value of social-capital relations had diminished.

Of course, this does not mean that social-capital relations today are nonexistent at RMV. On the basis of survey data from 1998 (see the appendix for further details about the survey), inferences can be drawn about the present structures of family relations and also mobility patterns in the sample of production workers:

¹⁶⁰Thorstensen (1985: 25) mentions that he and two others were asked whether they had relatives or if they knew anybody at the yard when they first started to work at RMV in march 1925. All of them had relatives at the yard - and all of them got work. Of those I have interviewed, several have also had relatives working at RMV.

¹⁶¹Internal archives, RMV. Several of the interviewees also mention this as a general tendency.

6.9: Having, or having had relatives at RMV.

No relatives	Relatives before	Relatives now	Father	Siblings	Uncle(s)	Other relatives
48%	27%	25%	17%	15%	17%	29%

Although "only" 25% of the present workers have relatives at the yard, 52% have either had or still have relatives in the yard's workforce. One may therefore conclude that even though the official policy has been changed, therefore, these capital structures are changing slowly.

Both the table above and the occupational and educational mobility analyses in chapter 5 indicate that the direct intergenerational reproduction in the workforce is strong in the industrial occupations in the Stavanger region. The tables below further substantiate this hypothesis. For instance, 45% of the fathers of the present yard workers were employed in industrial occupations. Moreover, two of the most common parent-generation occupations of the workers: transportation, and farming/fishing/logging, are also occupations that in Norway have been historically characterized by a low general educational level:

6.10: Father's main occupation. Categories in Nordic Classification of Occupations (NYK).

Categories in Nordic Classification of Occupations.	Percentage
Technical, scientific, arts and artistic work	12%
Administration, leading positions in firms/organizations	4%
Office work	3%
Sales work	5%
Farming/fishing/logging	12%
Mining	3%
Transportation (including sailors in the merchant navy)	12%
Industry and construction work 1 (incl. platers, plumbers, metal workers etc).	35%
Industry and construction work 2 (incl. canning workers, dockers, dairy workers etc).	11%
Service work	4%
TOTAL, all categories.	101%

The fathers of a total of 73% of the workers have worked in occupations that usually imply a high degree of hard and exhausting physically labour¹⁶², i.e. characteristics that also apply to the yard workers' own work situation (see chapter 9, table 9.11 for more information).

¹⁶²Farming/fishing/lumbering, Mining, Transportation, Industry and construction 1 and 2.

A similar pattern of direct intergenerational mobility is evident with regard to the question of educational mobility. The father's highest level of general education is not usually above lower secondary school, for those respondents who have been able to answer this question at all:

6.11. Father's highest level of general education

	Percentage	Cum. percent.
Not indicated	46%	46%
Folkeskule/Ungdomsskule	25%	71%
Lower secondary (1 year+)	17%	88%
Upper secondary (2 yrs. +)	4%	92%
Lower Univ./higher ed. (12-13 yrs)	4%	96%
Higher Univ./higher ed. (14-15 yrs)	5%	101%
TOTAL	101%	•

In short, these tables indicate that there is a clear and strong tendency towards an intergenerational reproduction of the fathers' positions in the local social space by their sons, with the concomitant consequences for the formation of the structures in the latters' habituses.

6.8. Concluding comments

In this chapter, the main emphasis has been on the structural changes that have taken place internally at Rosenberg Verft in the postwar years. Focusing on positional, qualificational, educational and economic changes, I have considered how technological and organizational changes and changes in the yard's products have meant the eradication of some positions (for instance the riveters and the boilermakers), and the strengthening of others (such as the plumbers) and how formerly important positions (such as the turners) have become less central over the years. To use a Bourdieusian expression, their trajectories in the yard-internal occupational field have been different.

In addition, the yard workers' positions in the local social space have been further clarified in the brief analysis of the patterns of intergenerational occupational and educational mobility, and also in the (brief) survey of the most common residential areas.

The questions to be asked once again are: how are the processes, changes and events that have been outlined in chapters 5 and 6 remembered by the yard workers? And to what extent can a Bourdieu-inspired field analysis provide insight into the importance, or relevance, of these memories with respect to the yard workers' practices in general? These questions will be addressed in the analyses in chapters 7, 8 and 9.

7.0. Positional frameworks of remembering

7.1. Introduction

So far, the analysis has concentrated on changes in the objective social structures in the Stavanger region and at Rosenberg Verft: the number of people being located in a given occupation, in a department or in a position at the yard. Changes in the local educational, qualificational and economic structures, i.e. indicators of different types of capital, have also been described. Furthermore, the skilled workers' positions in the local social space in Stavanger have been identified, and changes in the structures internal to the yard have also been examined in some detail. In short, the first steps towards a field analysis have been taken by objectivating the structures and relations in the local social space and partly also the structures and relations in what might be called the local *occupational field*.

As earlier indicated, the dialectics between dispositions and positions, i.e. between the structures in the social space, the structures in the field/s and the agents' mental structures, is seen as the generating principle in Bourdieu's theory of practice. Analytically, this means that structures in the agents' habituses must also be objectivated. In chapter 3, it was also claimed that, since fields and habituses are seen as both products and producers of history, they should also have the capacity to structure the agents views on, or memories of, that history. The validity of this claim will now be investigated by analyzing the shipyard workers' opinions on and memories of processes and changes that are integral parts of the structural changes described in chapters 5 and 6. In chapters 7, 8 and 9, three further steps will therefore be taken in an analysis of positional, generational and yard worker frameworks of memories.

However, the relevance of a Bourdieusian field analysis of this phenomenon cannot and should not be taken for granted a priori. In order to analyze a social phenomenon in field terms, some additional characteristic features must also be identified. First, there must be a struggle over the *definition* and the distribution of field-specific types of capital and their value. What has status as capital in the field and what does not? What agents are seen as holding or not holding these types of capital? Are there struggles over "legitimate" and "illegitimate" ways of describing the other agents, the characteristics of their positions and their access to theses field-specific types of capital? What types of capital are needed to gain entry into or to stay in the field? Second, agents must also have, or generate, a habitus which predisposes them to take the "value" of

the field for granted, to participate in the struggles for power and positions in the field, and in consequence also to uphold and reproduce the structures and relations in the field. Third, and most important for the present analysis; the history and the agents' memories of the field, of the field positions and of the dominant field oppositions, must somehow also gain status as field specific symbolic capital, and thus be a sustaining element with respect to the reproduction of present symbolic power relations in the field (relations of power primarily based on integrity, trust, confidence, honour, moral obligations etc.).

Put somewhat differently, the problem to be addressed is how the dialectics between structures in the past and structures in the present not only generate and structure the agents' remembering practices, but also the processes through which symbolic (historical or "memorial") *coherence* is produced both within the field, and within and/or between the different field positions. Analytically, this implies that the focus must be on "legitimate" vs. "illegitimate" classifications, perceptions and opinions relating to *past* field events, changes and processes, as well as on systematic patterns of *knowledge* or ignorance about elements in the history of the field, and on systematic patterns of opinions on the *relevance* of specific elements in this history. The relations between these "memorial" patterns must also be considered, along with the agents' perceptions of and opinions on *present* field structures, field events, processes and relations, and the agents' present field practices, and their positions in the social space. (For a discussion of the inherent risk in this strategy, i.e. the risk of mistaking the agents' *views on* and *accounts of* the history of the field, for *the history of the field*, see the appendix.)

In chapter 7, the focus is on relations within the shipyard workers' positional social frameworks of remembering as the first element in a step-by step construction and analysis of the yard-internal occupational field. The reason for choosing this starting point is straightforward and rather trivial: positions have histories and are part of systems of relations that can affect the practices of the agents that are presently located in the same positions. At the same time, agents have the capability to reflect on and to have opinions on the centrality of this history, and also to act in ways that can change historically established routines, practices and relations. The main focus will be on *intra*-positional and *inter*-positional visions of struggles over field specific types of capital, and memories related to those, as well as on position-specific "lieux de mémoire" and views on the occupational field's history. In addition, given the theoretical framework, an

examination of the patterns of intrapositional and interpositional relations, similarities and oppositions is necessary.

Partly based on Elias' figurational approach and the pronoun model (see discussion in chapter 3), the analysis begins with an examination of some positional patterns with respect to whom is included and described as "us", and who is excluded and described as "them". How do the agents describe not only their own but also the other positions in the production at the yard? What are perceived as intrapositional characteristics, and as interpositional differences and similarities, and in what ways are the relations between the positions perceived?

This analysis will be linked to an analysis of these same agents' perceptions of positional hierarchies at the yard. There are several reasons for doing this. Firstly, social esteem may constitute an important type of symbolic capital in a given field, so positional variations or oppositions in perceptions of social esteem may be an indicator of the relevance of a field analysis. Secondly, the agents' perceptions of hierarchies may provide not only information about their "sense of [their] place, but also a sense of the other [agents] place" (Bourdieu 1987:156). Finally, the results of this analysis will be related to these same agents' position related perception of historical events and processes, their "lieux de memoire" and their epochal classifications.

In the chapters to follow, a similar strategy is employed, and the focus shifts to relations within other potential frameworks of memory, for instance generational frameworks of memory or "worker collective" frameworks of memory, as well as to the structured and structuring relations *between* these different social frameworks.

7.2. Positional patterns of "us" and "them", and perceptions of social hierarchies at the yard

At first glance, all the above questions seem fairly straightforward. However, as Renaud Sainsaulieu indicates in "L'identité au travail", they are rich in analytical implications and introduce complicated theoretical issues:

Percevoir l'autre, le partenaire de relations, dans toute la complexité de sa personnalité n'est pas un phénomène simple, car cela suppose qu'on soit capable de reconnaître et d'accepter sa différence. Or, c'est à ce point clé de l'activité perceptive d'un sujet que s'interpose tout l'écran des relations sociales. (Sainsaulieu 1977: 303)

An examination of positional patterns of inclusion and exclusion therefore will provide a lead to identifying the agents' perception of not only qualificational and social hierarchies, but also of the power relations at the yard. Moreover, it will also provide an indication of the centrality of one "space" of relations within the shipyard with respect to what has been conceptualized above as 'relational memory': the positional space of relations.

At the same time, this is not an analytical approach without pitfalls, since the risks of preconstructing the research object by statically applying the *presently* existing categories and positions are immanent. Over time, both the positions, and the relations, and therefore the space itself, have changed. In chapter 6, specific changes were enumerated - changes in the absolute number of people working as platers, plumbers, welders etc. (see table 6.1), in pay structures (see figures 6.1-6.3), in qualificational structures and in the ways the work was organized. There is every reason to believe that changes in the relations between these structures have resulted in related changes in the positional patterns of inclusion, exclusion, and evaluation. For instance, the position of a welder in 1970 is not necessarily the same as the position of a welder in 1995.

This must be taken into consideration both when constructing the positional space of relations and when analyzing the agents' positional memories of the same period. While some positions have been "rising on the horizon", others have been declining in power. While the tasks of some positions have been more or less the same throughout the period, others have been exposed to fundamental changes. This is also reflected in what the agents emphasized in the interviews. The plater cited below started to work at RMV in the early 1970s, while Rosenberg was still building ships. Looking back, the story he is telling is not a positive one:

The changes that have taken place, since I started as a plater... in the 1970s.... The trade has changed! .. In those days,... you were given a drawing, you'd go and get the materials yourself... you'd mark it [the plates]... Make the parts... Cut the pieces yourself... Put the pieces together.... And install them on the ship... or where it was supposed to be.....

Towards the end of the decade, he left RMV, but reentered the yard's workforce in the mid-/late 1980s, after Rosenberg had become an offshore yard:

When I got back ... I had become a fitter of pieces of LEGO. Everything was already...marked, cut, divided .. The job I was given was to assemble the parts. And there was a machine we platers used to see as a defeat if it was given to us. And that was the grinding machine. Nowadays, it's one of the most important tools. I hate it!.. I hardly touch

it! And that's something that's a part of me from [the] earlier [days]. But in my opinion... The work of a plater has completely changed. I'd say it's destroyed. (AE9)

One plumber's account of the same period, while less harsh in its judgement, shows clear similarities both with respect to the way the changes are described and the elements that are emphasized:

When we started a job... I was a plumber when we were building ships..We'd go down to the store.. Get what we needed.. We'd make the pipes... Take them to be shotblasted and painted..Get them onboard the ship..You'd install them..So we completed the job.. You would follow the circle all the way..Nowadays, we're only a part of that circle.. You see? You're given... If you work on the shop floor..You're given a drawing ...of a .. system of pipes..Only a small part... of larger system of pipes....And you're given.. the parts...You put them together..You pass it on...And you'll never see it again... Afterwards, you're given a new drawing.....So it's more like mass production...But that's the way it is....rationalized.. Its faster...(CC2)

From a welder's point of view, the same years appear in a completely different light:

We have greater challenges [in the job] today.... It's more complicated.. You really have to know your work! When I started [to weld] at Rosenberg, I dare say that I could have taken ... a one week course and I would have been fully capable of doing the job I was supposed to do in Hall 1. But today, I could never had done the job I'm doing if I'd walked straight in from the street and had taken a course in welding! You need some experience and... I've taken many courses at Rosenberg.. Been updated all along. (BE10)

But a static approach to the analysis of positions is only one risk of preconstruction involved in the analysis.

As Luc Boltanski has shown in his study of the formation of the category of "les cadres" in France (Boltanski 1982), the agents' ways of thinking about a group and group membership must be seen in relation to *both* the historical and the internal variation in a given category. While the categories of the shipyard workers are clearly more homogenous than the category of "cadre", this is yet another complicating factor in the analyses. Although subcategories are frequently collapsed into a single category (i.e. position in the space) as an applied analytical strategy, this may introduce yet another unwarranted preconstruction of the positional frameworks of memory. That a person can be located in an "aggregate" position, for instance as a welder, does not necessarily mean that the welders can be adequately described by this general category, nor that the welders are, or perceive themselves as, a homogenous group. On the contrary, internal

differences can even be perceived as *the* most important hierarchies, and thus influence the perception of who to include as "we" and who to exclude as "they":

-You know.. these pipe welders... They think they are far better than the rest of us.. I'm not the only one to say so... Many people do...

J.Hj: So the pipe welders have....

Yeah, these pipe welders...They've got big heads.. But they have problems... those who weld pipes.. MiG and TiG.. If they have to change to the usual types of welding, the welding we do..They're in trouble! They haven't done it for a long time...They notice the difference! (BA)

Collapsing these two different subcategories into a single category or position, therefore, cannot be done without a loss of analytical complexity. At the same time, practical and capacity related considerations often make this the only feasible strategy. This is also the case in my analysis, since it would have been virtually impossible to interview a sufficient number of people from all relevant job categories and subcategories at the yard within the limits of this study.

In my interviews with 38 former or actual Rosenberg employees¹⁶³, an attempt has been made to correct this "defect" by including three types of information, identifying not only the yard workers' positional frameworks of perception, but also their judgements as to what are important or valued aspects of jobs, i.e. potentially important structures in the agents' habituses: How do the employees perceive their *own* positions and work at the yard? How do they perceive the *internal variation* in their own positions and work at the yard? And how do they perceive *other* positions and types of production work at the yard? The results are presented in Matrix 7.1. Part 1-4. (See below.)

MATRIX 7.1. PART 1 HERE.

¹⁶³See appendix for further details.

Matrix 7.1: Positional patterns of "us" and "them". Part 1: The Platers.

	Platers	Plumbers	Welders	Mechanics/Turners
Platers	<p>We and the plumbers used to be the group of skilled workers (AA13)</p> <p>We can read drawings (AA15)</p> <p>We've been the leading group in the union (AA16/17)</p> <p>The work varies (AA20)</p> <p>A good plater must understand the drawings (AB5)</p> <p>When I started, this was one of the groups that really took pride in their work (AD)</p> <p>The trade is completely changed. Nowadays, we are "Lego-piece" builders. The trade is destroyed. Grinding is something we never did before (AE9)</p> <p>[Historically] It's an industrial trade that's also a craft. It's the closest you can come to a craft within the industry. (AE10)</p> <p>We go through the drawings. Then we start to work(AAB4)</p> <p>We get to move. (AAB)</p> <p>In Hall 1, they'll make the LEGO bricks .. We in Hall 2, we will fit the pieces together (AAB9)</p> <p>In hall 1, they do a lot of grinding. That's not plating! (AAB10)</p> <p>Building large sections, where you have to use some force.. That's the most fun. It's no fun sitting all day with a puzzle! (AAB19)</p> <p>In Hall 1, they do the same all the time..down in Hall2 you get into different things (KE4)</p> <p>What I like best in my work is the larger jobs. Where there are a large number of drawings../.../ Not just making squares ... Things that you don't immediately see ..how's it gonna be.But when you take a closer look [at the drawings]... That you'll have to find a way../.../Standing all day, burning squares or circles..Can't call that a great challenge.. (AAA7)</p> <p>When I started, plating was a challenge. /.../today, it's just building pieces of Lego. You don't have to think (AG2)</p> <p>If you work in the halls, you've got an assembly line production. /.../Nothing beats working outside the halls. You really get to see the globality [of the production process]. (AAD8)</p> <p>If I can avoid the halls, then I'm happy (AN8)</p> <p>We're the best riggers. (AAD11)</p> <p>Today, a plater is more like a fitter. Hasn't learned the trade the way we did. He's given ready, cut plates. Already fit together</p> <p>It's like building bricks he's putting together. (AF4[former plater])</p> <p>Is more like an allround craftsman. ..Makes a piece of work../.../ Works daily with drawings on order to do the job. And has knowledge about them (AF5)</p> <p>Previously, you'd educate a plater. Nowadays, you educate a fitter (AF17)</p> <p>Nowadays, it's more like a building brick system. And therefore, you're not as versatile (BB22[former plater])</p>	<p>We platers are also plumbers. It's just a question of the dimension of the pipes. Because a pipe is just a steel plate that's rounded. They don't like to hear it, but we (the platers) do a lot of plumbing... The plumbers are a group who take pride in their work.. In the group of industrial plumbers at Rosenberg, they are really proud. If the pipes have a certain dimension, they'll refuse to take them (AE11)</p> <p>They can also read drawings (AA15)</p> <p>I think we're rather equal. We've tried having people skilled in both trades (AF5)</p> <p>It's a "nice" occupation. It's clean. Rigging pipes ... /...../</p> <p>There is more dirty work in plating. (AAB19)</p> <p>It's interesting work. (AAB15)</p> <p>It's far more precision [in plumbing] than in plating.. But I think that the challenges are greater the drawings... have to find solutions of your own ..in plating (AAA9)</p> <p>The only difference is that...The visible progression is very slow. They might be on an area for days, .. perhaps weeks before there is a visible result [of their work] (AG6)</p> <p>They [platers and plumbers] are close to each other You deal in rounded instead of flat plates/.../ Plumbing has challenges of its own../.../There are more challenges in plumbing than in plating. It takes years to become a good plumber. More years than to become a good plater.. (AAD12)</p> <p>The drawings are more complex in plating. The drawings in plumbing is just a straight line! (AAD16)</p>	<p>Were not originally a skilled group. They would often start as point-by-point welders for a plater (AA13)</p> <p>Doesn't know how to read drawings. Can't orient himself on a drawing (AA15)</p> <p>I respect them.. Imagine sittin' all day long behind... It's a monotonous job..(AA20)</p> <p>Seems to be a boring job. They just sit there and weld all day (AB7)</p> <p>It's the worst job there is.. They must renew their certificates once a year..And it doesn't get any easier as you get older! (THJ8)</p> <p>They don't have any kind of social intercourse /.../ They can't have., because they sit behind a mask all day long. (AE)</p> <p>A major difference between us. /.../ He comes afterwards.. Welds the pieces together.. He's not dependent on drawings or anything like it do to the job. /.../ Less variety in the knowledge (AF5)</p> <p>I'm glad I'm not a welder. Imagine a seam, maybe 10 meters high. They sit there day in, day out until they're finished. Hardly get to move. They get to rise, stretch, .. put the mask back on.. and on it goes AAB9)</p> <p>I don't envy them.. They have a lot of difficult working positions and conditions (AAA7)</p> <p>I see the occupation as a monotonous,.. boring one. (AG5)</p> <p>I would never have been a welder!! I can't think of anything as less challenging..Just to sit there behind the mask and weld...Doesn't give me anything... But I admire them.. (AAD11)</p> <p>The TiG-welders ... They're really privileged (AAD21)</p> <p>Their conditions are different from ours. They've got something called the "Welders record".. A register of their mistakes. If they make a mistake, it's registered../.../ If a fitter does something wrong..nobody will notice it. (AAD22)</p>	<p>I would like to be a mechanic. They make things.. They make things that work (AB7)</p> <p>The machinists have always been in more of a status job... more precision work (EA14, former plater)</p> <p>The machinists, or the machine shop, used to be a shop within the yard. They were by themselves, and wanted to be by themselves. They would hardly lend us anything[tools]. They would look owlishly at us when we went through the hall. We had nothing to do in there. It was their home!!! It's easier today. They're weaker, and they need us. ... But earlier..They even had their own toilets. If you used it to take a leak,they would almost throw us right out /.../ It's become better today.. (AE11)</p> <p>Haven't had that much contact with this group.. (AF5)</p> <p>We'd also call'em "cleaning ladies"....'cause they would wash all the parts in white spirit ..And fit'em together. But we (the outfitters) were bloody respectful towards their foremen. If sparks from welding or grinding fell into the machine room and hit an axel /.../ we didn't dare to say who was to blame! (ED12-13)</p> <p>I didn't like it at school.. Turning... (AAA8)</p> <p>I think those working in the machine shop perceive themselves as one step up the [qualificational] ladder from us (AAA14)</p> <p>It used to be a very strong group.. But the job is very stationary. To me.. it's too much precision.. They deal in 1/100 millimeters..Can risk getting into mass production.. Maybe 100 copies of a product.. There is no challenge in that (AG6)</p> <p>The machine shop is hardly a part of Rosenberg anymore. (AAD)</p>

Starting with the platers, it is evident that some aspects of their own work are clearly considered more important than others when they are describing their own and the others' positions in the production at the yard. Firstly, *job variation* seems to be a keyword. The importance of variation in plating is emphasized, and is contrasted to the work of the welders in particular. Furthermore, the ability to *read drawings* - i.e. a specific competence or a qualificational aspect that is considered linked to a certain degree of job autonomy - is also emphasized. This is also seen as a "common" point of reference for the platers and the plumbers. Not only do both deal with steel plates (but of different shapes), but both must also have the necessary knowledge to read the technical drawings. The *formal qualificational* aspect of being a plater is also emphasized. Historically, "we" and the plumbers were among the "real" skilled workers. Both positions are also seen as arenas in which *challenging work* can be done. The job is not a straightforward one, and is for this reason also more craft-like than other jobs at the yard.

When talking about the welders, the lack of challenges is singled out as a key feature. In short, *their* work is seen as a polar opposite to what the platers appreciate in their own jobs: welding is perceived as static, solitary, monotonous, less challenging and boring. The lack of job autonomy is also stressed: not only are the welders heavily inspected and controlled. The job is also precarious: they must renew their certificates every year. Compared to the platers, they are therefore living with a constant risk of *losing* their qualificational status in the field. Their "sector" of knowledge is also seen as limited compared to the platers': they don't know how to read drawings, and don't need to know, since their work is not dependent on it.

The mechanics and the turners are described in completely different terms. Both their former and their present statuses are described as superior to the status of the platers. The precision and "neatness" needed in their work is also recognized, but historically, this was also an object of mockery. The pejorative tag of "cleaning ladies" implies a lack of masculinity compared to the work of the platers. And nowadays, there is also the risk of "getting caught" in mass production. But still, the turning shop is seen as a "shop within the shop"; i.e. the people located in this position have historically been perceived, and still are perceived, as a distinct group. In short, "we" do not know much about them, but what "we" did or do know, justified and still justifies respecting them as skilled workers. "Their" work was important, the people who did it had highly specialized skills, but "their" work and skills were clearly different from "ours".

Some of the same features also seem to distinguish the plumbers from the platers; plating is perceived as more "dirty" than plumbing, and as less precise work. The *visibility* of the progress being made, however, is less in plumbing. While the platers do not perceive qualificational criterias as a major source of difference between the two trades, physical aspects are of greater importance; the physical dimensions and challenges of plating are considered unequalled in plumbing. Whether or not this is actually true, is not analytically important. In addition, survey data from 1998 indicates only minor differences in the ways the respondents in these two positions perceive their own work situations. While 57% of the platers said that they always or often had to do hard physical labour, 48% of the plumbers said the same. What is important, is the *ways* this is used to distinguish between the two occupations. Nevertheless, this does not mean that the platers rank themselves higher than the plumbers:

Table 7.1: Perceived positional hierarchy, platers. N=80.

	Plating	Ind. Plumbing	Mechanics	Welding	Surface treatment
Very highly esteemed	12%	14%	12%	14%	14%
Highly esteemed	39%	38%	38%	26%	24%
Relatively lowly esteemed	36%	36%	39%	46%	40%
Very lowly esteemed	4%	2%	2%	5%	14%
No answer	9%	10%	9%	9%	8%
TOTAL	100	100	100	100	100

According to table 7.1, the data from this same survey indicate that the platers perceive the plumbers and the mechanics as more or less equal to themselves when it comes to the trades' social esteem at the yard. Only minor variations are evident. The welders are considered to be worse off, only "beaten" by those working as painters and shotblasters. How are we to interpret these distributions? Given the information in the interviews, at least two complementary interpretations can be found. Firstly, plating, plumbing and the mechanics have historically all had status as craft-like, and the persons holding these positions would often also achieve status of *skilled* workers. Although this did not apply to the shipwrights at Rosenberg in the early postwar decades (see for instance table 6.1.4, chapter 6), the survey data indicate that at present, 76% of the platers enjoy

this status.¹⁶⁴ Furthermore, in the interviews with the platers (as shown in Matrix 7.1.Part 1), plating and plumbing are also singled out as being among the original skilled trades at the yard: "We and the plumbers used to be the group of skilled workers" (SG13).

It is reasonable to hypothesize, therefore, that skilled workers in the "old" or "original" metal trades are perceived as equals with respect to social esteem by the platers. In contrast, the work and the work situation of the welders (and also of the painters/shotblasters) is perceived by the interviewees in the survey both as boring and as involving risks not present in plating. Thus, the historical aspects and features of present work situations may be considered relevant parameters for hierarchisation of positions.

But does this combination also affect the way platers perceive the internal variations in the trade? As Brown & Brannen (1970: 207) have pointed out in a study of British shipyard workers' views on various kinds of social relations, "[h]omogeneity at some levels is combined with diversity at others". While Brown & Brannen discuss this disparity with respect to visions of class society and internal group solidarity at a Tyneside shipyard, the findings in Matrix 7.1. add yet another dimension of complexity to this picture. In the interviews, many of the older platers claimed that their trade had degenerated since the shipbuilding era. In those days, being a plater implied that a person had to be familiar with the entire production process, and therefore had to know how to deal with and how to shape steel plates. Nowadays, the workers claim they have become "Lego" builders. For these people, plating is no longer the challenge it used to be. Various skills and types of knowledge have been lost. Monotonous work that was previously done by unskilled workers (usually a helper) - i.e. grinding - is now an integral part of their daily work. Yet, not all the platers are exposed to these changes in the same, fundamental ways. There are realms where "real" plating still exists.

But what relevance has this for the way the platers apply the parameters that are vital in the processes of group inclusion and exclusion? The answer is straightforward: the parameters that are employed when the platers describe the features distinguishing platers and welders, are also active when describing the internal differences and the perceived hierarchies within their own position. Monotony is contrasted with variation; limited knowledge and job autonomy with extensive versatility in knowledge and job autonomy. Within the position,

¹⁶⁴14% are special workers or helpers, while 10% are apprentices, i.e. skilled workers *in spe*.

the contrast is between the opportunities available outside the halls to apply one's skills in shaping the steel plates and to see the final results of production, and the (perceived) assembly line work carried out in halls, and particularly in Hall 1. The latter work is considered to demand only a limited knowledge of how to read complex sets of drawings, which is perceived as a prerequisite when working as a plater elsewhere at the yard. For these workers, therefore, "real" plating is not what is going on inside the halls. "Real" plating is perceived in more "historical" terms as a *trade*, and not in terms of "modern" mass production organized according to assembly line principles. The question of whether or not an assembly line work model is relevant at all when analyzing the work done in production in the shipbuilding industry, is in this case not important. The point is that this model can be used as a distinguishing parameter when talking about "us" and "them": in "real" plating, the workers move along the production chain, and have the ability to "see through" the whole production process (i.e. the process is characterized by an element of "transparency"), whereas in the work done in the fixed position in the halls this is not perceived as possible (i.e. the assembly line work model is felt to lack process transparency). Depending on the contexts and the relations that are focused upon, therefore, it is also possible to distinguish between different "us"s and "them"s within this position. The relation between positional frameworks of memory and perception and what I have called "departmental frameworks of memory" (and perception) in an earlier study (see Hjellbrekke 1993, chapter 6) must also be taken into consideration when analyzing the platers' positional frameworks of memory.

Given the theoretical approach set forth in chapters 3 and 4, the above outlined patterns are in themselves of only limited analytical interest if not seen in relation to other positions at the yard and the perceptions and views of the same phenomena held by the agents in *these* positions. As we have seen, the platers emphasize the similarities between their own work and the work of the plumbers. We shall therefore turn to the plumbers' perceptions and ways of describing the same positions:

Matrix 7.1: Positional patterns of "us" and "them". Part 2: The Plumbers.

	Platers	Plumbers	Welders	Turners/Mechanics
plumbers	<p>We used to say.."Imagine being a plater.. A large sledgehammer, and lots of wedges/.../ Rigging large metal sections doesn't seem interesting (CC11)</p> <p>No major differences. We deal with rounded plates, they deal with flat plates. (CD)</p> <p>It is very close to what we do (CB).</p> <p>Doesn't seem interesting to work with the large-scale sections and large pieces of steel (CC10)</p> <p>Different sets of drawings.</p> <p>Does not have the variation and knowledge of materials that we do(CB9)</p> <p>Not a trade where you're allowed to get old (CBI13)</p> <p>It's noisy work. They use the sledgehammers a lot (CA11)</p> <p>They work on pipes that are flattened</p> <p>There's no big difference, really. Probably mostly down to the drawings. /.../ Involves a lot of use sledgehammers and wedges Things we don't use. (CCA5)</p> <p>It's much the same.They deal with squared pieces, we deal with round (CCB5)</p>	<p>Must know how to read technical drawings (CD)</p> <p>We <i>make</i> something. (CC12)</p> <p>Must know how to read isometric drawings (CC18)</p> <p>Priveleged, because there are changes. You don't get bored (CC30)</p> <p>Knowledge of various materials and their treatment (CB9)</p> <p>We have a degree of self-inspection (CB38)</p> <p>On the prefab, you just have to follow the drawings. Outside, on installation, you must improvise (CA10)</p> <p>Today, the trade involves too much grinding (CA25)</p> <p>When working in prefab, we must follow the instructions closely. (CCA4)</p> <p>I prefer Inst.P. when compared to Ind.Pl. When working in instrumentational plumbing, you must always think two steps ahead. (CCB3)</p> <p>I don't like dealing with these larger things(CCB5)</p> <p>You have more freedom when you work outside the halls (CCB7)</p> <p>Working in the halls is more like an assembly line(CCB29)</p> <p>No revolutionary changes in the work itself the last years (CCB)</p> <p>We must be more productive (CCB p. 26)</p> <p>The foremen are more sloppy nowadays(CCB27)</p>	<p>The work doesn't give you much /.../</p> <p>Sitting with a tread all day long. Wouldn't have the patience to do it(CD8)</p> <p>You're in a world of your own./.../A lonely job/.../Does not appeal to me/.../Can't see it ... 20 meters of seam (CC12)</p> <p>They must have knowledge about the ways the material changes when welded (CB9)</p> <p>They need all the certificates (CB37)</p> <p>Heavily inspected (CB38)</p> <p>Doesn't seem to give you much. Putting layer upon layer on a pipe. Stationary work were you don't move. I wouldn't like to be a welder (CA11/14)</p> <p>I guess it is a somewhat monotonous job. Sitting behind the mask all day long (CCA5)</p> <p>I wouldn't like to do it. Sit all day long, looking down in a melting bath (CCB4)</p> <p>If you have local "kings" at RMV, it must be the TiG-welders (CCB20)</p> <p>"The TiG-welders are a group who.. know their trade... But some people have... for this reason... become big-headed (BBB44)</p>	<p>The "climate" and the foremen were tough (CD)</p> <p>They make something. I could have worked as a turner (CC12)</p> <p>Compared to the turners, there are major differences between us and them. But those working outside, installing pumps and machinery are more like us (CCA5)</p> <p>I liked turning. I like jobs where you have to concentrate (CCB)</p>

As the first column shows, there are some clear commonalities in the ways the plumbers and the platers perceive and describe each other. Both emphasize that there is "common ground" between the trades, much of which is due to the fact that the material both are dealing with is mainly steel. Furthermore, the importance of the drawings is repeated. In this respect, the differences between the two are not perceived as important.

But this does not mean that differences are *not* perceived and that in the same ways the parameters of inclusion and exclusion are applied in these two positions. The plumbers' emphasis on the platers' use of sledgehammers and wedges is of particular interest here. While the remarks about these tools not being part of the plumbers' usual toolchest might perhaps seem trivial, their implications are not. Instead, these remarks should be seen as an indication of the plumbers' perception of "die feinen Unterschiede" between the two trades. Not to overdo the argument, the bottomline is simply that the plumbers have a different perception of and attitude towards the use of brute force in their work than that found among the platers.

In short, the interviewed plumbers consider extensive use of force a negative feature or an indication of negatively valued challenges in their daily work. Not only is the use of sledgehammers associated with a noisy work situation: it is also considered as one of the longterm factors contributing to physical exhaustion. But this is only part of the story. Although the plumbers strongly emphasize the similarities between plumbing and plating, their remarks can also be interpreted as an indicator of a perceived *hierarchy* ranking the two trades. While plating seems to be associated with the heavy work of a blacksmith, their own work is perceived in somewhat different terms, no matter what kind of plumbing they are doing.

Firstly, differences in the sets of drawings are emphasized by several of those interviewed. Plumbers must know how to read isometric drawing, which are more complex and precise than those used in plating. Secondly, the variation in materials and steel qualities is considered larger in plumbing than in plating, so the plumbers must also be more skilled than the platers in handling materials. Knowledge of the way a steel pipe will react to various kinds of treatment, and its limits of tolerance, is also seen as crucial. Thirdly, precision is also considered an absolute must when working in the plumbing shop. Extensive use of physical force and sledgehammers is, for obvious reasons, not associated with complex precision work, i.e. the work the plumbers see themselves doing. Moreover, for this reason, plumbers' tools can be more than simply tools: they may also be among the symbols that, despite all the similarities, are applied by the members of this group in order to distinguish between "us" and "them".

However, like the platers, the plumbers employ these interpositionally perceived differences not only when distinguishing between themselves and other positions at the yard. Similar patterns to those found within the position of the platers with respect to perceptions of differences and hierarchies of preferences, are also found within the position of plumbers. The descriptions of work in the prefabrication halls, work outside the halls, and work with instrumentational plumbing bear a clear resemblance to the platers descriptions of work as a plater in Hall 1, in Hall 2 or outside the halls. As shown in matrix 7.1. Part 2, work as a plumber in the prefabrication halls is generally the most negatively valued, and is repeatedly associated with assembly line work by those interviewed. Compared to the installation of larger pipe systems, the prefab work is considered to be simple, with little room for variation and improvisation, limited freedom and few challenges. Instrumentational plumbing is perceived in still other terms, as "analytical" work - "you must always think two steps ahead"

- in which workers have the possibility to shape the pipes and to see the totality of the systems being produced (i.e. the transparency > < opacity distinction). Prefabrication is "simply" a matter of following specific instructions and of fitting usually pre-made parts together.

But resistance to an assembly line work model is not the only reason for these "internally" perceived differences. Judgements similar to those passed about the rough "blacksmith" work of plating are also an implicit element in the perceptions of the differences distinguishing between work of an industrial plumber and that of an instrumentational plumber. Having first mentioned how plating implies extensive use of sledgehammers and wedges, and how plating and industrial plumbing carried out in the halls were the same in many ways, one of the interviewed would go on to say:

...It [industrial plumbing] seems .. so huge...Large sections to fit together..Doesn't seem interesting to me... That's why I've been doing a lot of smaller pipes... I was educated as a ship plumber. But... if I'm given a large pipe today.. I'm getting a little bit uncomfortable.. I'm used to working with.... 20 mm's [diameter] and smaller... Been doing it for 10 years...More or less... But of course, I've been.... In periods when you're not given small pipes like these... Then I've been working in the plumbing shop. ... Was given.... First job I was given this autumn... Given a 24" bend... on a large table... It was like.... It wasn't right!... It wasn't me! (CC11)

Put simply, the size of the pipes here seems to be a symbolic counterpart of the sledgehammers: "real" plumbing - in other words "me" - is not about pipes of enormous dimensions. The realm of "real" plumbing is instrumentational plumbing, and the challenges implied in installing complex systems of (smaller) pipes. It is here the above mentioned qualities typical of the "real" trade still are seen to exist. When asked about what other jobs at the yard they would have liked to do, these workers replied a turner or a mechanic. The reasons given were straightforward: these jobs are considered to involve precision work in which concentration is required, and feeling of actually making something is achieved.

Given this internal variation it is problematic to describe the position of the plumbers as homogenous. The internal distinction between industrial and instrumentational plumbing is a characteristic that in a critical sense also makes it possible to establish an internally perceived hierarchy in which the above mentioned elements once again constitute the central parameters of hierarchisation.

Nevertheless, homogeneity is "reinstalled" in the ways the plumbers perceive the job of the welders. No matter what kind of plumbing those interviewed were usually doing at the yard, they described the work of the

welders in the same negative terms as the platers. Extracting phrases from several interviews, the bottomline can be summarized as follows: "Sitting behind a welders mask all day long, alone, looking down in melting bath...that job can't give you much!" In short, contrasted to their own work, welding is considered lonely, stationary and monotonous. The level of surveillance, inspection and pressure welders work under is also considered tough and devastating. Nevertheless, the views of the plumbers and the platers differ somewhat; for example, TiG-welders (highly specialized pipe welders who work in cooperation with or finish the work of the industrial plumbers) are singled out as a strong group *who know a lot* about the materials they are dealing with.

To return to the survey data, the patterns of perceived positional hierarchy are somewhat more complex than those of the platers. At first sight, the overall impression is of homogeneity:

Table 7.2: Perceived positional hierarchy, plumbers. N=60.

	Plating	Ind. Plumbing	Mechanics	Welding	Surface treatment
Very highly esteemed	15%	17%	10%	13%	8%
Highly esteemed	23%	27%	35%	23%	17%
Relatively lowly esteemed	45%	42%	42%	40%	37%
Very lowly esteemed	12%	10%	8%	18%	33%
No answer	5%	4%	5%	6%	5%
TOTAL	100	100	100	100	100

While the painters and shotblasters ("surface treatment") are clearly perceived as occupying *the* position of lowest esteem at the yard, the other positions seem to be perceived as quite equal. Ranging from 40% to 45%, all positions have their modus in the category "relatively lowly esteemed". Membership in a production category at the yard, is evidently not valued positively with respect to yard-internal social esteem. However, since all positions obtain double digits in the highest esteem category, the picture is also characterized by variation.

Closer examination reveals structures that modify this general picture in minor, but nonetheless sociologically significant ways. The plumbers perceive all of the positions as "very lowly esteemed" more frequently than the platers. By combining the categories into "highly esteemed" and "lowly esteemed" in tables 7.1. and 7.2, it becomes possible to distinguish between the plumbers' and the platers' perceptive structures regarding yard hierarchies. The platers' displayed a dichotomous perception of social statuses, with platers, plumbers and mechanics

ranking above welders, painters and shotblasters. In contrast, the plumbers operate with three "levels" of esteem. At the bottom are the painters and the shotblasters. On the intermediate level are the platers and the welders, who are ranked in similar but not identical ways.¹⁶⁵ While the platers rank themselves above the welders, the plumbers tend to rank the two as more equal. On the top level, if only by 6 to 9 points, are the plumbers and the mechanics, i.e. positions that historically have not only had a higher percentage of skilled workers than the platers, but have also seen themselves as exponents of precision work. Thus, despite an emphasis on the similarities between these two metal trades, there are still small, but critical features that the plumbers perceive as important in distinguishing between their own and the platers' social esteem.

According to the interviews, both platers and plumbers must cooperate with the welders in their work at the yard: they rig and point-by-point weld the plates of a section or a part of a pipe system, and the welders are the ones who usually finish the job.¹⁶⁶ In contrast to the platers and the plumbers, the welders work alone and in static positions. These characteristics are among those also singled out by the welders in describing their own and others' work at the yard. At first sight, the descriptions of welding provided by the platers and the plumbers seem to be confirmed in the welders' self-descriptions. Not only is their work seen as solitary; it is also closely inspected, and the welders see themselves as being under a constant pressure not found elsewhere in production. While descriptions of their actual work are harder to come by, their relations to the other positions in production are emphasized. When describing these relations, the keyword is sloppiness: not only are "we" (the welders) the ones who are left with the problems caused by the others' lack of precision, "we" are also the ones who must suffer the consequences when the final inspection takes place:

¹⁶⁵The welders are ranked somewhat lower than the platers, but when the categories are collapsed, the welders' "negative" score is 58%, whereas the platers' negative score is 57%.

¹⁶⁶This does not apply to instrumentational plumbing.

Matrix 7.1: Positional patterns of "us" and "them". Part 3: The Welders.

	Platers	Plumbers	Welders	Turners/Mechanics
W e l d e r s	<p>Haven't been that many changes. /.../ May have taken some courses. Know something about interpreting drawings.. (BE11)</p> <p>The cooperation should have been better. There are great internal differences in the group. There have been some conflicts between us and them.(BF17-18)</p> <p>They can do a job, and get it finished, even if it's not done the way it should be.(BBC6)</p> <p>They do a lot of sloppy work! (BBD6)</p> <p>I would've liked to be a plater! /.../They work in pairs and trios. (BBA9)</p>	<p>The work- tempo is more even. (BBB16)</p> <p>Larger variation in the work. The work is more interesting (BBB18)</p> <p>The plumber must be really skilled in his job. Must be able to interpret drawings, have insight into the drawings (BE12)</p> <p>They can do a job, and get it finished, even if it's not done the way it should be.(BBC6)</p> <p>They do some sloppy work, but are better than the platers!(BBD6)</p>	<p>Nobody has the same pressure as the welders have. Both physiological and psychological pressure. Three mistakes, and you're out.</p> <p>The welders do not support each other the way they should (BBB16)</p> <p>Intensive periods of work. You can go an hour or two without doing anything, but then have a lot to do (BBB17).</p> <p>We have a competence that is far above what's found elsewhere [in the industry] (BBB25)</p> <p>When I started to weld at RMV, a week's course would have done in the job I was doing in Hall1. Wouldn't do today! (BE10)</p> <p>New certificates, new technology etc. etc have changed the job (BE)</p> <p>We must do our job 100%.We're closely inspected. We're the one's who get the shit left by the platers and plumbers! We're the ones blamed! (BBC6)</p> <p>There are no status differences within the group (BBC11)</p> <p>They demand 100%! The control of your work is total (BBB3)</p> <p>The control is far more strict than it used to be (BBD10)</p> <p>As a welder, you work on your own. It's OK, but in the long term you get bored..sitting...staring at that silly arc. You'll become slightly crazy.. Start to sing to yourself inside the mask.. And have great fun! Hah! (BBA9)</p> <p>The pressure the foremen put on us is enormous. (BBA25)</p> <p>It's not an occupation that anybody would want to enter, to put it bluntly. You're bloody exhausted.. You notice.. your grip, your back... (BBA27)</p>	<p>They're the local kings..If they're working somewhere, .. and there is a welder nearby... We can't stay there...close to 'em. Maybe there'll be a spark [from the welding] ... Sparks don't reach that far.. But if they have something going somewhere.. everything that's ours must be cleared out of the way.. Just have to get out of the way!</p> <p>Everything must be clean and shining! (bba9)</p>

To put it simply, the welders' position is seen as being "caught" in a crossfire. Dependent on the work of the platers and the plumbers, "we" risk getting into conflicts with "them" even before "we" start to do our job; and once the job is done, "we" risk getting into trouble with the inspectors, partly because of mistakes made by the plumbers or the platers.

Here again, this picture is not without nuances. While both platers and plumbers focus on the deskilling of their work as a result of its assembly line organization, the welders focus on the improved quality of their work compared to what they achieved in the shipbuilding era. In short, the perceived history of their position involves qualificational upgrading. While the inspections have become tougher, they themselves have also become experts: nobody could enter the production nowadays the way they did in the 1970s.

How is this reflected in the welders' perception of the social esteem of various positions? In the survey, the painters and the shotblasters are at the bottom of the status hierarchy once again. Since these are the best paid of all positions in production, the relation between social esteem and economic pay-off seems to be inverted. At first glance, the welders seem to respond in the same ways as the plumbers; with the exception of the mechanics, the moduses of all positions lie in the category "relatively lowly esteemed". Nevertheless, there are some important differences between the welders and the platers/plumbers perceptions of these hierarchies:

Table 7.3: Perceived positional hierarchy, welders. N=102.

	Plating	Ind. Plumbing	Mechanics	Welding	Surface treatment
Very highly esteemed	4%	5%	3%	7%	2%
Highly esteemed	33%	35%	41%	32%	25%
Relatively lowly esteemed	42%	43%	38%	40%	40%
Very lowly esteemed	8%	5%	4%	11%	21%
No answer	13%	12%	14%	10%	12%
TOTAL	100	100	100	100	100

Firstly, the non-response rate for the welders is the highest of the three, being in the double digits for all positions. At the risk of overextending the argument, it is tempting to ask whether this may be related to the welders' "isolated" work situation. Secondly, *none* of the positions are in the double digits in the highest category of esteem; with regard to the yard-internal social status of these positions, therefore, the welders are clearly more "critical" than the platers and the plumbers. Thirdly, in the highest category of social esteem, the welders display the greatest disparity between the received and the self-perceived status at the yard. They rank the platers and the plumbers 8 points and 12 points lower than these two see themselves. Having their own position ranked lowly by others, therefore, seems to influence the agents' dispositions when ranking *all* these positions' social esteem.

Combining the categories in the table into dichotomies once again, but this time focusing on the category "lowly esteemed", a perceptive structure with three layers emerges: surface treatment is "safely" located at the bottom, obtaining a combined negative score of 61%. On the intermediate level, are the platers, the plumbers *and* the welders, with 50%, 48% and 51% respectively. Thus, the

welders are inclined to see the positions they are closest to as more or less equal to themselves when it comes to social esteem at the yard. On the top level, if only by a margin of 6%, are the mechanics, , referred to in terms similar to those used by the platers, and even described by one of the interviewees as "the local kings".

But it would be misleading to claim that this is how most welders describe their relations to this position and the work done there. Apart from the single comment presented in Matrix 7.1. Part 3, the welders would not go into greater detail in their description of this position. The reason given was logical and straightforward: except for situations like the one mentioned in the matrix, they had hardly any contact at all with the mechanics and/or the turners. For this reason, they didn't know much about either them or their work. Nevertheless, in the survey, the welders still consider the mechanics to occupy a position that is "best off" in the yard's status hierarchy (a combined positively valued percentage of 44%).

I shall refrain from further speculations about what parameters the welders have employed when evaluating these positions' social esteem at the yard. Instead, I will briefly turn to the turners and the mechanics:

Matrix 7.1. Part 4 HERE.

Partly due to access problems and to practical problems in data production, the empirical basis for drawing conclusions about the respondents in this position is weaker than for these analyzed above. While the response rate of the mechanics (46%) is not significantly lower than for any of the other positions covered by the survey, the total number of respondents is still only 18.¹⁶⁷ Although certain inferences can be drawn, this is not an ideal basis for a more detailed comparative analysis of distributional profiles. This has therefore been omitted.¹⁶⁸ Secondly,

¹⁶⁷In a univariate distribution, one respondent will thus count as 5.5%.

¹⁶⁸ But the results are as follows:

Table 7.4: Perceived positional hierarchy, mechanics/turners. N=18.

	Plating	Ind. Plumbing	Mechanics	Welding	Surface treatment
Very highly esteemed	17%	17%	22%	17%	17%
Highly esteemed	44%	44%	50%	39%	22%
Rel. lowly esteemed	33%	33%	22%	39%	22%
Very lowly esteemed	0%	0%	0%	0%	33%
No answer	6%	6%	6%	5%	6%
TOTAL	100	100	100	100	100

Once again, the painters and shotblasters are clearly located at the bottom of the hierarchy of social esteem.

the number of *interviewed* mechanics/turners is as low as 4. While position characteristics can be identified on basis of these interviews, it is still problematic to draw definitive conclusions from this material. These two factors must be taken into consideration when considering the patterns outlined below.

Matrix 7.1: Positional patterns of "us" and "them". Part 4. The Turners.

	Platers	Plumbers	Welders	Turners/Mechanics
T u r n e r s / M e c h a n i c s	<p>Our job is far cleaner.. The platers... deal with large, heavy steel plates.. Lifting... grinding.. and it's very noisy .. plating (DDA7)</p> <p>They don't have the tough limits of tolerance... and tough standards... that we do. Their products will be further "refined".. Welded... outfitted.. (DDB5)</p> <p>I think plating was seen as important. But it was really.... It was far easier to get into plating than start in the machine shop! I feel that the machine shop..It was very hard for people to get a job in the machine shop.. They showed me too..they picked the boys they wanted to become turners or to be... That's the feeling we had! (DA1:17)</p>	<p>If it was instrumentational plumbing... I could have worked as a plumber. ... Rigging thin pipes...But I would never have been an industrial plumber.... they weld the pipes... (DDA8)</p>	<p>I've tried to weld... 2-3 hours. But I can't imagine myself sitting like that a whole day. Day in...day out.... with the stick in my hand.. It's too..monotonous.. (DDA17)</p> <p>I would never have been a welder.. A welder just welds all day. Can't see me doing it. As a mechanic, the work is more varied (DA6)</p>	<p>"Well..I had the feeling that..it was attractive..getting a job at the turning shop...And I think they picked the best ones..You must remember that those who started in the turning shop usually had some kind of education...Chiefs.. Had been sailors..and needed schooling to get in.." (DA7)</p> <p>We work in the hall all the time. In some ways.. we're somewhat isolated. /.../ We really get on with each other in the group. (DDA3)</p> <p>[Operating a CNC-machine] is a ... great responsibility... We have more control in the manual benches.. You can stop.. control... You must be pretty selfconfident when operating a controlled [bench]!The work is varied! (DDB1)</p> <p>It's finer mechanics.. Very focused on limits of tolerance (DDB5)</p> <p>We used to be the largest department at RMV...when it came to the amount of work. (DDB6)</p> <p>We [on the shop floor] make [the equipment] they [in installation] install. (DDB12)</p> <p>I used to work as a turner for 6 years. Operated a milling machine. Afterwards I moved out.. What we call a mechanic..Various kinds of installation work.... It was like being liberated..Not locked up..Standing at a bloody bench all day..You're so much freer/.../You have a wider specter of possibilities ...in many ways.. (DB)</p>

When looking at matrix 7.1. part 4, apart from 'responsibility', two of the keywords the turners used in describing their own position are the same as those used by the plumbers: 'precision' and 'variation'. Working as a turner or as mechanic is seen as demanding . Historically, a vocational education was seen as one of the key characteristics of the trade. Plating is described in similar forms to those used by the plumbers': they are doing blacksmith work and the job is noisy. The difference between industrial and instrumentational plumbing is also recognized, and if forced to change jobs, two of the interviewed would have

chosen to become instrumentational plumbers. None of the other trades appealed to them. Once again, welding is seen as the worst job there is, being static, solitary and monotonous.

So far, the welders, the plumbers, the mechanics/turners and the platers seem to "agree" as to what parameters to apply when classifying or describing their own and the others' positions in production. In short, a pattern where monotony is contrasted with variation, where limited knowledge, responsibility and job autonomy are contrasted with diversity in knowledge and skills, larger job autonomy and responsibility, and where precision in work is contrasted with a lack of precision. When it comes to evaluating one's own work and that of the others, these axes of oppositions seem to be the most important ones. But as indicated above, this does *not* mean that these parameters are applied in the same ways by all agents. Depending on the agents' positions, some parameters are clearly perceived as more important than others. In consequence, a position may be described in similar ways by *other* positions, and yet be ranked differently with respect to its perceived social esteem. An "agreement" on the parameters of hierarchisation therefore does not result in identical *perceptions* of hierarchies at the yard.

At the same time, it is clear that the perceived history of their position is an integral element in the self-descriptions provided by both the welders, the platers and the plumbers. While the plumbers and the platers both emphasize the negative effects of the assembly line model, the welders tend to focus on the qualificational upgrading. But can these differences and oppositions plausibly be seen as generated by differences in the various positional habituses? Given the historical and relational approach outlined in chapters 3 and 4, this question cannot be answered without obtaining a clearer idea of the *present* yard-internal capital structures. In a Bourdieusian approach, the agents' habituses can also be seen as an embodiment of, but not as a mere reflection of, these capital structures. Before analyzing positional practices, including practices of remembering, it is therefore necessary to examine these capital structures in greater detail. Having already described their historical development from 1958 onwards, the next step in the analysis is therefore to objectivate the yard's present internal capital structures. Once again, this will be done on the basis of the survey data produced in 1998.

7.3. Internal capital structures at RMV

When all the worker positions that had more than 10 respondents are included¹⁶⁹, a multiple correspondence analysis (see for instance Hjellbrekke 1998 for further details) of 10 capital variables¹⁷⁰¹⁷¹ from the survey (internally stabilized for 3 axes¹⁷²) gave the following result:

FIG 7.1. HERE

The three most important axes summarize respectively 4.91%, 4.32% and 3.5% of the inertia.¹⁷³

After a visual inspection of figure 7.1., the first axis can be interpreted as an overall capital volume axis, i.e. as describing a capital hierarchy. Categories indicating high capital values, for example personal and household income, value of house, level and type of vocational education, qualificational status, relatives at the yard now or previously etc. etc. all have positive coordinates on this axis, while categories indicating low capital values are given negative axis coordinates. Positions located on the positive side of this axis therefore are

¹⁶⁹For this reason, the electricians are excluded from the analysis as an active category. Also, the position of the apprentices is not included in the set of active categories, even though there are as many as 31 responses from the apprentices. The reason for this is mainly technical. When the apprentice category is included in the active set, its absolute contribution to the first axis is as high as 0.115. Although this point does *not* destabilize axis 1, the internal balance is radically improved when the category is excluded. No single category dominates the axis. Furthermore, and more importantly, the results of the analyses of these two sets of active categories are more or less identical. Given this fact, excluding the apprentices does not affect the conclusions that can be drawn from these analyses.

¹⁷⁰The respondents' positions in the production, the year they first entered Rosenberg Verft, their qualificational status, whether or not they have had relatives at the yard, their present/former relatives at the yard, their personal incomes, the value of houses, their household incomes, their years of education past elementary school ("Grunnskole"/"Folkeskole"), and all kinds of vocational education.

¹⁷¹Due to the coding principles applied, there are 21 active variables in the analyzed set. This is due to the fact that all the categories in a multiple response variable will usually be coded as a binary variable. I am grateful to professor Michael J. Greenacre, who took the time to look through the applied principles at the "Empirical Investigations of the Social Space" conference in Cologne, Oct. 7.-10. 1998.

¹⁷²Accordingly, some categories have been excluded as active categories. This is the case for "RMV 1994-98" and "No ed. beyond "folkeskule/grunnskule" (elementary school), an opposition that, given the structures found in chapter 5, must be seen as selfevident and in this respect therefore analytically trivial: The majority of the oldest RMV-workers did not have any school education after "Folkeskule". The majority of the newly employed do. Even so, the exclusion of these points does not affect the overall structure in any significant way.

¹⁷³These percentages might seem small, but see Hjellbrekke 1999, chapter 3 for additional information about how to interpret the results of a multiple correspondence analysis.

relatively strong capital holders, while those located on the negative side of the axis may be considered weaker capital holders. This interpretation is confirmed by an examination of the categories making the most important absolute contributions to axis 1¹⁷⁴:

Table 7.4: Categories with and absolute contribution >1/K to axis 1 (CV=0.013).

Axis 1	
Negative coordinates	Positive coordinates
Welders=0.035	Plumbers=0.013
Special workers=0.038	Plumbing/Plating=0.023
No relatives RMV=0.038	Foremen/Functionaries=0.019
Father not at RMV=0.014	Dual competance=0.045
Don't own house=0.050	Relatives at RMV now=0.021
5 years ed+=0.025	Relatives RMV before=0.013
No vocational ed=0.039	Father at RMV=0.043
34/2: Voc. ed <i>other</i> than basic=0.018	Brothers/sisters at RMV=0.019
34/4: Voc. ed <i>other</i> than §20=0.025	Uncles at RMV=0.024
34/7: Voc. ed <i>other</i> than various courses at RMV=0.032	House value 800'-1000'=0.017
Personal income 100'-200'=0.038	House value 1250'-1500'=0.024
Household income (HI) _200'=0.050	1 year ed+=0.024
	§20=0.044
	Various courses at RMV=0.039
	Basic voc. ed. at RMV=0.016
	Personal income 311'-351'=0.020
	Personal income 351'+=0.014
	Household income (HI) 501'+=0.015

Of the positions discussed above, the welders are once again "worse off" than the others; they have the highest negative coordinate on the axis. Thus, the welders location in the capital hierarchy at the yard seems to be translated into a similar position in the hierarchy of social esteem. The same applies to the plumbers; they are not only ranked among the highest when it comes to social esteem both by themselves and others, they are also located in the capital strong sector of the axis. At the top of the hierarchy, are those skilled both as platers and plumbers. Up to this point, there seems to be a correspondence between a positions' location in the yard's capital structures and the agents' perceptions of their social esteem and valued job characteristics, i.e. a correspondence between the social structures and the agents' embodied or mental structures of classification.

But this claim must not be overextended. While the shotblasters and painters have consistently been ranked low and their work is described in

¹⁷⁴The complete matrix can be found in the appendix.

negative terms by the other categories, their joint position (surface treatment) is located on the capital "strong" side of the axis (close to the plumbers), largely due to their wages. The relation between a position's economic capital power and its symbolic capital power (here defined as social esteem) therefore is not a direct one; high wages cannot be converted directly into high social esteem. In this case, symbolic capital cannot simply be reduced to a reflection of economic capital.

Moreover, the mechanics and the platers are located close to each other on the axis' negative side. These two categories are the ones receiving the lowest relative contributions from the axes; being less homogenous¹⁷⁵ than the other active categories, they are also less well described by the same axes. It would be incorrect, therefore, to claim that the positional hierarchies identified above can be considered mere reflections of a position's *present* location in the overall capital hierarchy at the yard. Instead, it is apparent that multiple dimensions are active in the stratifying processes at the yard.

This is clearly demonstrated on the second axis. While the first axis is a global capital axis, the second can first be interpreted as a capital *structure* axis. Looking at fig. 7.1 and table 7.5 (see below), it is evident that axis 2 distinguishes internally between those with the highest scores on the variables indicating economic capital¹⁷⁶ and vocational education and qualifications (i.e. a field specific type of cultural capital), and those with the highest scores on the social capital variables, here defined as length of time at RMV and relatives working in the past or present at the yard. While the former are assigned positive coordinates on the axis, the latter are assigned negative coordinates. This axis also separates the auxiliary positions from the positions directly involved in production at the yard; transport/craneoperators and various services are clearly separated from the metal trades. Of the positions discussed above, only the platers are located in the lower quadrants. There is also a distinction made between three cohorts: those who entered RMV in the shipbuilding years (pre-1979), those who entered in the most lucrative years of offshore production (1979 to 1985) and those who entered in the less lucrative offshore years (1986-1993):

¹⁷⁵In this case, this means that these two categories' distributions or profiles *across* the other categories in the active set are more even than what is the case for the other position categories.

¹⁷⁶The categories "Personal income 100'-200'" and "household income_200" are the exceptions. These positions can however be explained by the "linkage" to the apprentice category.

Table 7.5: Categories with and absolute contribution >1/K to axis 2 (CV=0.013).

Axis 2	
Negative coordinates	Positive coordinates
Transport=0.023	RMV 1986-'89=0.032
Various services=0.045	RMV 1990-'93=0.046
RMV pre 1970=0.045	No rel. RMV=0.032
RMV 1971-'78=0.081	2 years ed+=0.016
Special worker=0.021	Basic voc. ed.=0.044
Rel. before RMV=0.028	VGK (Voc.ed. school 2-3yrs.)=0.077
Father RMV=0.045	Skilled Worker (Fagbrev)=0.017
Brothers/sisters RMV=0.046	Personal inc. 311'-350'=0.020
Uncles RMV=0.019	Household income 501'+=0.013
1 year ed+=0.019	
No vocational ed=0.051	
34/2: Voc. ed. other than basic=0.054	
34/3: Voc. ed. other than VGK=0.029	
Personal inc. 221'-240'=0.013	

At the same time, the second axis can also be seen as describing the historical transformation of the capital structures and the recruiting mechanisms that took place at the yard between the late 1960s and the 1990s (see chapter 6).

As already mentioned, relatives working at the yard constituted a central capital asset when applying for a job up until the early 1980s.¹⁷⁷ Since then, formal qualifications have become more important when recruiting new personnel (see Michelsen op. cit). As a result, the younger generation of shipyard workers have markedly more vocational school education than the earlier generation recruited in the shipbuilding era; the former are more often educated in the school system, whereas the latter more often received their formal vocational education, if any, at the yard, for instance at RMV's internal vocational school. In this respect, fig. 7.1. also describes a capital transformation that has resulted in a qualificational upgrading of the work force. At the same time, the devaluation of social-capital relations and the diminishing intergenerational social reproduction of the yard workforce is clear; apart from "cousins", all categories indicating close relatives (grandfathers, fathers and brothers/sisters) at the yard are found in the lower quadrants, where the older yard workers are also located. All the highest income categories are in the upper quadrants, as well as the categories indicating a vocational education in the school system. Thus, the changes in the recruitment policy is thus reflected in a present structural opposition between these different types of capital.

¹⁷⁷See Thorstensen op. cit.

The third axis can also be interpreted to some extent as a capital structure axis. While of less importance than the second (summarizing 3.5% of the inertia), it serves mainly to separate those who do have relatives at the yard and those who do not, the "oldtimers" and "the newcomers", and perhaps more importantly it distinguishes between those who have obtained their vocational education in *school* and those who have obtained their vocational education at the *yard*. The axis also distinguishes between those skilled in a single trade and those skilled in two trades. Although this axis is internally stable, it is less balanced than the first two:

Table 7.6: Categories with and absolute contribution $>1/K$ to axis 3 (CV=0.013).

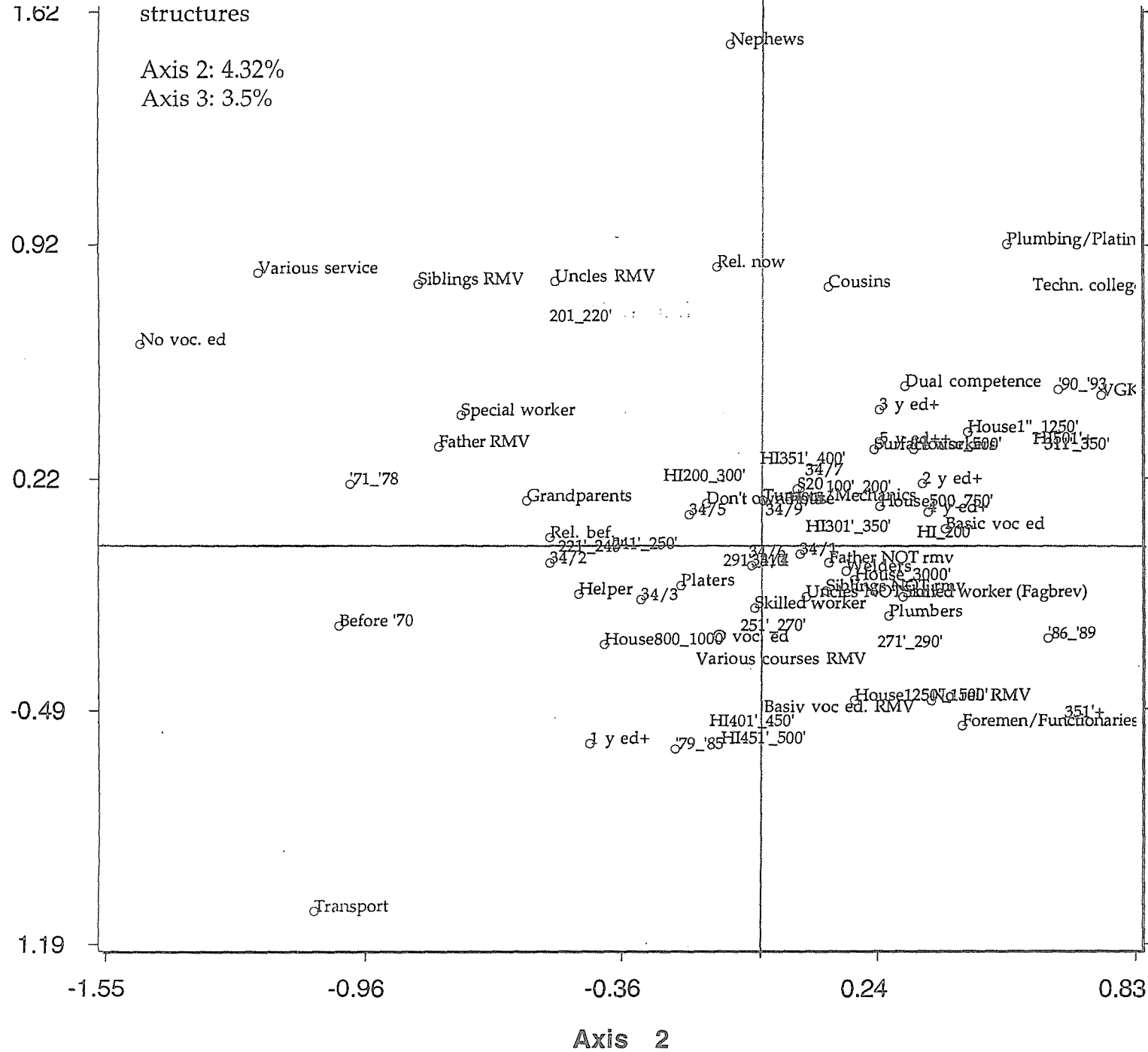
Axis 3	
Negative coordinates	Positive coordinates
Transport=0.032	Plumbing/Plating=0.030
Various services=0.027	RMV 1990-'93=0.026
RMV 1979-'85=0.037	Skilled in two trades=0.021
Skilled workers=0.014	Rel. at RMV now=0.103
No rel. RMV=0.061	Brothers/sisters RMV=0.054
House 1250'-1500'=0.016	Uncles RMV=0.062
1 year ed+=0.051	Cousins RMV=0.022
Various voc. courses at RMV=0.029	Nephew RMV=0.043
Other voc. ed.=0.015	3 years ed+=0.019
Basic voc. ed. at RMV=0.022	VGK=0.032
Household inc. 401'-450'=0.019	Tekn fsk=0.018 (Technical college)
Household inc. 451'-500'=0.025	34/7: Voc ed. <i>other</i> than var. courses at RMV=0.017
	Personal income 201'-220'=0.016

As table 7.6 indicates, only "Rel. at RMV now" has an absolute contribution of 0.103, while three other categories also have values higher than 0.05. Moreover, categories indicating whether or not a worker has relatives working at RMV, as well as *what* the relationship is, account for a total of 34.5% of the absolute contributions to the axis. In short, axis 3 is more strongly affected by particularities in the data set than the first two dimensions, and should therefore also be considered a second order axis.

Graphically represented, the crossing axes 1 and 3, and axes 2 and 3 produce the following results¹⁷⁸:

¹⁷⁸In combination, this gives us a 3-dimensional view of the capital structures in the yard's workforce. Unfortunately, this cannot be easily represented on paper.

Fig. 7.3. Yard internal capital structures



Although the horseshoe effect can disturb the interpretation to a certain degree, some of the patterns in figure 7.3. are of particular interest; for instance, almost all the lowest indicators of economic and vocational capital are located in the upper left quadrant. This is also where all the most important social capital indicators, related to having relatives working at RMV, are to be found. The two quadrants on the right constitute the strongest capital holders, or the field of power to employ the Bourdieusian expression. This is also where the above-mentioned opposition between a vocational education at school and a vocational education at RMV is to be found. To this opposition is also added the positional opposition between those trained both as platers and plumbers (i.e. "tofagleg"[dual competence]) and the foremen/functionaries, positions that are close to each other in fig. 7.1. At the risk of overextending the argument, the results in fig. 7.3 might describe two different trajectories in the local occupational field at the yard: a school-dominated vocational trajectory, which leads to a top position being trained in two trades, and an internal yard-dominated vocational trajectory which more often leads to a top position as a foreman or a supervising functionary, although in many cases this is only a temporary position.¹⁷⁹

For reasons outlined in chapter 3, a habitus cannot be seen as a mere (embodied) replication of the objectivated capital structures. Thus, it would be highly problematic to analyze the above construction as a closed system of variables with an unidirectional causal impact on the agents' schemes of classification.¹⁸⁰ Features and assets that are external to the above construction of the yardworkers' capital space, may also be of vital importance in the formation of the structures in the habituses. It is not surprising, therefore, that the overall perceived positional status hierarchies cannot be reduced to a mere reflection of these capital structures; the ranking of both the mechanics and the painters/shotblaster in fig.7.1-3 differs from the overall rank attributed to them by the respondents on the basis of perceived social esteem. As the data from the interviews show, this may be partly explained by matters related to the history of the positions in production, to the agents' work experiences and to the actual work situations. But it may also be related to oppositions towards positions, for instance those of leading functionaries on which information is lacking, due to access problems in data production. (see copy of the correspondence in the appendix).

¹⁷⁹This category is also including the temporary foremen.

¹⁸⁰This is what usually is assumed in causal path analysis.

This said, there are still minor but interesting indications of correspondences between the occupations' positions in these capital structures and the way agents located in these positions perceive the positional hierarchies at the yard, i.e. structures in their habituses. To return to tables 7.1- 7.3, it is evident that the welders, located in the low capital sectors, were the most reluctant to express highly positive opinions on the social esteem of the various positions in production. They also displayed uniform opinions on the positional hierarchies at the yard. The same applies to the platers, located near the barycentre of the capital structures, but they also distance themselves from the welders who are located in the "weaker" sector. At the opposite, capital loaded pole, among the stronger capital holders, are the plumbers, who displayed the clearest hierarchical perception of the positions' social esteem. While the platers avoided the lowest social esteem rankings and the welders avoided the highest, the plumbers more often applied the entire scale. Being at the top, they not only displayed the most hierarchical perceptions, but were also inclined to distance themselves from the more capital-weak welders.

In themselves, these differences and oppositions in the production workers' capital structures are not clear and strong, nor are the agents' perceptions of the differences. Therefore, it would be incorrect to claim that they can be considered proof of the relevance of field analysis. The critical questions are therefore: How, and in what ways, do the overall structural changes that have taken place at the yard correspond with the agents memories of these processes? In what periods, if any at all, are positional differences and oppositions more distinctive, considering the production workers' memories of the processes that have produced the present structures and relations, and why? In what situations are these capital structures set aside allowing interpositional "agreement" as to memories and views of the past?

7.4. Positional memories of yard relations

This analysis cannot be restricted to the relations between the occupational positions discussed above. The reason for this is that important power relations would be neglected, for instance the relations between the foremen and the workers, the workers and the inspectors and also the workers and the managers. Lacking sufficient data on these positions, the analysis will focus solely on the production workers' memories related to and views of these relations. Moreover, the individual positions themselves are of limited interest. Analytically, the

approach specified in chapters 3 and 4 implies that the focus must be on relations between an occupational position, a qualificational category and other types of field specific capital that may have structuring capacity for the agents' perceptions of and memories of their own work, work relations and work locations.

There are numerous reasons for this. Chapter 6 and the foregoing analyses, have shown that not only the occupational structures at RMV changed between the late 1950s and the 1990s, but also, the *qualificational space*¹⁸¹ Not all occupational positions at the yard have been affected in the same ways by these changes. While some positions, for instance the welders, have undergone a process of formal qualificational upgrading, other positions, like the platers, have been more stable in this respect. New positions, for instance "Overformann" ("head foreman") have appeared in the organizational hierarchy, potentially changing the power relations at the yard. There are a number of questions to be addressed in this context. In what ways, if at all, are these differences and changes reflected in the agents' memories and opinions of these processes? For instance, are the differences, oppositions and schemes of evaluation discussed above also present in the agents' memories of *these* aspects? In what ways, for instance, are apprentice relations, periods of struggles and conflicts over wages, and changes in formal vocational statuses remembered, both intra- and interpositionally?

As stated earlier, acquisition of field-specific and position specific skills may be important elements in autobiographical accounts of agents' field histories and their epochal classifications. In approaching the production workers' positional memories, therefore, the focus will also be on "lieux de mémoire" related to and memories of the acquisition of qualifications and work skills, which are indicators of potentially important field-specific vocational capital. Are issues related to qualifications and skills central criteria when the agents classify the internal yard history in epochs, or with respect to what they emphasize in different epochs? If this is the case: are there qualificational and/or skill-related differences in epochal classifications to be found *between* the various positions? Nerheim & al. (1996: pp.399-449) have classified the postwar years at the yard in three main epochs: pre1970 (the Bergesen years), 1971-1978 (Kværner and gas tankers) and post1979 (the offshore years). Within the latter, sub-epochs have also been indicated: 1979-1984 (the Statfjord-years), 1985-89 (transition from a shipyard to an offshore mechanical works yard) and 1990 onward (restructuring and

¹⁸¹The oldest respondent started work at the yard in 1950. See Korsnes 1996 for a detailed study of changes in the structures of the Norwegian industrial qualificational space.

implementation of new organizational models). Do the agents' epochal classifications differ from these "officially recognized" epochal classifications?

In one sense, all the above questions may be considered fairly simple and mainly descriptive in character. However, they are all associated with the following, sociologically more complex, problems: how, and in what ways, does the dialectics between historical and present relations of power have structuring capacity for the agents' memories of acquisition of qualifications and skills? Moreover; how may memories of conflicts, struggles and oppositions related to skill acquisitions and qualificational changes have a structuring capacity for present relations of power? These questions can in turn be "translated" into a theoretical challenge: to what extent can a Bourdieu-inspired field analysis be employed in an analysis of shipyard workers' memories of these phenomena? In what current struggles can, for example the memories of events, processes and changes related to skills and qualifications, presently also have status as field-specific symbolic capital?

Adopting the official epochal classification, this analysis will first focus on memories of yard relations in the Bergesen years. How are the yard relations remembered? Who are seen as the "heroes" and who are the "villains"? What are the most important "lieux de mémoire" from this epoch? And more importantly: why?

7.5. Remembering the Bergesen years

As stated in chapter 5, Sig. Bergesen d.y. was a dominant agent in the local power field in Stavanger already in the 1930s. In 1943, a struggle for control over the yard resulted in a takeover in which Bergesen and his associates obtained total control. His ownership ended the first of January 1970, when the yard officially became part of the Kværner group. Only a few of those interviewed had personally experienced Bergesen. The majority had started work at Rosenberg several years after the yard had been sold to the Kværner group. Even so, the opinions expressed, and the stories told about Bergesen were almost identical. When remembering this relation, therefore, the practices of non-personal and personal remembering converge. While acknowledged as an important figure with respect to the investments made in the early postwar years, the man is systematically described and remembered as tyrannical, authoritarian and capricious:

J.Hj: How did you experience Bergesen?

-...I only met him once.... during a.... But he was the kind of..man of power... an arrogant, powerful.... bastard as they used to say... So we made some jokes about it.. He was lying....a statue in the old store building, long before he was dead! In a case filled with glasswool..And in the morning, N.N. /the yard director/ would always pass on his morning walk round the yard. And we would ask "Why the hell is he going that way?"..."-Can't you see he's passing just to kick the guy in the case?! [we both laugh].. He [N.N] was pissed off... I remember when he [N.N] quit.. He told me, once I was sitting next to him : "You ought to know [..] Many times it has been a hell to be me!" The way he was treated..thrown out, yelled at ... being the director. To us, he was one of the great men at the yard. To be treated in that disrespectful way...?

J.Hj: Was this the way Bergesen treated people?

-Yes! That's the way it was! Tyrant!... So... even if he was somebody... outwardly... this was the way he was internally. They feared him... It was not respect.. It was pure and simple fear. .. He had habits..or things that were simply sick!... But he might be a good man despite... He got things done...he had.. Owned the yard.... ordered ships. (EA23-4)

When focusing on actual episodes, individual actions or overall processes, the distinction between the owner as a tyrant and as a benefactor is also central. Outside, and when dealing with outsiders visiting the yard, Bergesen is remembered as generous, as showing off in both extravagant and expensive ways. In this context, the ambulances he donated to the local hospital are often mentioned. Money earned at the yard could be spent or reinvested in generous ways that made the owner look good. But when it came to reinvesting in tools and in the equipment needed in production at the yard - in activities that not only made him profits but would also secure the employment of the workers, who were seen as paying for his extravagances - the tightwad would cut the budgets to a minimum. Following the same logic, an effort was made partly to convert the economic capital the owner accumulated at the yard, into his personal symbolic capital in the local community. A memorial statue, a material "lieu de mémoire", an object that can be analyzed as part of an effort to convert economic capital into symbolic capital, was ready several years before he died. But with respect to obtaining the workers' retrospective respect, this strategy of symbolic capital accumulation failed.

Instead, he is remembered as constantly complaining about the workers' efforts, and thus adding insult to injury. He made them work under less than favorable conditions, and lacked respect for other people; situations in which he questioned the workers' ability as shipbuilders or humiliated the director are important memories. Stories like the following, in which the yard director fears

of the owner's rage, but where Bergesen is also unmasking himself to outsiders, are not unique:

We had this beautiful teak door [taken ashore from one of the ships to replace an old, damaged door]..You almost stopped to admire the materials.. But Bergesen was to pay a visit. Suddenly, a painter is painting the door in green! So I go up to the guy and ask: "What the hell are you doing? Do you want to destroy our door?!" "It is an order from the director. Bergesen is coming. Tomorrow! If he sees the teak door, it'll be the first thing he notices. "Who the hell put up this lovely door in here?!!".. Had to be painted green... Hah!.. You know, many episodes like that.. Had to shine things up... Clean the machines. We were ordered to clean the machines [when he came to visit] Once, when he was walking through the machine shop... he came over to my bench.....We had cleaned up the place.. So he comes over to my bench...Two or three people were following him, you know.....Journalists..He asks: "Is this an automatic machine?" "-No, it's just a standard turning bench!" "Than were is the automatic one?!" I say: "We don't have any automatic machines!" "Of course we have automatic machines!! Come here!... This man doesn't know what he's talking about!" Then he went... (DA16)

The fact that both personal and non-personal memories related to this particular yard relation are dominated by interpositional "agreement" regarding memories and opinions about the past, is perhaps not surprising. Being located in positions close to each other in the local social space and being located in positions in production at the yard as well, the differences between the agents are set aside when remembering the relations to the agents in the field of power, in this case the management and the owner:

Matrix 7.2. The Bergesen epoch. [HERE](#)

To use Lysgaard's terminology, this is one of the clearest examples in the data of an all-inclusive "worker collective memory": the "us" and "them" in these memories, or what Halbwachs would call the social frameworks, are clearly all the workers on the one hand and the owner and the senior managers on the other. Furthermore, memories of conflicts, situations or events in which inspectors, the management or the owner in one way or another challenged or questioned the production workers' statuses are not only the clearest examples of personal and non-personal remembering dominated by an interpositional and intergenerational convergence; they are also episodes or processes that have resulted in the creation of material "lieux de mémoire".

Matrix 7.2: The Bergesen epoch.

Platers	Plumbers	Welders	Mechanics/Turners
<p>I remember the Bergesen ships. In the engine rooms...A lot of signs..One drop of oil every minute or and hour was so and so much.. And for a whole year, it added up to several liters of spilt oil... You know..If there was anyone who knew to watch over his own money, it was Bergesen! We got the feeling... towards the end... We weren't given any new tools... And the budgets.. He couldn't buy anything... We stood there, working with old tools... But I must say: we did enormously well... We'd build the ships at record pace. Had much to do with the fact that they had good workers. No doubt about it (EB9)</p> <p>J.Hj: When you come in here in '69, the yard was still owned by Bergesen. Were there any stories about him, or do you remember thing about Bergesen? - It was the usual stuff.. Only half of the force was working. How many are working here? Only half of them..And... 1 øre was one percent, and that really showed on the equipment and everything we had... He was... Everything was run down. J.Hj: He'd turn a shilling before spending it? - Yeah, he turned ... the strokes of paint! (AC4)</p> <p>J.Hj: Bergesen as the owner of Rosenberg..You start here towards the end of this period, but were there any stories about him.. that you were told when you first arrived? - No.. There was no other stories than. When the day was finished, a Rosenberg worker would be so tired that he could hardly lift the fork up to his mouth! So.. He was asked about how many people worked at Rosenberg? "Half of them!"... (AG35)</p> <p>When you talked to the oldtimers they said that he wanted to have total control over everything ... Really that way.. Budgets and new investments... That's what they were saying..Because we were in the first phase of development down in the hall. Because the hall had just been built. Hardly a year (AD11)</p> <p>It's clear...Bergesen did many good things... But...he was the type that everybody would be on parade for...no matter what. It was even worse than the king, when he came (AA6)</p>	<p>J.Hj:Bergesen... Your father worked here when Bergesen was the owner. . -Mmmm. J.Hj: ...Were there any stories about Bergesen... when you grew up? Yeah, I remember him telling about once when they were about...They should... come and take a look at the ship... And he just told'em to throw it all overboard. Not onshore..It should be clean and tidy! I remember him telling me he despaired.. In this case, he [Bergesen] wouldn't..... Welding rigs and everything were simply thrown overboard. But otherwise, he was very thrifty... But when people were to come and take a look at the ship... It had to be really tidy... He threw everything into the sea! J.Hj: But usually... he would turn a shilling before he spent it? - Yeah. That was the way he was. ... And I remember..There was another.. A contract worker hired to dig ditches. ... worked and worked... You could almost see the smoke around him in the ditches...And Bergesen is supposed to have said: "If everybody worked like that, we wouldn't need the number of people we have now". My father says, not too long ago.. "There's the guy I told you about who was diggin' the ditches..." He could hardly walk! ... His back bent... Was that the way Bergesen wanted us to be?/.../ J.Hj: So what did they think of him as a boss? Did they like him or was it more..? - Well I don't know..I remember in the machine shop.. There was a large sign..On the wall.. "Our daily effort is our future". Typically Bergesen... (CD30)</p>	<p>J.Hj: When you started here in '69, it was at the end of the Bergesen period. Did they tell you any stories about Bergesen when you started here? - Well..There was a story when..Right before I started.. Bergesen was to inspect a ship... lying with huge tanks.. Can't remember the name of the ship... It had to be ready.. And they weren't ready, so they.... Painting, because the painting had to be done..So they painted one side.. Green and nice on one side, and on the other side it wasn't painted.. But that was on the seaside, so he couldn't see it!.. So..they painted that side the following night! (laughs) J.Hj: He was respected, Bergesen? - Yeah, he was the great one..But at the same time you might say... Welding rigs and ... they were thrown at sea.. They hadn't time to get them off the ship.. The ship was about to leave... A lot these things..but that's more himself (Bergesen).. But the social enviroment overall was... Good! (BB)</p> <p>I want to say that, ..Bergesen..Fuckin' hell... He had really cut to the bone..A lot of bad stuff.. I don't understand that people accepted it! ... The workers.. had themselves to blame.. "You have keep up with it", they just said.. [about the toilets] (BE16)</p> <p>Bergesen was born in the previous century! It was ... a totally different way of thinking. Nothing social... He didn't think about things the ways we do today. (BE16)</p> <p>They wrote in the papers that Bergesen had lost 5 million on the [Shell] ships. But it was his profit that was reduced by 5 million!! He had calculated.. As usual! (BF5)</p> <p>He would never renew anything, when it came to the tools and those things (BB21)</p>	<p>J.Hj: The management... Is there anything you remember from your first years... -No, I remember that the distance was colossal! Especially to director Behrens and the leading managers. Enourmous distance from the ordinary guy on the shop floor to the director. And he didn't do anything in order to improve the relation... I think he worked from... a system that implied... People should be afraid..People would run faster if they were afraid. And do more../...../I was afraid many times when these people came by.. It took a long time to overcome these inferiority complexes! You know.. being a director, was really something...And we got it in with the milk of babes, so we really knew... Our inferior position (DA1:16)</p>

Throughout the Bergesen period, the size of the ships increased both gradually and radically. At the same time, the yard area infrastructures were radically transformed (see maps in appendix). For those who have worked at the yard in this period, it might be reasonable to think that individual ships or larger investments in production facilities would gain status as material "lieux de mémoire". This did not prove to be the case. For the reasons mentioned above, production *series* were remembered, while few of the interviewees remembered particular ships or numbers of ships as important milestones or as symbols of a new era starting at the yard. One of the welders said straight out:

I've welded on many ships and platforms. But damn..I've got problems when it comes to remembering their names. And when [it was].... (BE9)

He is not the only one:

Matrix 7.3: Remembering, or *not* remembering, the ships built in the Bergesen epoch.

Plater	Welder	Functionary
<p>J.Hj: Of the ships you've built...Are there particular ones that you remember better than the others?</p> <p>- No, I don't know..... You know... The gas-tankers.... They... It just slides on from one to another. They were very much the same.</p> <p>J.Hj: Was it a kind of standardization?</p> <p>- Yes. Almost identical drawings...Very much the same, so you would remember, "that's how it looked over there" (Plater - AA10)</p>	<p>"J.Hj: You started working here in 196X...You've taken part in the building quite a lot of ships. Are there any ones you remember in particular?</p> <p>-.Well I don't know... No...Nah.... Wouldn't put it that way...</p> <p>J.Hj: So there is no one that's singled out?</p> <p>- What do you mean? When it comes to the work?</p> <p>J.Hj: Yes?</p> <p>-The gas tankers .. they were OK to work on.....They got bigger...And... I liked working on the gas tankers.." (BB17)</p>	<p>J.Hj: The changes [construction of the large drydock] In what ways did this change your own work..?</p> <p>- They gave us [functionaries in a particular department] bikes. We didn't have to walk to the site anymore! But apart from that..There wasn't a big difference building a ship that was 30 000 tons or 100 000 tons. In many ways. (ED)</p>

Even when asked far more leading questions than in the last column above, or when asked explicitly about specific numbers of ships built in the periods mentioned by the interviewed, they would usually hesitate in singling out any particular ships. Instead, like the welder cited in the middle column, a few would focus on a production series, yet giving me a clear feeling that they were doing so in order to provide a feasible answer to my question, and indicating non-verbally that "the case is closed, I can't give you a more precise answer than this".

However, there is one (or rather two) clear exception(s) to this overall pattern: the two Shell tankers built in 1965-1967. A closer examination of this particular case will give a better understanding of why, or how, some ships might obtain status as a "lieu de mémoire" for some agents, while others seem to have

been forgotten. In the official history of the yard, these two tankers are among the few ships given extensive coverage by the historians. The main focus is on the yard's economic losses, on the number of man-hours required to build the ships compared to the projected number of hours, and on the owner's complaints about the declining productivity at the yard (see Nerheim & al. 1993: 235-238).

The focus of the interviewed workers and also of the functionaries is entirely different when they remember these ships. When asked about the changes implied by the transition from building oil tankers to building gas tankers, one of those interviewed started by telling about the Shell tankers:

Shell came in and built a couple of...I remember it as if it had been today..An inspector who..priming plates ... that came from the painting shop..Shotblasting and painting... Couldn't be handled in the usual ways.. that is.. Use hooks. You almost had to wear slippers when you walked on them [the plates].. We started to wonder whether these guys had gone nuts!.. Steelplates .. we were hardly allowed to walk on them. Couldn't use tools,.. drop them on... no welding sparks dropping on...You weren't allowed to drop tools, because it would set marks in the primer.... So we went through a phase where .. the customer set... harder quality standards.. Everybody had to get better..Many steps on the ladder...So when we started the period of gas tankers... the threshold wasn't that high.. to the next step (EA11, plater when the ships were built).

Similar patterns or stories may be found among those who had been building these ships. Although not being a typical answer, this is one of the very rare cases where a person who entered the workforce several years *after* the ships had been built expresses an opinion about them, or remember being told about working for Shell:

Matrix 7.4: Remembering the Shell-tankers.

Personal remembering of the Shell-tankers	Non-personal remembering of the Shell-tankers
<p>J.Hj: I understand, you built two tankers for Shell. This was also the contact with a different contractor.. /the interviewed interrupts:/</p> <p>- Yes. That's right. "Daphne" and "Dalila. Wasn't that their names?</p> <p>J.Hj: Yes.</p> <p>- Yes. You know, it was very, very strict. We came... English inspectors..Carrying mirrors... Checking if it was painted behindLooking..Everything.. All the specifications were far stricter..And we weren't allowed to... to do things the way we did when building ships for Bergesen....An inspector, and a captain, a chief...walking around...You see? Totally different climate. (EB8, plater when the ships were built)</p> <p>They [the inspectors] demanded to see if things were done correctly..It was a totally different inspection... that we were exposed to. When we had the other ones...the Bergesen inspectors, it was more like... a relation of trust and confidence..... But no question of that with these guys... They were Dutch. So this was really a great transition for us" (EF9, inspector)</p> <p>"It was just that Shell had their own standards..There was a lot of turbulence about it afterwards..Because Bergesen said that Shell..should have everything the way they wanted..Even if it took more time, and became more expensive" (BF5, welder)</p>	<p>J.Hj: I think it was in 1966.. The yard got two contracts for Shell.</p> <p>- Yeah? That's before my days....</p> <p>J.Hj: When I was reading about the yard's history... these [two tankers] had resulted in a deficit...Did they talk about it?</p> <p>- Oh yeah.. That's correct... There was a story... They were never satisfied...A lot of fuss over these ships. They were never finished. The control on the ships was enormous.. They weren't ... There was a conflict... concerning money.. They weren't paid for the work that had been done and... Had to redo a lot of work.. That wasn't really necessary (BB18 Welder)</p>

With regard to quality control and questions of formal qualifications, the above cited plater also remembered the Shell tankers as a radical contrast to the ships built for the owner:

On the old... Bergesen ships,..you would even paint on ice.. on decks covered by ice..just to get the colour on the ship and send it out [to sea]...But you know.. there was no quality control.. Everybody could paint! Painting... the last night before the departure... everybody .. from the offices and everywhere..as taken on board..cleaning, sweeping, washing and painting.. As long as the job was done.. it didn't matter if they'd never held a paintbrush..(EA11)

In terms of qualifications, therefore, the two Shell tankers are also seen as symbols of the beginning of a new epoch in which the quality of the product improved. Despite the problems and the strict quality controls, the workforce at the yard succeeded in responding to these changes. So, these ships are at the same time also considered objects of pride:

Those Shell ships were really special!..We did a week of testing in the North Sea..Fully loaded [tanks], unloaded..Full speed unloaded and fully loaded... In really rough storms in the North Sea!! That was really something!! That was great fun!!(EF22)

This must also be seen in relation to the owner's 1966 annual statement (as cited from Nerheim & al: 238), with its implied threat to close the yard: in this statement, the ships are represented as symbols of the workforce's incompetence, which resulted in heavy economic losses:

If the workers can't help us bring the productivity at least up to the former levels, the level of activity in constructing new ships must in one way or another be reduced. A complete shutdown [of the yard] cannot be seen as a satisfactory solution for anyone, since this activity is in a special position.¹⁸²

In short, these ships were focal point of controversy between the owner and the entire workforce at the yard.

At first glance, all these answers might seem trivial, but their implications for a relational study of memory are not. As all the extracts in the table above clearly show, it is not the ships as such that are considered important by these agents. The focus is instead on the owner, on the new inspectors, on the lack of trust characterizing their relation to the yard and the workers, and on the qualificational challenges implied by the far stricter control regime. Since I had

¹⁸²For a discussion of Bergesen's motives, see Nerheim & al. op. cit.

found and analyzed similar phenomena¹⁸³ in a different Norwegian shipyard in an earlier study (see Hjellbrekke 1993: chapter 6), this came as no surprise. Conflicts, events or processes in which the agents' symbolic statuses and field relations of trust are at risk, in this case their honour as skilled, well qualified and knowledgeable workers as well as the yard's reputation, are also processes that typically create a "lieu de mémoire" as their memorial outcome. In Bourdieusian terms, the memory of field events - for instance when new agents enter the field, when there are open struggles over power relations in the field, when processes change these relations, and/or when agents risk losing or must struggle for the value of their capital types, or must acquire new skills and qualifications (i.e. field capital) - cannot only become part of a position's symbolic capital foundation in the field and thus a potential element in subsequent field struggles a posteriori. They may also be highly central with respect to the way agents remember and classify historical periods into epochs, the way they perceive periods of power struggles and/or changing power relations in a field, as well as in symbolizing qualificational and positional changes.

Given the questions raised above, this implies that an analysis of positional frameworks of memory must include a closer analysis of position specific "lieux de mémoire" and memories of oppositions, transitions and changes. Are there distinct patterns of variation between the "lieux de mémoire" of different positions? If this proves to be the case, to what extent can these plausibly be considered products of differences in the various positions' habituses? And vice versa: on what points can an interpositional *agreement* be found, not only with respect to what can be designated the status of "lieux de mémoire", but also with respect to the agents' opinions on transitions and changes at the yard? To what extent can this be considered a product of a "worker collective" habitus?

7.6. Remembering the first Kværner years

As already stated, few of those interviewed would give exact or immediate answers to explicit questions about ships built in the Bergesen epoch. In the following analyses, we must therefore apply an indirect strategy: the various positional "lieux de mémoire" must be identified on the basis of answers given to open questions about experiences and memories of transitions and changes at Rosenberg.

¹⁸³The variation in epochal classifications in two different departments.

In this respect, the takeover by the Kværner group (the present owner) is seen as one of the major events in the yard history. Retrospectively, a great number of respondents in all the major positions in production at the yard perceive this change as being a change for the better. For all positions, the combined percentage for "Completely agree" and "Partly agree" to the statement "Rosenberg benefited from the Kværner group's takeover" exceeds 60%. For the platers, plumbers and mechanics, it is 70% or higher, and only a fraction (single digits for all but the mechanics [2 respondents = 11%]) see this change as being for the worse. Despite the variations in the "neither/nor"-category and in the category indicating no opinion¹⁸⁴ ("don't know/no opinion"), the overall pattern is clearly dominated by positional unity¹⁸⁵:

Table 7.7: Opinions on the statement "Rosenberg benefited from the Kværner group's takeover" N=286.

	Platers	Plumbers	Welders	Mechanics*	Surface treat.
Completely agree	41 %	49%	43%	56%	42%
Partly agree	29 %	21%	19%	11%	21%
Neither/nor	16 %	9%	9%	0%	18%
Partly disagree	0%	2%	2%	0%	3%
Completely disagree	1%	4%	1%	11%	0%
Don't know'	15%	14%	25%	22%	16%
TOTAL	102% (74)	99% (57)	99% (99)	100% (18)	100% (38)

Given the opinions expressed regarding Bergesen, this is not surprising. In isolation, however, these figures are of limited value. Apart from indicating a generally positive attitude towards the change of ownership, they do not tell us anything about the workers' opinions on or memories of specific changes which were triggered by or took place after Bergesen sold the yard.

One of the first major transitions and a direct result of the takeover was the shift from building oil tankers to building gas tankers. It is problematic, however, to carry out a fullscale positional analysis of the remembering of this event.¹⁸⁶

¹⁸⁴As expected, the association is strong (i.e. linear) between the year of first employment at the yard and whether or not the respondent had an opinion on this question. However, as many as 47% of the group first employed at the yard after 1993 (58 respondents), see the takeover as positive.

¹⁸⁵Having only 18 respondents, the profile of the mechanics will be affected by individual responses more than the others.

¹⁸⁶See the appendix for a discussion of the principles applied in the sample selection.

While the survey data for most positions also includes respondents who have experienced this transition, this is not the case when it comes to the personal interviews. Of those interviewed, half of the sample worked or started to work at the yard during the closing years of the shipbuilding epoch. For various reasons, firsthand experiences of this particular transition are unevenly distributed across the positions. There are no interviews with plumbers or mechanics who started work at the yard *prior* to the Kværner takeover that also stood in the production when building the gas tankers.¹⁸⁷ It also proved very difficult to gain access to mechanics who had started working at RMV in the 1970s and were still employed at the yard. Restricting the analysis to interviewees with firsthand experience of the takeover, the initial focus will be on the welders and the platers. Thereafter, when dealing with the gas tanker period in general, the scope can be expanded to include the plumbers.

While both the platers and the welders focus on the continuity between the two periods, some minor positional differences reappear:

Matrix 7.5: Remembering the transition to building gas tankers.

Platers	Welders
<p>J.Hj: The gas tankers that were built here .. from the early 70s.. How did that turn out?</p> <p>- Well...It was.. It was..The hull was like all the other ships..The only thing was the aluminium cones that was.. Special steel a couple of places (ac10)</p> <p>..The first cone tanker we built here.. Aluminium cones..A completely new thing..Must have been then we didn't have the responsibility for the aluminium cones.. directly.. It was Kværner Montasje that delivered them and installed them at the workshop... Was a bit strange to see a different company on our sector.. See the tools and everything.. they brought with'em compared to the old ones we were struggling with.. In some cases originally from the war (AD11)</p> <p>Of course..the development with gastanks and conetanks.../.. / I guess it was a difference for a while /.. / I don't think we noticed the difference that much (AF6)</p>	<p>J. Hj: If we go back in time.. And the transition from building ships for Bergesen ... to building for Kværner..Did you notice any differences?</p> <p>- No, apart from...When we began building gas tankers...The quality standards were stricter....So you might say. That's when we had to start to improve technologically!</p> <p>J.Hj: ASME-certificates..such things?</p> <p>- No. That came with the oil. The usual Veritas certificates would do as long as we were building ships.. (BF10)</p> <p>It started to be a bit more... Took more X-rays, more inspection of the welders' work. Same thing as today,you know..With the oil...The standards..control of joints and those things (BD7)</p>

In both cases, the changes remembered are related to qualificational aspects and changes. But while the platers remember the entry of a special workforce to build the aluminum cones, the welders remember the intensified inspection of their work. While new *agents* are challenging the platers, the welders are instead entering a period of *increasing control* of their work, facing an increasing

¹⁸⁷In the survey, only 2 plumbers had worked at the yard in the Bergesen years, while 5 mechanics/turners had experienced the yard in this period. One of the interviewed mechanics had started at the workshop in the 1940s, but his experiences of this change was from a totally different position. It is not a feasible strategy, therefore, to base the analysis of this position solely on this single interview.

pressure on the individual welder. Although this without doubt can be seen as an indicator of changing relations at the yard, it would probably be wrong to portray these changes as entailing or initiating an increased level of conflicts in the workforce. For instance, the arrival of better paid short-term contract workers in 1975, is not remembered as generating open conflicts or any major dissatisfaction.

Instead, the years working for Kværner as shipbuilders are remembered as a period characterized by stability in the work groups, by social integration, by a good social environment, by freedom in their work, by new investments in the yard's infrastructure, and perhaps most characteristically, by funny episodes at work¹⁸⁸:

Matrix 7.6: Remembering working at RMV in the 1970s.

Platers	Plumbers	Welders
<p>I used to work in the group of repair workers..There was a group of repair workers.. dockers..Today there is nothing. And people knew each other.. Everybody knew what the others were able to and not able to do.. Nowadays..they split up..</p> <p>J.Hj: Were there any differences between those who worked in the dock and those... working in the halls?</p> <p>- Well.... The social environment was better outside..More..tempo in the repair work..More overtime..The work gave you more if you.. liked to have some noise..Not too calm.. But the work in the halls was better too..Than today..</p> <p>J.Hj: What's the most important difference?</p> <p>Earlier, the gangs were welded together.. That was both an advantage and a disadvantage.. Nowadays..You need two "fagbrev" (certificates) If possible you should have three. You're supposed to be able to "sail" from one thing to the other, so that in the end, you're not able to do/knowledgeable about anything. I think it's better that people have just one....(AC3)</p>	<p>I was working on all the gas tankers.. We were four men working together...Had the same job on every ship...In the beginning, I was an apprentice...Two skilled workers, me.. and a helper..Were a steady gang..had the same jobs...So if I'm talking about the social environment..We had..a far better... The gang was welded together. (CC4)</p> <p>We used to have competitions.. Who could lift the anvil with one hand..A lot of things you don't do today! I remember always on the fridays..[From] A quarter to four until four o'clock. We'd play football..Inside the hall. Between the pipes and bends..saws and all kinds of machines..Heh..Had fun..../ If we had done that today.."One more time, and you're out!" (CC6)</p> <p>"In those days there were more originals at work..[Nowadays] they're removed.. And if they weren't there.. They would be made! ...Heh!" (JCA15)</p> <p>We had one guy.. would climb through a pipe..Had set his mind on doing it ..And got stuck!..Really stuck!..We really had struggle to get him loose! (CA31)</p>	<p>We had more time for doing ... To experiment...Gas bombs..You see...They're not dangerous...They just go off..You get scared... That was great fun....One of the guys tried to do it to me, but I knew what was coming...Working on top of the aluminum cones... (BF12)</p> <p>You know..The social environment in these was.. Solidarity,...the boys.. It was better welded together..You worked as a ..as a team, you know..You knew people, you know...Today it's more like..It was more like.. You looked forward to going to work...These things.. There was no coercion..Today there is ..You have to wear glasses..And other things.. It's..different.. Nowadays, it's rougher (BB2)</p>

As the matrix indicates, the period is not primarily remembered in terms of power relations, open struggles or conflicts, or major oppositions between the yard positions. Instead, the overall tendency is a homogeneity in remembering these years as a "golden age".

At first glance the relevance of a field analysis might seem questionable. These citations do not give strong indications of field-like struggles at the yard in

¹⁸⁸Statements from one mechanic, who worked at the yard in these years but experienced the events from a positions outside the machine shop, is not included in this matrix. His opinions are, nevertheless, similar to the ones found in the matrix.

these years. Nevertheless, if we are to understand and analyze the relation between the generational habituses and the local occupational field, these agents' reflections on and memories of experiences in the 1970s are of vital importance. Whether or not their memories of yard relations can be viewed as historical evidence of how things actually were, is not the important issue. What *is* important, is the fact that for these people, retrospectively, the shipbuilding years represent an important contrast or opposition to the offshore-period which started in 1979. The experiences of this period had a formative impact on the habituses of an entire generation of shipyard workers, and these habituses must be analyzed in relation to the *present* structures at the yard.

An opposition between social and qualificational capital was revealed, in the structural oppositions described by the second axis in fig. 7.1. For this reason, the views expressed by the plater cited above are of particular interest. The ship building years are recalled as being dominated by stability and social integration in the work groups, and are also seen as being diametrical opposed to the present situation. When describing the present situation, the focus shifts towards the qualificational changes that have taken place at the yard, changes that are not viewed positively. Although social capital cannot be defined as being equal to social integration, and although this posterior description should not automatically be taken at face value, the opposition found in this plater's evaluation of the past and the present situation at the yard corresponds with the oppositions found in the correspondence analyses.

However, the above outlined patterns must at the same time be analyzed in relation to, and be contrasted with the agents' memories and experiences of conflicts related to the piece-rate system in the Bergesen years. Not only was this one of the major controversies between union and management at the yard in the last decade of the Bergesen ownership: it was also the subject of internal controversy both within the workforce and within the union after the late 1950s. Yet another dimension was added to this conflict in the form of a political opposition between central Labour Party members, leftwingers within the Labour Party and Communists. Thus, oppositions in the Norwegian political field were also imposing their logic on the relations within the union.

As revealed in the foregoing chapter, the wage levels within the various positions displayed a tendency to homogenize over the years. For the category of skilled workers, the top wages in 1963 were more or less identical. Retrospectively, this does not affect the workers' opinions or memories of the system. While the Shell tankers are the clearest examples of material

interpositional "lieux de mémoire" from the Bergesen epoch, the piece-rate system is one of the very few examples of an interpositional and an intergenerational convergence of personal and non-personal worker collective remembering in any epoch. Even though positional variation may be found in the survey data, especially when considering the "No opinion/Don't know" category, this is (as expected) mostly a product of a linear association between the year the worker was first employed at the yard and whether or not he has an opinion on the particular question:

Table 7.8: Evaluation of the positive or negative influence for the shipyard of the change from a piecerate wage system to fixed hourly wages.

	Platers	Plumbers	Welders	Mechanics	Surface treatment
Strong positive influence	58%	43%	47%	63%	46%
Somewhat positive influence	10%	16%	14%	6%	5%
Neither/nor	14%	7%	4%	0%	16%
Somewhat negative influence	1%	2%	4%	0%	3%
Strong negative influence	0%	2%	0%	0%	0%
No opinion/Don't know	18%	31%	31%	31%	30%
TOTAL	101% (74)	101% (57)	99% (96)	100% (16)	100% (37)

This phenomenon must be analyzed by focusing on specific relations at the yard. But in this case, perhaps somewhat surprisingly, it is *not* the relations to the owner or the managers that the majority of those interviewed focus on. Instead, it is the relations between the *foremen* and the workers, and between the skilled workers and the *apprentices*, that are focused upon both in the personal and the non-personal remembering of the wage system.

When remembering these relations, two of the key elements referred to are the "5 øre snout bonuses" and the foremen's power over the individual worker's economic gain and specific job tasks. To quote at some length from the interviews:

J.Hj: The transition from piece-rates to fixed wages?

- We had these snout bonuses, as they were called... 5 øre bonuses, to those the foreman liked ..It was stupid....silly...The sums weren't that great, but it created a bit... of dissatisfaction.. /...../the system was a bit rotten, in my opinion, to put it mildly (BB14)

"You, know..It's clear that being liked or not liked was a part of it ... There were cases where... People who'd been working at the yard longer than me...Didn't get the jobs they wanted..While they might be given to me....without me asking for the job because the foreman liked me..and the way I worked" (AF8)

"I remember in the days of the piece-rate system...Some guys would get the best jobs...And were not willing to teach some of the tricks of the trade.."(KI6)[...] But I was an apprentice in those days..when we were working piece-rates..I didn't notice it in any other way than being cheap labor.." (AE16)

"You know, these 5 øre..they caused a lot of frustration...A lot of focus on why that guy should have 5 øre more an hour than me..The foreman would explain it by claiming that the other's efforts../.../the foreman had more of a god-given power (EA13)"

"When you're talking about the Bergesen years...There was a lot of talk about the piece-rates..Good jobs..bad jobs...On the good jobs..You had to go and hide away, half the day, not to destroy the rates, so that they would be the same on the next job... Others would kill themselves working. (BD8)"

"It [the piece-rate system] had some positive elements, but the pressure was constant..I think it was the best to get rid of it. There was a skewedness..The foreman would say to a guy he liked: You can have that job.. It's well paid..But I don't like you, so you can have this shit..So it was100% on the rate..You could... kill yourself working and get almost nothing out of it..(AC9)

"The oldtimers said that..The piece rate depended a lot on .. whether the foreman liked you or not" (AD16)

"I've... I've heard histories..I can't confirm it but..It was ...If you and the foreman were pals..You'd be given good jobs...That gave you good rates...And..When you were building ships.. Particularly if you were to build...There were some good jobs ... no matter what..And ..they were given to the best people..Or the ones the foreman liked..And others mostly had to...Take the shit.....And they wouldn't make money..So.. Well, that's what I've heard." (CC9)

- ..If you had a foreman that was ready to try out 80-90 percent, and see how the management reacted.. And if they did, it was a goal in itself to stay at that level. But with us, it was hopeless to get any bonuses. More controlled!!

J.Hj: So the contact between you (the turners) and ... the foremen and the shop manager was direct..?

- Yes..I think so..I guess that's because we got so angry.. in the group of turners..Because... We felt pressured... more than the others...So I guess that's one of the reasons for us being so eager in the meetings at the union, getting rid of the piece rate system !

J.Hj: So the initiative to get rid of the piece-rate system..Was it the turners that took..

- Oh, yes! No doubt about it!

J.Hj:/.../ Were there any of the groups who would get into conflicts with the foremen more often...Apart from you?

- Well I don't know.. /.../ I think it was a bit mixed..I guess they had their boys..Whom they took care of..That got something better than the others.. (DA12-13)

Thus, being on good terms with the foreman is remembered as a valuable type of social capital that could be directly converted into economic capital. In some cases, work experience and formal qualifications are remembered as being of lesser value, generating a general feeling of injustice among the workers.

If we compare these memories of the capital structures at the yard in the 1950s and 1960s with the capital structures found in the multiple correspondence analyses of the 1998 survey data, an interesting difference is revealed. While fig. 7.1. - 7.3 indicate that economic and social capital constitute a structural opposition in the present workforce at the yard, retrospectively, these capital types are remembered as being positively correlated. Whether or not this is actually a historically correct description, is not the important issue in this context. While the analyses in chapter 6 are not exhaustive when it comes to the social capital structures at the yard, the statistics indicate that the *economic* differences were not the greatest and over the years these tended to even out. The point, however, is that this capital correlation is *perceived* as a major contrasting element when comparing the past and the present capital structures and power relations at the yard. The reason for this is straightforward: when the system was abolished, a major and long-standing point of contention disappeared. In this homogenized version of the past, the fact that this conflict had also split the workforce and the union is not often mentioned. Retrospectively, this struggle has become a key

element in the workers' remembering of yard relations; to the workers, getting rid of the system also meant getting rid of an injustice that had only affected them since the functionaries had fixed wages on all levels.¹⁸⁹ At the same time, change in the wage system is remembered as implying a change in field relations, reducing the foremen's power over the individual worker, and thus changing the power balance in favor of the latter.

But this is only one part of the story. When recalling the piecerate system, a frontstage-backstage distinction is activated. The keywords here are "a system of double entry bookkeeping" and "delayed delivery". To quote from two interviews with platers who had experienced the piece rate system themselves:

...there was a lot of double-entry bookkeeping, you know.. Like.. You would transfer hours.. calculate so that the percentage never exceeded more than ..90-100 percent on the job when it was ready and delivered..As a guarantee for not losing hours on the next one....You had to be disciplined..Not just see short-term profits..When new methods were implemented..that made a job go well.. New tools or new methods..Gave us some problems.. I remember... I must have had three weeks in "the bank".. could have stayed home for three weeks, and still been paid 100% on the job! (EA4)

I remember we could sit..Remember working there..Many of us sat...three or four days on our asses and wouldn't do a thing.... Because we knew..that if we delivered the piece..Hadn't used up the hours..The next time,..they would...give us fewer hours on the job.. (EB15)

If this system was to be sustained over longer periods of time, a silent cooperation between the workers and the foremen was required. Since both parties could profit from this in terms of increased stability in the work situation, the foremen could turn a blind eye to the workers' practices. But this does not alter the fact that the foremen's power and the social capital relations are remembered as important. Not only were the foreman consulted before a skilled worker would be promoted to the top wage: they were also in control of work allocation. Some workers are remembered for never getting jobs in which they could earn "surplus hours". For these workers, the change to fixed hourly wages also meant an improvement in their economic situation and increased stability. For those with hours "in the bank", the Kværner takeover and subsequent transition to fixed hourly wages posed a short-term problem: how to "withdraw" the surplus hours from the bank before the system was abolished for good.

In addition, the frontstage/backstage perspective is generally applicable as a distinguishing parameter in the yard workers' memories of power relations in these two periods. As indicated in the cited interviews, the director used to go for

¹⁸⁹Interview with PMT.

a morning walk around the yard. Stories like the one which follows are not told about the post-Bergesen years. Working in a team unloading sacks of shotblasting sand, the interviewee remembers being told to stop unloading because of the rain. But this was not to be reported to the yard management:

The director was of the old school. Would go around and check... Most important thing for him was ...whether anybody was smoking at the yard area. Not allowed to do that in those days... So he comes down to us.. "Why are you standing here, three, four guys, [to get out of] the rain?".. "The headman told us to do so"...So he disappears..The headman comes back..He says: "Listen..You must not say that I told you to stand here...Just say.."We're waiting for the cranes!" (AA5)

To describe those memories of the piece-rate system and the Bergesen years in a few words, one approach would be to stress that everyone remembers almost being caught in a spiral of bluffing; Bergesen would try to bluff the inhabitants of Stavanger and the local journalists, the yard management would try to bluff Bergesen in order not to be exposed to his rage: the foremen would in turn try to bluff the yard management for similar reasons, and would themselves be bluffed by the workers. In each case, the bluff is remembered as being meticulously planned in advance.

Having contrasted the positional memories of the closing years of the Bergesen-epoch and the first years in the Kværner epoch, what are the implications of these findings for a field analysis? Is a field analysis of this phenomenon a plausible theoretical approach at all? As stated above, *open* struggles or conflicts are not immediately identified either in the interviews or in the survey data. Furthermore, apart from the Shell tankers, none of the ships built at the yard in this period have attained the status of material "lieux de mémoire". But a return to the memories of the piece-rate system, reveals an underlying element of conflict that has not been commented upon so far: the yard workers' struggles for "good" and "bad" tasks. "Good" jobs were not only the jobs in which the individual worker could take full advantage of his skills or qualifications; they were also the jobs in which economic profits were highest. As indicated above, the workers' qualificational capital and also their social capital volume were considered to be of major importance when it came to maximizing economic returns. The position of the foreman governing the distribution of "good" and "bad" jobs, implies that the power relations and potential opposition between the worker and the foreman is *the* central relation in these memories. Apart from the opposition to the owner, even if the economic differences not were the greatest, therefore, these field struggles constitute key elements in the

workers' practices of both personal and non-personal remembering of these years. The same logic affects all the positions in production, and the patterns are more or less the same for all positions: "good" and "bad" jobs existed in plumbing, plating, turning and welding.¹⁹⁰ Once this conflictual element was removed, an important element providing the occupational field with the overall characteristics of a field would also disappear. Thus, other aspects of the position of a yard worker are more important when remembering the early Kværner years. But this does not mean that the change is remembered as a single transformation: the positional "struggles" over the definition of what is and is not "real" plating, plumbing, welding etc. analyzed above, is remembered as persisting during the early Kværner years.

Further speculation on the changes triggered by the transition from a piece-rate system to fixed hourly wages, might lead to a consideration of whether this change did not initiated long-term structural changes in the production workers' capital relations. While social-capital relations could still be important with regard to obtaining status as a skilled worker and obtaining good jobs, the convertibility of social capital into economic capital was probably no longer as direct as in the days of the piece-rate system. Put somewhat differently: internally, over the years, social capital relations would gradually decline in value in the field. The change from piece rates to fixed, hourly wages would therefore also initiate a capital differentiating process, a transformation having the structural opposition found in figs. 7.1.-7.3. as its final results to date.

One characteristic of this transformation has been the increasing importance and value of the workers' *formal* qualifications. As indicated, capital structures and field relations cannot be analyzed as static entities, not can the social frameworks of memory. Combined with large-scale organizational changes in production, such as the implementation of an assembly line model, the changes in the local qualificational space would also affect the positions in different ways, and at different moments in time.

Given this fact, it is reasonable to ask whether this has resulted in the formation of clearer or more distinct position-specific habituses, which would in turn also affect the positional memories of the overall structural transformations. If this proves to be the case, these changes will not only have taken place at different moments in time from position to position; they will also be related to

¹⁹⁰Although not cited, elements similar to the quotations above are to be found in all positions. To accompany a welder operating a automatic welding machine is remembered as a good job among the welders. Special types of turning, demanding special qualifications, fall into the same category.

changes in position specific qualifications, relations and capital combinations, and have the capacity to affect the agents' opinions of the changes. It is reasonable to claim that the views expressed by the elders cited above, in which the focus is on the increased controls experienced when building LNG/LPG-ships may be considered an indicator sustaining this hypothesis. This also applies to the results in table 7.9, concerning the transition from building ships to building platform decks:

Table 7.9: Positional attitudes towards the statement "The transition to offshore production has resulted in fewer possibilities for applying my work skills"

	Platers	Plumbers	Welders	Mechanics	Surface treat.
Completely agree	14%	5%	3%	50%	3%
Partly agree	10%	12%	3%	6%	8%
Neither/nor	16%	13%	11%	11%	15%
Partly disagree	16%	7%	8%	0%	10%
Compl. disagree	24%	42%	39%	17%	33%
Don't know'	16%	20%	24%	11%	23%
TOTAL	100% (80)	100% (60)	100% (102)	100% (18)	100% (39)

As table 7.9 indicates, the mechanics are the ones expressing *the* most negative opinions of this transition. From a key position during the shipbuilding years, this position doubtlessly lost status, jobs and importance when the yard changed its line of production; since none of the platforms built at the yard were floaters, the competence and skills needed for installing complex marine machinery was no longer needed. This position is therefore a special case.

The platers' distribution is also of particular interest. 24% of the responding platers agree completely or partly with this statement, a proportion 7 points higher than that for the plumbers and 18 points higher than that for the welders. Clear positional differences are also evident if the focus is shifted to the respondents in complete *disagreement* with the statement. Once again, the plumbers and the welders are clearly more positive to the transition from shipbuilding to offshore production. If we relate the figures in table 7.9 to the structures found in matrix 7.1, this is not surprising: the most negative opinions on the historical development of a given position were expressed by the platers. The bottomline expressed in their opinions is clear: while formal qualifications

have become more important, informal qualification and practical skills have not only lost value; they have been lost. Seeing themselves as exponents of these types of practical knowledge, they are more inclined to view the transformation negatively.

One possible outcome of these transformative processes therefore, is a decline in the importance, but *not* an erosion, of what has been called "the worker-collective frameworks" of remembering, in favor of an increase in the importance of the *positional* frameworks of remembering. Put somewhat differently, the changes in the qualificational and organizational space at the yard have resulted in more fragmented "worker collective" frameworks of remembering, while the positional frameworks of remembering have become stronger. However, it is important to stress that this must not be understood as a romantic glorification of a past in which the workers are seen as a united class. The next chapter will reveal memories of brutal internal hierarchies in the workforce, and violent events, drunkenness, alcoholism and social misery are all part of this picture. For this reason, the argument must not be overextended.

Furthermore, the fact that this analysis is proceeding on the basis of retrospective reflections is an important but also complicating factor: one of the results of the assumed changes in the structures of the positional habituses may have been that *all* agents, in retrospect, are more inclined to focus on qualificational aspects when thinking about the changes and transitions at the yard. If this is the case, the "worker collective" frameworks of remembering have simply been changed: while resulting in differing opinions on the past, the basic logic organizing the agents' remembering practices may still be the same.

To return to the distributions in table 7.9, the modus for all the positions except the mechanics is still to be found in the category indicating the strongest disagreement with the statement. One of the questions which must now be addressed therefore is: do these positional differences also appear when we focus on the yard workers' memories of the transition to offshore industry? Moreover: are there distinct patterns of variation between the positions' "lieux de mémoire" from the various phases of this period? On what points can a "worker collective", interpositional *agreement* be found? And finally, and perhaps most importantly: What are the relations between the "positional" and the "worker collective" frameworks of remembering with regard to these more recent events and processes?

7.7. Remembering the transition to offshore industry

The transition from building ships to building platform decks implied a radical change in not just the yard's main activity. Having had shipping companies as contractors for decades, the yard now had to adapt to the quality standards and the organizational models laid down by the oil companies. In addition, the size of the jobs increased radically. On the Shell tankers, for instance, the number of manhours had not exceeded 1 million, while on the first two platform decks, Statfjord B and Statfjord C, a total of 6 and 7 million manhours was needed¹⁹¹, extending over a period of six years (Nerheim & al.: 238/480). As discussed in chapter 6, the transition also implied a radical transformation of the occupational and organizational structures at the yard; trades disappeared, new qualifications and certificates were required, and new positions were created in the organizational hierarchy. The number of functionaries increased radically, and in 1980, as many as 3000 contract workers were also employed by the yard. At the same time, being employed by Rosenberg no longer automatically meant working *at* Rosenberg: "hook up" jobs were carried out in Vats, and the work on platform shafts was carried out in the Gandsfjord. Thus, the yard as a *halbwachsan* framework of remembering literally became more fragmented than it had been in the shipbuilding era.

As already stated, this transition affected the positions in production in different ways. Nevertheless, the interviewees' responses when asked about the changes, reveal certain easily identified, common denominators. Some of the keywords are "increased control" and "improved quality", as well as the apparently contradictory "pulverization of power". While the transition to offshore industry retrospectively is remembered as being dominated by increasing inspections which extended across all positions, the power relations in production are remembered as becoming more blurred. In particular, the power of the foremen is remembered as being reduced, while the inspectors and the controllers, *apparently*, had more to say:

¹⁹¹While the construction of both decks is calculated at 4 million hours, there were other deck related jobs totalling to 2.2 million hours on Statfjord B and 2.9 million hours on Statfjord C.

Matrix 7.7: Remembering the transition to oil industry.

Platers	Plumbers	Welders
<p>When the oil came, everything became more "square"(AG2).</p> <p>Nobody could make a decision(AG13)</p> <p>You know..What was wrong with Mobil was that..If you had a pipe weighing x tons, well.. they'd go around, with paper and pencil...and they'd say.."It weighs 8 tons..so you must have ..4 men working on it! And on a pipe, there is usually two ends! So you couldn't have more than two men! And the other two had to go around and pretend ... to be doing something..(AA26)</p> <p>After "Alexander Kielland" went down...The quality standards were totally changed..That concerned everything..welding, grinding..the whole .. production..There didn't get less of it /controls/after "Alex. Kielland" went down..</p> <p>J.Hj: So it's the oil and that accident..</p> <p>- I think that accident had a lot to say when it came to level of controls on ... the installations</p> <p>J.Hj: Did you notice...The inspectors..Did they change..?</p> <p>-Yes. The inspectors..that was a problem..we couldn't understand why it should be this way..when we came from the ships and onto the oil installations..There were a lot of people running around, but nobody had power! Nobody had power to do anything.(AA26)</p> <p>That was a really big change..Everything had to be correct. Much more, say.. people who would be watchin' you ..</p> <p>J.Hj: Perhaps a stupid question, but ..How did you react?</p> <p>_ Can't say we liked it..Many ...It's not fun to work when somebody's looking over your shoulder (AB6)</p> <p>"There is far more grinding nowadays than when we were building ships..Today, every plate must be ground. It's far more work (AB11)</p> <p>I remember the first job.. in offshore..It was.. Gather some carriers..with flanges top and bottom.. Huge..5 meters high..And all the way, we had a controller who'd sit and write everything we did..You see? Procedures had to be followed..This was completely ...new to us. At the same time..There were to be 10 people doing the job..even if there was only work for 4.. You'd start to wonder.."Who's paying for this?" (AD14)</p>	<p>J.Hj: The trade..did it change?</p> <p>Yes, it was a great transition..I had been in the sector before..When we started on the platforms..New parts..Much of it [drawings] in English.</p> <p>J.Hj: Rules for handling steel?</p> <p>-Yes. Everything became far stricter..Procedures for steel handling..Everything was far stricter. (CA)</p> <p>The ones at the top became very focused on.. the number of hours on each job..Earlier..when we were building ships..the ship was a product..But now..every pipe was a product..fixed starting point ..and a time for finishing..Earlier, you had the ship. (CB12)</p> <p>Earlier, we planned the jobs..Got the jobs done in the ways we wanted..Bend the pipes as we wanted..We would treat..say..the whole line of the product..And made sure .. The speed..Would send a reminder to the painters.. Transport to the outfitting quay..Crane onboard..And install them..While.. In oil..You would stand.. On the same post..And.. Make a lot of reels that you would..You see..You'd pour out a lot of repeat products..So that was the great change..You wouldn't follow the product from the beginning to the end... Usually what we call specialization.</p> <p>J.Hj: Did people react to this, or was it accepted as "OK, we're in a new industry, and .."?</p> <p>- I don't think people knew what it was. I remember the foremen also had huge problems with.. the goals and the drawings..New sets ..Suddenly, everything was measured in millimeters. It was.. so so .. earlier.. When you took the measurements yourself, .. you would usually do it in meters and centimeters (CB)</p> <p>When it comes to offshore..The specifications are all in the book! But between these lines, you show some common sense! A lot of people don't do that. They just read what it says. And don't think about .. what they're saying. That's been a problem in offshore (CC16)</p>	<p>J.Hj: When we are getting close to.... Past the gas tankers and over to the oil industry,.. How did you experience this transition?</p> <p>- (sighs).. You can say...experienced the transition..It was.. Controls, you know! People running about controlling you... Looking at you..in every possible way. Idiotic! So it was...Rubbing and grinding and grinding machines.. You know..On the ships we were used to ... People who grinded... People who were Sweeping... People who were cleaning.. Now you had to... I remember the foreman.. started to make fuss about.. We had to carry a steelbrush...A picker....to remove the slag from the seam..a.s.o. (BD9)</p> <p>You had to learn..Had to take welding courses..Improve your own standard..More complex things..technical things..You had to be a bit better..I felt that ..Both the foremen an us had to ..get better insight. You know..welding the skin on the hull..doesn't take that much. But starting with pipes and mountings..Different kinds of alloys..You must be more aware..So the challenges became greater..Fortunately.. Less boring work (BE5)</p> <p>"It had become far stricter...Stricter controls..Had to be far more accurate..Things like that..Than what it was like when we were building ships" (BA5)</p> <p>"Today..it's far more..you know... The controls are far stricter to say it straight out!.. The demands on the welders..are far stricter " (BB10)</p> <p>You'd be told: "That section must be finished together with one man. The work could be easily done..But the number of hours had to be kept! [up] You'd come on a monday "OK. This week, you've got these three kneeplates!" (BF14)</p> <p>What made [the difference] was that..If you weld something provisional.. You needed ASME G6 certificate to do it.. As it was called in these days. (BF15)</p> <p>"In the earlier days...On the oil tankers..It was just "Weld and cheat!" There was a control of the crosses..(BF22)</p> <p>You know... the greatest transition..When compared to building ships.. The platforms..After all. they are.. You just weld pieces of LEGO together.. Mostly.. (BF22)</p>

At first glance, the fact that these positions had been affected by the same overall changes seems to have resulted in interpositional patterns of homogeneity when looking back at the transition. It is not surprising, perhaps, that they all emphasize the increased levels of control in their daily work. Furthermore, interviewees in all positions acknowledge the improved quality in production. But the matrix also reveals slight variations in the positional remembering of the

reaction to the regime imposed by the "outsiders", in this case the various representatives of the new contractor, Mobil Oil.

Interviewees in all positions emphasize what they remember as the complete madness which characterized the changes in the organization of the work for example, the contractor specified that the number of workers per foreman should never exceed 10 (a dramatic reduction compared to the ratio in the shipbuilding years), they specified how many workers were required for each individual job. Put simply, they remember it as being more important to be counted at a job site than to actually do anything. This detailed regime is retrospectively remembered as a total break with the system that had existed at RMV in the shipbuilding epoch. Complaints about a decline in the work morale were also frequent.¹⁹²

The fact that everything was directly supervised by the controllers and the inspectors, meant that those interviewed remember the degree of freedom as being reduced for all the positions in production. At the same time, however, what I have called the "spiral of bluffing" also constitute an underlying element in their memories of this epoch. While the workers previously had had to cheat the foremen, the foremen and the workers now had to cheat the "outsiders"; the representatives of the oil companies. Having three kneeplates to weld in the course of a whole week, or being four people on a job where there was only room for two, meant inventing new strategies for cheating the contractor.

But the formalization of the work procedures is also remembered as having reduced the power of the foremen. Due to the strict application of formal rules and quality specifications, "nobody could make a decision anymore"; the key question in this context is simply, decisions about what? Although not evident in matrix 7.7., the bottomline is still clear from the interviews : when specifications were wrong, when procedures could not be followed or when some

¹⁹²Nevertheless, the majority of the respondents disagree with to this statement when asked about it in the survey:

Table 7.11: Attitudes towards the statement "The transition to offshore production resulted in a lowered work morale at Rosenberg"

	Platers	Plumbers	Welders	Mechanics	Surface treat.
Completely agree	7%	4%	3%	11%	0%
Partly agree	15%	9%	10%	0%	8%
Neither/nor	15%	9%	13%	6%	26%
Partly disagree	15%	7%	8%	17%	10%
Compl. disagree	35%	58%	38%	39%	40%
Don't know'	16%	14%	27%	27%	16%
TOTAL	103% (75)	101% (57)	99% (97)	100% (18)	100% (38)

thing had to be changed relating to a product (when formal specifications not were correct and *practical* solutions had to be found), nobody on the shop-floor or close to the production is remembered as being able to make a decision. An opposition is perceived between those having authority and/or the expertise based on experience and practical skills¹⁹³, and those having authority based on formal qualifications, understood as the authority to "rewrite the book". In the shipbuilding years, the foremen are remembered having the ability and authority to find solutions "outside the book" when "the book" either proved to be wrong, or when its specifications proved to be impossible to convert into practical. While in the offshore years, only people on higher levels in the hierarchy had the authority to rewrite the book". This tendency is considered to have persisted up to the present:

Today..we are directed far more by the superiors..You can't go to the foreman and ask.."Can we do it this way?"..He doesn't dare to take the decision..He goes higher up..to an engineer.. And he takes the decision, and passes it down again..(CB7)

In short, authority in production is remembered as becoming far more bureaucratic and distant. Thus, power and/or field relations are also remembered as becoming "blurred", in the sense that the power relations became less direct and more anonymous.

To return to the positional memories of qualificational changes at the yard, the differences here are far more distinct. Once again, the platers pose an interesting case. While both the plumbers and welders generally focus on aspects indicating both increased control over their work and its qualificational *upgrading*, the platers tend to emphasize a more radical break with what was formerly the work of platers. For workers in this position, the transition to offshore industry is remembered as implying that skilled platers had to do work previously done by *unskilled* workers. This change not only represents a break with the traditional understanding of the job of a skilled plater, therefore, but also indicates a process of deskilling. Bearing this in mind, the results shown in table 7.9 are not surprising.

Once again, grinding is *the* symbol of a degraded or destroyed trade. According to one of the platers cited in matrix 7.7:

I don't think that it [grinding] is ... a life for a plater... Earlier, the yard had unskilled [workers] who [would do the grinding]... But nowadays..there are hardly any unskilled..The

¹⁹³I.e. this opposition is also described by the second axis in fig. 7.1. See also the discussion of Dreyfus & Dreyfus in chapter 3.

oil companies demand, they demand skilled workers. So there must be as many skilled workers as possible. I don't think there are any unskilled workers left..Everybody must be skilled (AB12)

At first glance, this might seem to contradict the conclusion already drawn, since this man emphasizes the fact that everyone must now be *skilled* workers. Nevertheless, grinding is *not* perceived as appropriate work for a skilled worker; it's not a plater's life. Plating is not about grinding, so a plater should not have to do this. Thus, there is an opposition between *formal* qualifications on one hand and practical work and work knowledge (i.e. a kind of cultural capital) on the other, which functions as a structuring element in the platers' memories of these years. Although not a direct reflection of the structures described in fig. 7.1. - 7.3., this is still related to the phenomenon that is partly described by the oppositions in the same figures: changes taking place in the yard's qualifical space and organizational space and in the space of work relations at the yard (see Korsnes 1996: part 3).

In this respect, the observed difference between the plumbers and platers is of particular interest. While those interviewed in both categories emphasize important similarities between the two job (see matrix 7.1 part 1-2), and while those who experienced the change generally express negative opinions of the implementation of what they perceive as an assembly line model, they still evaluate the transition from shipbuilding to offshore industry differently. Thus, the large scale transformations at the yard, which seems to be identical, have resulted in sociologically important differences when these changes are remembered. The question which must now be asked is simple: why? Part of the reason has already been stated above: many of the platers who experienced this transition personally, do not remember it simply in terms of deskilling. As one of the oldest trades at the yard, it is also considered a break with the platers' historical understanding and definition of what is and what isn't the work of a plater. Thus, it also represents a break with their memories of the skills, qualifications, work relations and work tasks that used to characterize their position as skilled production workers at the yard. There is a perceived discrepancy, therefore, between the memory of what the trade used to be, and their daily work experiences in the trade at present. While formally ascribed the status of skilled workers, they still are required to do work that previously only unskilled workers would do. Analytically, therefore, it is possible to distinguish between the social construction of skilled and unskilled workers, and what for reasons of simplicity may be called the social constructions of skilled and

unskilled work: what kinds of work the agents perceive to be worthy or entitled to be labeled 'skilled work'.

The history of relations between the qualificational space, organizational space and space of work relations is slightly different for the plumbers than for the platers at RMV and on the national level. While both have experienced a yard-internal reorganization, which implied an adaptation to assembly line work organization, their qualificational histories are different. For instance, as mentioned in chapter 6, industrial plumbing was not included in the apprenticeship legislation and defined as a separate trade in the vocational schools until the mid-1980s. Up until the present decade, a vocational school education in plumbing would be in VVS. As shown in table 6.1, the number of plumbers employed at the yard doubled in the years between 1980 (75 plumbers) and 1990 (156 plumbers), while in the same period the number of platers declined from 250 to 182 (a reduction of 27%). These figures may also be considered to indicate a change in the centrality of these two positions at the yard. For self-evident reasons, entry into the offshore industry meant that the complexity of the pipe systems built by the yard's workforce increased, so the plumbers became one of *the* central positions at the yard.

Thus, the plumbers perception of the relation between the state of the trade in the past and the present differs from that of the platers. The plumber cited above on the subject of the regime of the engineers, continues:

But you know..It's mostly because the criterias..the quality..the product..all these things.. Questions of security in the oil industry.. The thickness..You know.. We can't just do whatever..Can't just start to cut a pipe...You'll...change the steel so that it will lose its properties....That's much of the reason why people.... or people on my level do not make these decisions straight away. (CB7)

At first glance, this might not seem to be that different from the views expressed by the platers: in both cases, it is remembered that the authority to decide was removed from the shop floor when the yard entered the offshore industry. However, this plumber's focus on the importance of knowledge about steel properties and how these could be destroyed if incorrectly treated is of particular importance. Despite the assembly line model, the transition from shipbuilding to offshore production is not remembered as a process of deskilling. Instead, the focus is on increased knowledge about the steel qualities dealt with in their daily work. This also applies to the emphasis placed on the millimeters in drawings (see quotations in matrix 7.7). When contrasted to their memories of the plumbing done on the ships, the industrial plumbing of the offshore years is

perceived in terms of precision work demanding more special knowledge of materials than used to be the case. For this reason, the practical tricks that were frequently employed in shipbuilding, such as putting the end of a pipe into a bucket of water to find out how to cut it, can no longer be used.¹⁹⁴

The patterns of positional inclusion and exclusion analyzed above reveal that agents both in plumbing and plating see themselves mainly as steel workers: despite the easily identifiable differences, those interviewed have no problem in seeing similarities between these two trades. Nevertheless, their memories and opinions of the transition from shipbuilding to offshore industry differ in important ways. The analytical implications of these differences are complex, and to be adequately understood, I will argue that in addition to focusing on relations between:

- a) the qualificational space, organizational space and space of work relations, the analysis must also focus on
- b) the relations between the agents' perceptions of their present work, and their positional *memories* of their work, and
- c) the dialectics between a) and b) as it manifests itself in struggles over field specific capital in the occupational field.

While the first set of relations (a) is of vital importance when analyzing the social construction of the skilled industrial worker, the second set of relations (b) is central when analyzing how this socially constructed skilled industrial worker distinguishes between skilled and unskilled *work*. In order to analyze processually how the socially constructed worker, through a social construction of skilled and unskilled *work*, partly contribute to the social construction of the *categories* of skilled and unskilled workers, I would argue that the focus must be on the dialectics between a and b.

Exposed in simpler terms, this means that in an analysis of the social construction of the skilled industrial worker and this skilled industrial worker's social construction of skilled industrial work, the focus must not only be on the relations between qualificational space, organizational space and space of work relations, but also on the relations between the agents' personal and non-personal memories of work experiences, their memories of and opinions on the

¹⁹⁴In terms of the plumbers' work tasks, their position has become more ambiguous. While industrial plumbing often means working on large pipes and does not easily entail precision work, the opposite is the case in instrumentational plumbing, where precision work and small-scale pipes are two main features.

history of their positions and qualificational categories, and their perceptions of present work practices in the positions in which they are located. The reason for this might seem trivial: having formal status as a skilled worker, and being paid the wages of a skilled worker, does not necessarily mean that this person always sees himself as doing skilled work. Likewise, a formally unskilled worker may also see himself as doing skilled work.

In this respect, the interviewed platers and plumbers differ from each other. Although both see themselves mainly as steel workers, and all of those interviewed had formally status as skilled workers, their opinions and memories of the transition to offshore industry differ. As indicated above, for the platers, grinding (and the grinding machine) falls historically into the category of unskilled work: plating is not about grinding. For the older platers, the same applies for assembling "Lego-pieces", i.e. the dominant activity at the present. Among the interviewed plumbers, it is harder to identify a similar, historically defined low-caste work. Thus, their memories of the transition to offshore industry also differ. A fullscale analysis of the skilled industrial worker's social construction of skilled industrial work, would probably merit a dissertation of its own and is therefore outside the range of this analysis. Instead, this section on the transition from shipbuilding to offshore industry will conclude with a consideration of the welders, a position that historically was not considered to involve skilled work. Finally, mention will be made of the turners and mechanics.

In the ten years from 1980 to 1990, the number of welders at RMV increased by more than 75% (from 160 to 283 persons) (see table 6.1). In this respect, their trajectory can be seen as similar to that of the plumbers. Moreover, welding was not included in the Norwegian apprenticeship legislation until the 1980s (see Michelsen 1995). However, as described in chapter 6, the welders differ from both the platers and the plumbers on several parameters. Firstly, their qualificational status has been based on various courses in welding leading to specialized welding certificates. Throughout the years of offshore industry, the number of these certificates has increased, and they must be renewed at fixed intervals in order to avoid loss of qualificational status. Secondly, their work is closely inspected; all welded seams are x-rayed or checked by ultrasound, and every faulty seam can be traced to the individual welder. Thirdly, while the platers and the plumbers work in pairs, the welders generally work alone.

When looking back (see matrix 7.7), the welders clearly emphasize most strongly the increased frequency of inspection of their work. Given the changes

described above, this is not surprising. Nevertheless, the welders are markedly less negative in their attitudes towards the changes triggered by the transition from shipbuilding to offshore industry. The combined percentage indicating agreement with the statement in table 7.9 is only 6%, by far the lowest in the table. This is not surprising, since the welders have experienced both a qualificational upgrading and an upgrading of their skills. New certificates were needed as new materials and products required to be welding, new technology was introduced and quality controls became stricter. But when asked about work on particular platforms, none of these were singled out in ways that would indicate that they may be analyzed as position specific "lieux de mémoire". Whenever Statfjord B and Statfjord C are explicitly mentioned by the welders, it is usually not because of job related episodes or challenges. Instead, the emphasis is on the profits the yard made on these jobs, and the opposition to the new organizational regime introduced by Mobil.

Compared to the platers and the plumbers, it is harder to claim that the welders consider these transitions a radical break in their own position's history. Nor has the reorganization of the production meant radical changes. For instance, little mention is made of the implementation of an assembly line model of work organization, a change that is not evidently remembered as having affected their own work in any major way. Instead, the overall changes taking place at the yard in the offshore years are remembered as a gradual acceleration of processes, characterized by a constantly increasing demand for specialized qualifications, by more strenuous work, by less freedom because of the inspections and quality controls, and by the regime of the engineers. Or to sum up, by a continuously increasing pressure on the individual worker. Compared to their memories of what the job used to be like, welding today is seen as being a more demanding occupation. Expressed in Bourdieusian terms, holding on to the welder-position in the occupational field in the shipbuilding years is remembered as being easier, allowing more room for fun at work and implying less physiological and psychical fatigue than is the case nowadays. Against this "memorial" background, the increased wages and the qualificational upgrading that have taken place since then, have had their price.

When asked about *when* this change occurred, why it occurred, or when the process accelerated, none of those interviewed would give exact answers or point to specific jobs or platforms. The general answer usually given, can be summarized as "it came with the oil". This does not mean that the welders do not have memories of interpositional and intrapositional oppositions. As will

become clear in the next chapter, memories of the introduction of new certificates, i.e. qualificational challenges, may be analyzed as being structured to some extent by intrapositional oppositions. Moreover, when classifying their own positional history, distinct epochs *can* be identified. However, compared to other positions in the production, these are not remembered primarily in terms of organizational or qualificational changes. Instead, the epochal classifications at first sight seem to be more directly linked to *technological* changes that have affected the position. In this respect, the introduction of semi-automatic welding rigs, dated by one of those interviewed to 1986, is of particular importance. This was made clear in the following interview with one of the younger welders:

....Since we're talking about welding....It's very...I see it [semiautomatic welding] as easier while another may see it as far more difficult... I think that..it's easier because..it's gliding..It's much faster..so that...If you're not concentrating..If you can't manage to hold the pace in your body..It's easy to get a hunchback... Isn't that nice..

J.Hj: To ask a leading question..Those who had problems, if anyone had problems, I mean..with this transition...was it the older ones on the welding floor or..?

- No. I. I can't remember if anyone had problems..I think it was the other way around.. Most perceived it as an easier way of welding....the semi-automatic..But of course...they demanded that things go much faster..When you..A join..much faster. Maybe twice as fast.. three times as fast..They demanded a different tempo..I think that was the great change..Plus.. Things get much warmer when you're working with a semi-automatic..Your body gets much warmer../.../

J.Hj: So more fatiguing for the body, if I understand you correctly? The heat... makes it a tougher job..Even if it's easier..So the toll on your body..?

- Yes..I mean...The toll on the body is tougher nowadays..I think..Than it was using welding sticks.. You know..If you've got a wall..One and a half meters high... And you're supposed to weld it vertically....If you weld with sticks, you must../.../ you weld 10-15 centimeters with the stick, and then you have to change it..So you get a normal..You relax your body..But with a semiautomatic you just do it all in one [operation].. Which means that the tool, which in the beginning isn't heavy..When you're half the way..It gets heavy..So it's more static. (BBB4)

Thus, it is not the new technology *per se* that in this case is seen as the important historical watershed: although the work has changed, it is not remembered as becoming more difficult, not even by the older welders who have learnt the trade in the time of electro welding.¹⁹⁵ Instead, it's the physical pressure on the welder that is remembered as being radically increased from what it once was. Accounts of this kind, in which work-related physical exhaustion is so strongly

¹⁹⁵One of those interviewed, who had worked as a welder since the late 1960s, for instance claimed that it just demanded a different way of "oscillating" when welding.

emphasized, are not to be found in any of the interviews with people in the other positions at the yard.

However, this does not mean that the welders are the only ones who experience their work as physically exhausting. When asked in the survey how often they (subjectively) feel they have to do hard physical work, or are physically exhausted after work, the welders are not overrepresented compared to the other main positions in production at the yard (the plumbers, platers and the mechanics).¹⁹⁶ On these two variables, the distributions are more or less equal for all the above mentioned positions. Although they are the ones who emphasize this aspect in the interviews most strongly, and consider their work heavy and fatiguing, this is not a characteristic that is unique to the welders' work perception. In order to understand why the welders single out this change as one of the more important in their own positional history, a simple, direct and ultimately reductionist and deterministic approach that focuses solely on the arrival of the new welding technology is not plausible. While not denying that this had an impact on the welders' work situation, I would still argue that the social relations within which this technological change occurred and is remembered, must also be sought included in the analytical scheme.

In the section in the survey concerning the workers' subjective perception of their work, there is one question that sets the welders apart from the other main positions in production. Although not a *statistically* significant result, 27% of the welders responded that they always or often feel their work is stressing. This is 10 to 17 percentage-points higher than for the other three positions. It is relevant, therefore, to ask what it is in the welders' relations in the occupational field that make the above aspects of their actual work situation not only a central major element in their perception of their present work situation, but also *the* focal point in their memories and classifications of important changes in their own positional history.

According to the analytical scheme outlined above, the relations between the qualificational space, the organizational space and the space of work relations different for the welders on several parameters compared to the platers and the plumbers. For instance, the history of the welders' qualificational space is clearly different from the others: Although they have been paid the wages of skilled workers at RMV, welding was not seen or formally defined as skilled work. At

¹⁹⁶When cross-tabulating these variables (question 7a in the questionnaire) against these respondents' occupational position, the results are in no case statistically significant. Of course, this does not mean that there are *no* differences between the positions.

present, the welders at regular intervals run the risk of losing their (newly achieved formal) qualificational status, since their welding certificates have to be renewed. In addition, any faults in their work are revealed in the rigorous inspection of all welded seams, traced to the individual worker and entered in his/her record (see matrix 7.1). In this way, their qualifications are tested on a daily basis. Furthermore, physical fitness is of vital importance in the actual work: for example, failing eyesight may have fatal consequences for the individual welder's work ability. Since they work alone, they cannot depend on the ability of coworkers, "splitting" tasks, for instance, so a coworker can do the specific jobs they can no longer do, or do not have expertise to do. In Bourdieusian terms, therefore, the welders' occupational capital and their position in the occupational field are far more precarious than the platers' and the plumbers', and can be challenged or questioned by the welding inspectors on an almost daily basis. Thus, there are characteristics in the welders' field position, in their capital structures and in the structures of their habituses that are different from those of the other two positions. Bearing in mind all these factors as well as the radical increase in work speed resulting from the introduction of semi-automatic welding rigs¹⁹⁷, it is not surprising that *the* focal point of the welders' remembrances of these years is aspects related to the actual work.

In the absence of interviews with turners or mechanics who have experienced the transition while working in these positions, it is very difficult to draw conclusions about their opinions regarding this change. As already stated, however, it is clear that they experienced a decline in status, jobs and importance when the yard started to build platform decks. When restricting the analysis to response patterns in the survey data and patterns of nonpersonal remembering, some structures are still clear. In table 7.9, 12 of the 18 turners/mechanics (67%) express a negative opinion on the question about the changed possibilities for applying work skills. On most parameters, the shipbuilding years are remembered as "the glory days".¹⁹⁸ When asked about the stories told on the shop floor, for instance, the newcomers would answer:

Those were the glory days..It was.. If you were an apprentice with us you'd make everything. Engines .. and ... everything you could see..There is a lot of talk about it..The oldtimers who are still there.. "Those were the days!" (DDA26)/.../

J.Hj: The transition..Do they talk about [it]...?

¹⁹⁷Jøssang (1990:62) has calculated the increase in productivity as 40%.

¹⁹⁸The brutality that older workers could exert on apprentices, however, is an exception. In this respect, things are seen as having improved.

No.. I haven't heard anything down at our place.. But I hear them say..We should start to build ships again..That was the thing to do! (DDA27)

That was the time when the machine shop was at the top! When building ships...in the days of the shipbuilding" (DDB6)

A full matrix based on an analysis of the interviews would have identified many of the "positive" keyword used by the turners in matrix 7.1. as integral features of their descriptions of the shipbuilding years. When looking back, what is remembered is the versatility of their work, the high levels of precision, the challenging tasks and the possibility to make decisions, even if somewhat restricted, about the work situation. While there is clearly an aspect of continuity, it does not change the fact that the position has lost some of its power, not just in numerical terms. Since they are no longer responsible for one of the key phases in production, such as the installation of the engine (an operation that transforms a 'hull' into a 'ship'), the importance of the position is considerably reduced.

To sum up, it is hard to identify clear positional or interpositional "lieux de mémoire" that are related to the transition from shipbuilding to offshore production. While the Shell tankers built in the 1960s have obtained status as "lieux de mémoire" because of the qualificational aspects and challenges, the first two platform decks are instead epochally remembered as "the Statfjord years". Yet this does not mean that the "Statfjord years" are not remembered as having conflicts, oppositions or negative effects. The main opposition articulated revolves around the detailed regime of an "outsider", Mobil Oil, which also affected the positions in production at the yard. This does not alter the fact that the yard's profits were enormous, and that the jobs at the yard were safe. If the workers wanted, they could easily find well paid work outside the yard.

This constitutes an important contrast to the dominant elements of the memories of the post-Statfjord years. Since in the mid-1980s, a new and qualitatively different set of changes have been taking place. When remembering these more recent episodes and transitions, patterns of interpositional agreement emerge. Analyzed in field terms, this "agreement" is characterized by an increasing opposition to the new managers and the managerial regime at the yard. While the "outsiders" are perceived to be the main opponents in the memories of the Statfjord years, the key opponents in the "contemporary" memory are all seemingly "insiders": new directors with new ideas about management and new philosophies.

7.8. Becoming "young and efficient"

As mentioned in chapter 6, 220 of the workers, born in 1926 or earlier, accepted an offer of early retirement (in 1985-6). Not surprisingly, the average age of the RMV worker was reduced. In general, and if analyzed in isolation from opinions on the other changes that were occurring, the retirement program is considered a positive element in the more recent history of the yard. In the survey, there are no major differences between the positions in production on this issue. In the interviews, the overall majority also emphasize the positive sides of the program: physically exhausted people would no longer have to work. When seen in relation to the overall changes taking place at the yard in the same period, however, there is an ambiguity in the ways the interviewed remember the effects of the retirement program. A plater who had worked at the yard since the mid 1970s, described the changes rather ironically:

You see... Hah. Everybody should be so young and efficient..(AB15)

The new retirement program was part of a broader shift in the yard's managerial policy. When recruiting new personnel, social capital lost its importance, and an increased emphasis was placed on formal vocational school qualifications (i.e. educational capital), changes that are described by the second axis in fig. 7.1. On the shop floor, jobs that had been retirement posts for the yard's older workers, for instance as cleaners and guards, were contracted out in the early 1990s to outside firms. In addition, profits declined in the years following the two Statfjord decks, and in 1989 a net loss was experienced. Larger programs were initiated, for instance the so called P-90 and "Omstilling 93", to reduce the costs and also reorganize the yard. This process would also affected the position of the foremen (see Nerheim & al. 1995: 438).

When asked about the managers and this new policy, the opinions expressed by those interviewed were more or less unanimous: "they" didn't know what they were doing. The following lengthy quote is from an interview with one of the functionaries in which he talks about shifting managerial philosophies in the later offshore years:

You see..they all come from Switzerland ..have been to the same course in management..And suddenly, it might be Aker or Haugesund or further north..The leaders had listened to the same...the same lecturer...And they all turn in the same direction..And I say it.. It is a catastrophe for us as a large firm..'cause we're not a small [ship of] 10 000 tons.... We're a 500 000 ton [ship]....that's moving! And you start to turn...to starboard..And ten nautical miles

later, they sit and wait.. "Nothing is happening!!"... And they're about toThe whole mass is about to turn in the direction that has come out of...The new philosophy...And damn..It's a new turn to port, because everybody has turned to starboard.. So the course has been staggering. ... And a new set of "Blåruss"¹⁹⁹ has come by.. You know.. Economists who have seen the light..And they change the phone book..the order numbers...And don't think about the 600 persons who know my number...And 600 people must learn a new number...And if it doesn't change anything radically, that you can save 10 million..Then for Gods sake don't do it! (EA24-25)

He is not the only one to criticize the new large-scale reorganization programs. When asked about "Omstilling 93", the typical (and ironical) answer can be summarized as "It cost us 80 millions, and produced no results whatsoever. But the food at the Hotel Alstor was good." When asked in the survey if the program had had a positive or negative overall effect for the yard, the negative opinions dominate:

Table 7.10: Positional opinions on the effects of "Omstilling 93" for RMV. N=269

	Platers	Plumbers	Welders ²⁰⁰	Surface treatment	Mechanics
Very positive	1%	5%	6%	0%	6%
Somewhat positive	10%	15%	10%	11%	6%
Neither/nor	27%	10%	14%	33%	17%
Somewhat negative	13%	13%	16%	11%	11%
Very negative	32%	42%	21%	25%	28%
No Opinion/Don't know	18%	15%	34%	19%	33%
TOTAL	101% (n=72)	100% (n=55)	101% (n=88)	99% (N=36)	101% (n=18)

Whether or not the above cited interviewees and respondents are right in their evaluations, or whether or not their description of what happened is historically correct, is not analytically important in this case.

What is important is the fact that the memories of these more recent years, analyzed as an integral element in the struggles in the occupational field, indicate that these years are generally remembered in terms of an opposition or resistance to the structural changes that are described by the second axis in fig. 7.1. The events, episodes or changes that are remembered are generally also related to changes in capital values, capital types and capital structures in the field, and to

¹⁹⁹Commercial college students.

²⁰⁰The differences are not statistically significant, but once again, the nonresponse rate of the welders is far higher than the other two larger groups in the production.

the consequences this has had not only for individual positions or for field specific types of knowledge, but also for the yard in general. By remembering the changes in negative ways, the yard workers are also discrediting, challenging and questioning the yard managers' positions and power in the local occupational field.

In this respect, the changes affecting the position of the foremen are of particular interest. From the early 1990s onwards, production workers could become foremen on a temporary basis, for instance for six months. Moreover, the principle of organizing the workers in more or less stable groups "belonging" to a particular foreman was abandoned. While a worker had previously been part of a group that was working for one particular foreman for many years, the majority now slowly "rotate" from one foreman to another, depending on the jobs. Finally, the qualifications required to obtain a permanent position as a foreman were changed as part of "P90". Those working as foremen on a *regular* basis were urged to take a one year course at Teknisk Fagskole (Technical School, paid for by the yard) in order to improve their formal qualifications. Some of the older foremen (in their late 50s) rejected this offer, on the grounds that they were too old to go back to school. In retrospect, it is the fate of these people that is remembered, and not the qualificational "upgrading". Since they lacked the formal qualifications, most of them are remembered as being pushed to the sidelines after a short period.

Once again, an opposition between formal vocational education capital and the skills (capital) gained from work experience constitute an underlying element in the remembering of these changes, regardless of the workers' position and age:

..You know, .. when we had to go to that school..I think it was a silly thing to do..They demanded that everybody should go...All the foremen..If you didn't go, you could no longer be a foreman. And it resulted...some of the old foremen..Were set to do other jobs../.../People being 57-58 years old..You see?... Have to go to school when you only have a few more years to work....'Cause you must have competence in writing [about] Olaf Duun²⁰¹ and that kind of nonsense, you know.... It has no purpose [Although] the intention is good... Having been a foreman for maybe 20-30 years...It's the same as teaching old dogs how to bark, in my opinion! (Head formen EB44)

Suddenly..The foremen is to have a technical education...And they started.. Heads started to roll..They took many of the best foremen...And... But in my opinion... That was something that they should have left undone.. (CB25)

²⁰¹This Norwegian novelist (1876-1939) was mentioned by every foreman having had to pass the exam. In one sense, Duun thus constitute a position specific "lieu de mémoire" that also is a symbol of the foremens' opposition to the new managerial regime.

To summarize the opinions on the more recent history of the yard, this period is negatively perceived in general: millions and millions were spent, hardly anything changed for the better, and good foremen had to leave their jobs because of a new and rigid management regime focusing on formal school education. In short, these managers are remembered as being incompetent.

This joint opposition to the leaders, means that positional differences are set aside when remembering the overall trends of the post-Statfjord years. This opposition can also be analyzed as a struggle for the symbolic power in the occupational field: Who have proven themselves worthy of our trust and who has not? What are the "real" and the "false" problems at the yard? Or in other words: what are the "legitimate" and "illegitimate" classifications of the present situation at the yard? In this struggle, "controlling" the yard's recent history can be an important asset.

7.9. Final comments

So far, this analysis has concentrated on the positional frameworks of memory, and the structures have proven to be rather complex. For instance, it has not been possible to identify a "worker-collective" memory in Lysgaard's classical sense. A "worker collective", interpositional *agreement* is most readily evident in the interviews when the workers remember changes triggered by the Mobil regime and the yard managers' focus on formal qualifications in the post-Statfjord years. However, in contradiction to Lysgaard's model, material from other interviews indicates that this "agreement" also encompasses functionaries and foremen. In addition, distinct sets of positional "lieux de mémoire" have been hard to identify.

Although all the positions in production have been exposed to the same overall processes, the consequences have varied. While all have experienced a formal, qualificational upgrading, some (the platers) still view the changes as a continuing deskilling process. Given that relations between the qualificational space, the organizational space and the space of work relations differ on several parameters for the welders compared to the platers and the plumbers, it is perhaps not surprising that the ways of remembering the transition from shipbuilding to offshore industry also differ.

In the analysis of the yard-internal capital structures, one of the main oppositions revealed also describes the changes taking place at the yard between

the 1960s and the present. A functionary who had worked at the yard throughout this period commented as follows:

...you know... it was new for us that we had to..consider... the written procedures..about how things should be done..Couldn't take shortcuts ...fix things.... no longer using your own creativity. This was the way it had to be!...So it became..what we see from this period [the first offshore years] up to the present, is that people....have lost everything that may be called creativity..and ..the ability to...think for themselves, find smart and simple solutions. (EA22)

Not all the interviewees share this view of the changes that have taken place at the yard. In the next chapter, this discrepancy will be addressed in an analysis of generational frameworks of memories.

8.0. Generational frameworks of memories

8.1. Introduction

The majority of the people who started work at RMV in the shipbuilding years had little or no vocational education. As shown in chapters 6 and 7, this situation changed during the 1980s: in order to get a regular job, a vocational education was almost mandatory. The process of starting work there in the shipbuilding years differed from starting work the second phase of the offshore years in other respects as well. While the number of job categories had been greatly reduced, the quality controls and inspections had steadily increased. In addition, the average age of the yard workers had fallen. As this chapter will show, there are also major differences in the experiences of those who entered the yard before 1978 (T1) and those who entered in the later offshore years (T2), differences that cannot be solely ascribed to, or merely seen as a function of the fact that the oldest workers have spent a longer time at the yard.²⁰² They must also be ascribed to important changes that have taken place at the yard between T1 and T2.

In this chapter we shall therefore examine the social and mental structural oppositions between two different groupings of yard workers: those who entered the yard in the shipbuilding years, and the younger ones who entered the workforce after the transition to the oil industry had taken place. The reasons for this periodization will be outlined below. Once again, the main theme is to ascertain whether and in what ways the dialectics between structures in the past and structures in the present generate structures in and are structured by the agents' remembering practices. Also in this chapter, field and position specific symbolic (historical or "memorial") coherences, will be central to the analysis. However, this time it is the differences within and/or between the different field-*generations* or field-generational *units* that will be analyzed. Thus, while chapter 7 focused on positional frameworks of memories, chapter 8 will be about generational frameworks of memories. The relations between the agents' perceptions and opinions of *present* field structures, events, processes and

²⁰²But this does not exclude the possibility that the workers entering the yard in the offshore years might develop a stronger subjective awareness of their generational locations in time. Even so, it will probably be radically different from the former shipbuilders' ways of thinking in terms of generational characteristics.

relations, the agents' present field practices, their positions in the social space and their "memorial" patterns will once again constitute the core of the analysis.

As a follow up of the analysis in chapter 7, the relation between generations and positions will be addressed first in an analysis of generational perceptions of positional status hierarchies. This will be done on the basis of survey data. Based on the interviews, generational patterns of "us" and "them" will then be examined in greater detail, addressing such questions as: What are perceived as intragenerational characteristics, as intergenerational similarities, differences and/or oppositions, and how are the relations between the generations perceived? Can distinct sets of generational "lieux de mémoire" be identified, and are there clear differences between the agents' perception of historical events and processes? Or in a slightly rewritten version of Mannheim's original terminology: can a generation specific set of formative events, experiences and processes be identified?

8.2. Generational perceptions of positional yard hierarchies

In Mannheim's original approach, a sociological generation is roughly defined as a grouping of people that, because of their social location, are exposed to a set of events or processes in their youth and early adulthood that give them a unique and unifying set of experiences which in turn result in a lasting 'stratified' consciousness. Employing Mannheim's model, therefore, it is problematic to analyze yard workers as a 'generation' of their own. According to the original terminology, they would be 'generation units':

The generation unit represents a much more concrete bond than the actual generation as such. Youth experiencing the same concrete historical problems may be said to be part of the same actual generation; while those groups within the same actual generation which work up the material of their common experiences in different specific ways, constitute separate generation units.. (Mannheim [1928] 1993:379, italics in original)

While being part of particular generations of Stavanger inhabitants, the yard workers have been (literary speaking) "working up" the material of their common experiences" in ways that were different from other inhabitants of the same age and in the same area, but in different social locations. Following the logic in table 3.1. , on a micro level, it still makes sense to distinguish between yard internal generations and generation units; at the yard internal conflicts between two generation units (in the above defined sense) can be analyzed and articulated as a conflict between two generations of yard workers. Their

experiences at the yard may be radically different in nature. Furthermore, conflicts or oppositions between workers of the same age, but located in different positions at the yard, can be analyzed as a struggle between two position-specific yard-internal generation units.

The yard-internal capital structures have already been explored in chapter 7, and the analysis indicates a division into 3 main groupings of yard workers: those employed before 1979, those employed in the years 1979 - 1985, and the younger workers employed after 1986. However, to assume the existence of these cohorts as distinct generation units of yard workers a priori, would be wrong. A generational identity, or in more Bourdieusian terms structures in the habitus specific to the generation units, must be identified and examined. Employing Mannheim's model, the existence of hierarchical, generational patterns not only of inclusion and exclusion but also of status evaluation, will be of critical importance in this analysis.

Based on the results presented in figs. 7.1-7.3, therefore, the analysis begins with an examination of perceptions of positional status hierarchies at the yard in the different cohorts of yard workers. Those who entered the yard before 1979 have been assigned to one category, those who entered the yard after 1985 have been assigned to another category, and those who entered the yard between 1979-1985 constitute the mid-category.²⁰³ Having divided the sample of the interviewed workers according to the pre-offshore <established offshore dichotomy (see details in the appendix), and having ascertained that the positions of the oldest and the youngest workers constitute a major opposition in the correspondence analyses in chapter 7, this opposition will also provide a point of departure for the analyses in chapter 8.

²⁰³In order to construct homogenous generation categories, the sample has been restricted according to the respondents age and when the respondents started to work at the yard. Some respondents have therefore been excluded from the runs. The distribution of respondents on the two variables of sample restriction is as follows:

	Born -1940	Born 1941-49	Born 1950-59	Born 1960-64	Born 1965-69	Born 1970-74	TOTAL
RMV-1978	100%	82%	86%	0	0	0	34%
RMV 1979- 85	0%	18%	14%	60%	29%	0	21%
RMV 1986- 93	0%	0	0	40%	71%	100%	46%
TOTAL	100% (24)	100% (49)	100% (44)	100% (42)	100% (76)	100% (67)	101% (302)

An analysis of the same set of variables as in chapter 7, employing a latent class analysis as the explorative tool (see e.g. McCutcheon 1987 for further details), identified a three-class solution as the one providing the best model fit.²⁰⁴ The results are as follows:

Table 8.1: Latent class probabilities and conditional probabilities of latent classes 1-3. (N=300)

	Latent class 1	Latent class 2	Latent class 3
Latent class probabilities	0.1623	0.3100	0.5278
Rosenberg- 78	0.2487	0.5048	0.2523
Rosenberg 1979-85	0.1846	0.2639	0.1609
Rosenberg 1986-1993	0.5667	0.2313	0.5868
Welders highly esteemed	0.7808	1.0000	0.0000
Welders lowly esteemed	0.2192	0.0000	1.0000
Platers highly esteemed	0.5444	1.0000	0.0222
Platers lowly esteemed	0.4556	0.0000	0.9778
Ind.plumbers highly esteemed	0.9599	0.9923	0.0000
Ind.plumbers lowly esteemed	0.0401	0.0077	1.0000
Turners highly esteemed	0.9012	0.9868	0.0781
Turners lowly esteemed	0.0988	0.0132	0.9282
Surface treatm. highly esteemed	0.0746	0.8105	0.0063
Surface treatm. lowly esteemed	0.9254	0.1895	0.9937

Chi-square=239.7004 (0.0000)

Dissimilarity index = 0.0519

L-squared = 47.3657 (0.9890)

Degrees of freedom= 72

For technical reasons, the number of respondents in the latent class analysis is lower than the number of respondents in the correspondence analyses. Although this means that the results cannot be directly compared with those presented in chapter 7, they throw additional light on the differences described in figs. 7.1-7-3. In addition, technical considerations have meant that the variables measuring statuses' social esteem have been dichotomized. While this necessarily implies a loss of distributional complexity for each variable, the latent class analysis nevertheless provides a summary of dominant structures in the perception of

²⁰⁴I'm very grateful for the help given to me by John Gelissen, WORC, Tilburg University in running and refining these analyses.

status hierarchies at the yard, and also a more detailed description of the differences between the various generations of yard workers. As indicated by the value of the dissimilarity index, and the L-squared in relation to the number of degrees of freedom, the model solution is not optimal.²⁰⁵ The latent classes could have discriminated better between the various response patterns on these variables. Nevertheless, the results can be interpreted in analytically meaningful ways:

- Latent class 1, the smallest latent class²⁰⁶, is dominated by a *mixed* evaluation of the different positions' social esteem, and is internally dominated by the youngest workers. The platers constitute the "splitting" factor, and the surface treatment workers also break with the overall pattern, being strongly negatively evaluated.
- Latent class 2 is dominated by an overall *positive* evaluation of all the positions' social esteem, and is internally dominated by the *oldest* workers.
- Latent class 3, by far the largest latent class, is dominated by an overall *negative* evaluation of all positions' social esteem, and is also internally dominated by the younger workers. The turners, historically one of the oldest trades at the yard, is evaluated *fractionally* more positively than the others.

In isolation, these results are of limited analytical value if the aim is to draw conclusions about generational differences in the structures of the habituses. To get a clearer picture of the differences, the respondents' (located in the different generational categories) conditional probabilities of being assigned to the above latent classes must be examined. Seen in relation to the results in table 8.1, interesting differences appear in table 8.2. Respondents in the oldest cohort of workers (Rosenberg pre78) have the highest conditional probability of being assigned to latent class 2 (the positives), and are also clearly split between latent classes 2 and 3. With some minor variations, the same pattern is evident in the first generation of offshore workers (Rosenberg 1979-85):

²⁰⁵When I was in doubt about fixing boundary cases (cases in which the conditional probability values are identified as zero or one on one or on several latent classes) to 0 or to 1, Gelissen contacted Jeroen Vermunt (WORC Tilburg and author of *ℓEM*) to obtain his expert advice. Both advised me not to impose restrictions, but to stay with the existing solution. McCutcheon & Mills (in Scarbrough & Tanenbaum [ed.]1998: 71-84) express similar opinions

²⁰⁶See values of latent class probabilities in table 8.1.

Table 8.2: Conditional probabilities of respondent groups belonging to latent classes 1-3.

	Rosenberg- 78	Rosenberg 1979-85	Rosenberg 1986-1993
Latent class 1	0.1223	0.1524	0.1943
Latent class 2	0.4741	0.4159	0.1515
Latent class 3	0.4036	0.4318	0.6542
Total	1.0000	1.0001	1.0000

The opposite pattern is evident among the younger workers. This group of workers is more *homogenous* in their views on status hierarchies at the yard (i.e. have a higher conditional probability of being assigned to one particular latent class). Moreover, they are far more "critical" in their overall views of the internal status of the different positions, as is indicated by the far higher conditional probability of their being assigned to the third latent class (the negatives), and by the far lower conditional probability of being assigned to latent class 2.

Thus, it may be concluded that there are indications of generational variations in the yard workers' perceptions of hierarchies of social esteem. In themselves, the differences are not sufficient to draw strong conclusions about the existence of subjectively recognized *generations* among the yard workers, or about generational structures in the habituses. Furthermore, it is not plausible to restrict the analysis of hierarchies only to the perceptions of positional status hierarchies. Perceived hierarchies *between* the generation units at the yard must also be examined. How do the members of different units describe each other? What are the characteristics in terms of which "we" are described and the characteristics in terms of which "they" are described? Are these (mental) structures of classification related to the capital structures and the patterns revealed in chapter 7? And perhaps most importantly: what events, experiences and processes, *if any*, are remembered as important and may be analyzed as "formative" for the specific generation unit? In what ways are these "yard-generational" memories integral features when distinguishing between "us" and "them"? And finally: is it possible to identify position-specific generation units, and/or memories of intergenerational *oppositions* within the positions analyzed in chapter 7? And if this is the case; what are the main elements or objects of this position internal struggle in the occupational field? Employing the model outlined above, the analysis will recommence with an examination of generational perceptions of "us" and "them".

8.3. Generational perceptions of "us" and "them"

A complete analysis of these patterns is not possible on the basis of the qualitative data. First, capacity limitations make a fullscale examination of the relations between all potential yard worker generation units practically impossible. Second, for some positions, for instance the welders, very few stay in their jobs for their entire working life, so it is virtually impossible to locate and interview welders over 50 years old. Thirdly, as discussed in chapter 6, many positions disappeared during the 1970s and 1980s. Thus, I have chosen to concentrate on workers employed at the yard prior to the transition to the oil industry (i.e. before 1978), and workers who started working at the yard after the main transformations had taken place (i.e. after the Statfjord years). The older generation will initially be restricted to those who had obtained the status of *skilled* workers (i.e. a minimum of 4 years) or as welders (for the same number of years) in the shipbuilding years, and had worked at the yard since the late 1960s or early 1970s. The younger generation will be restricted to those who have worked at the yard since the mid1980s, and formally obtained the status of skilled workers towards the end of the 1980s. For reasons of simplicity, the former category will hereafter be referred to as "former shipbuilders" and the latter category as "platform builders".

Chapter seven ended on a negative note, with one of the interviewees claiming that the workers have lost their creativity, i.e. the kind of expert knowledge described and analyzed by Dreyfus & Dreyfus (1986). To repeat:

...what we see from this period [the first offshore years] up to the present, is that people...have lost everything that may be called creativity..and ..the ability to...think for themselves, find smart and simple solutions. (EA22)

The person expressing these opinions had been at the yard since the late fifties, and is therefore not included in the former shipbuilders category as this is delimited above. Nevertheless, the emphasis he puts on creative competence and practical skills is not unique. Both the former shipbuilders and the platform builders emphasize these two elements when describing each other. The *ways* they are emphasized however differ slightly:

Matrix 8.1: Generational perceptions of "us" and "them."

Former shipbuilders	Platform builders
<p>When I was an apprentice, people were more committed..The young ones..They would have representatives in different committees and boards.. A really committed gang..It different nowadays (CB39)</p> <p>I remember when I started..I was hardly allowed to see the drawing!(CC4)</p> <p>You know..Nowadays, they must have ..they demand vocational school..Before you can apply for a job./../They demand more today..It's very hard (for them)to get a job (CC17/18)</p> <p>You know..There are more young people nowadays..And I think it's a bit sad..They have a different attitude towards the elders..The ones today..The old half-wits!.. When I started..it was..Whenever you got stuck..You'd go to them and ask..You learnt from them..Now, its more like..They've learnt everything at school..I think it's a bit frightening../. They don't have..the skilled part..If you did a job, it should be done properly..Now, it's more.. Everything must be done so damn fast..Just get it done..No matter how it looks! (CD32/33)</p> <p>The ones who are apprentices today..They must be schooled..They're longer at school..Perhaps two years at school..One year as an apprentice..Three years today..What do you learn..In one year..Compared to us doing four years?../..It's really a pity..When they recruit apprentices..They only look at the grades! In my opinion, they should take the ones who are good at practical work! (EB34)</p> <p>The part of "varmeretting"²⁰⁷ and the whole thing..People don't know how to do it any more! (AE10)</p> <p>You know... They don't take responsibility!..Be able to do that..They don't dare..To0 controlled..Regime of details all along the production line (AE26).</p> <p>I think the oldtimers know their job better than the young ones..Because of the training they were given! To do the piece from A to Z (AF15)</p> <p>I see the young ones..They go slavishly by the book..And..And if it can't be found in the book, they don't understand a thing. They don't learn much..You know..Take decisions of their own.(AG28)</p> <p>From the mid 80s and onwards..All the ones we saw as the exponents of a social milieu, they..disappeared..It became more..uniformed..They should only have the best ones from the vocational schools..Only the ones having the best grades (CB25)</p>	<p>When you talk to the ones who built ships..They say that nothing compares to that..But now... we see that the standards aren't all that different (AAA3)</p> <p>You had to ask if you wanted to know anything, and you weren't shown the drawings unless you "stole" them from their pockets./../Those being at my age, they explain things without being asked..Give you the drawings" (EEE9/10)</p> <p>"When we started..The attitude was..It's a bag money that never can be emptied..People are better..they think things through (AAA11)</p> <p>What they say, the ones who were building boats: "Ah..It was better in the earlier days..More fun." (BBA11)</p> <p>In my opinion... Many of the oldtimers who still are at the yard...They are very unsecure....In relation to..And for them..It's very difficult to take decisions..They are afraid of getting caught...../.../ You see..If your doing something on your own.. They try to hide from the foreman..Cause..They have a different opinion of the foreman..than us..We see him as a member of the gang.. To them..is a different..class (CCB21)</p> <p>In the gang I've been working in..We have this guy,..have been working for 3X years...He knows what he's doing..Even so he can see the drawing and not understand a thing....But he can see..How it looks and then find out .."That's the way it must be!" (AAB7)</p> <p>You know..I've been working with one guy who took part in building many of the boats. . He was more .."No problem..Didn't use the folding rule.. Totally different conceptions..earlier.. Would put a lever in the seam..If there was gap, they'd just fill with something..any kind of material..They had no idea about what the welding did..The steel means preheating..That's why I almost give up when I see those [boats] .. They should have sunk many years ago!..When compared to what we are building nowadays!!(AAD21)</p>

As matrix 8.1. indicates, the former shipbuilders emphasize strongly the value of the practical skills they see themselves as possessing. This is considered the key to the job, founded on knowledge about the materials that are used, and also on ways of finding solutions that are not necessarily according to the written procedures (i.e. "the book"). *Their* way of learning the trade and becoming skilled workers is also considered better than the formal education that the platform builders have received. While the latter's grades from vocational school may be better, they are not as good workers or as competent as the former shipbuilders when it comes to the actual work.

For a number of reasons, the patterns for the platform builders are not as homogenous. First, the former shipbuilders are not as clearly perceived as a

²⁰⁷Use of heat to shape the steel.

generation in opposition to, or radically different from themselves. Second, the practical knowledge possessed by the oldtimers is recognized as important, but not seen as superior to the knowledge they themselves have acquired. Task claiming practical skills have proved to be not that different from what they are used to or considered that difficult to acquire (cf. the first cited platform builder); the present standards are considered similar. In short, although the distinction is recognized, it is not seen as an overt opposition which clearly separates the two cohorts. The "claims" that are implicit in the former shipbuilders' statements (that quality suffers because the newcomers' lack of knowledge) are not automatically accepted. What they've heard about the things that could be done in the shipbuilding years, in contrast to what can be done at the yard today is almost shocking, so the quality of the products at the yard is definitely not considered to have declined. Furthermore, they see themselves as being more at ease with the foremen: for the platform builders, this relation is not considered to be dominated by the foreman's authority.

At first glance, these differences may seem trivial and of little relevance to the overall analysis. However, seen in relation to the oppositions revealed in chapter 7, this is not the case: the main opposition expressed in the descriptions in matrix 8.1. is also to be found in figs.7.1-7.3. In both cases, practical skills are contrasted with formal school education, and younger workers are located in opposition to older. Thus, the patterns in matrix 8.1 are important indicators of the parameters applied when distinguishing between generational groups of yard workers. At the same time, the quotations in matrix 8.1. reveal a latent struggle over the values of the capital types that constitute these oppositions: the former shipbuilders feel that their capital, and hence their positions in the occupational field, being challenged or at least questioned by the formally educated newcomers. The respect that once dominated relations between older and younger workers is gone; nowadays, the latter view the former as "old half-wits". Thus, the social milieu at the yard has become worse.

However, there is also an imbalance present in these patterns of inclusion and exclusion. Located in the "strongest" sectors in the yard workers' (yard-internal) capital structures, the platform builders tend to overlook their education from vocational school, or at least not to consider it important, while the former shipbuilders see this as the platform builders' strongest asset. When asked what it is that makes them different from the "oldtimers", the platform builders seldom mention their school education as important, and never refer to it as a major parameter distinguishing them from the others. Thus, that the

members of one yard generation tend to see as a threat to their own field position, the members of the other generation take more or less for granted.

In Bourdiesian terms, the patterns revealed in matrix 8.1 may be considered products of differences in the structures in the generation specific habituses. The main difference concerns the relative "weight" of the two types of qualificational capital, formal qualifications based on vocational school (an important structure in the platform builders' habituses) vs. qualifications based on experience (an important structure in the former shipbuilders' habituses). Although the necessary data is lacking to draw rock solid conclusions about the changes in the capital structures at the yard, it seems reasonable to relate these differences to the shifts in recruitment policy and capital values which took place at the yard in the mid-1980s. When the former shipbuilders entered the yard in the early 1970s, they entered a part of the occupational field in which the volume axis and structure axis were not distinguished as clearly as in fig. 7.1. Fifteen to twenty years later, this "unified" volume axis has been "split" into an overall volume axis and a structure axis. Thus, entry into the yard at T1 and T2 means reentry into two different systems of relations and social structures, which results in the formation of different structures in the respective agents' habituses. As a consequence, the agents have also generated different schemes of perception. The former shipbuilders, perceiving their positions as challenged by the newly imposed requirements for maintaining a position in the occupational field (i.e. having a vocational school education), have a stronger generational awareness; they are clearly able to distinguish "us" from "them" in terms of generations. At first, this might come as a surprise, but the underlying logic is basically the same as was found in chapter 7 with respect to the ships that were remembered; whenever the capital and/or statuses (i.e. a part of the symbolic power foundation) of the agents are seen as challenged, the formation of a subjective group identity and group specific "lieux de mémoire" seem to be accelerated.

Nevertheless, it is not analytically plausible to reduce the processes through which a subjective group identity is formed *solely* to questions of capital changes and struggles over capital types and capital volumes. In terms of Mannheim's key argument, a sociological analysis of generational awareness must also focus on the relation between people located in positions in the capital structures and the actual *experiences* associated with the positions in these structures. According to Halbwachs, it is necessary to analyze the ways these experiences are *remembered* by these same people. The central questions therefore are: what are the unique and in this context the unifying experiences of

the former shipbuilders? How are the memories of these experiences active in the formation of a subjective generational awareness, of a generational framework of memory in Halbwachs terminology? A simple answer would be that they have all been building ships, but as stated in chapter 7, it is not the individual ships that are remembered in most cases.

In addition, a fullscale analysis must somehow capture the dialectics between the histories and memories of the individual field positions, those of the larger field, and those of the agents' autobiographical histories and practices of personal remembering. The memories of relations between the different positions at the yard and the occupational field have already been discussed, so the analysis will proceed to consider the memories surrounding the events of *becoming* a yard worker.

In chapter 7, one of the conclusions was that, the power relations at the yard had become "blurred" over the years. When asked about their early years as yard workers, the former shipbuilders remember these as being brutal, the dominant memories being of their respect for the skilled workers and the foremen in particular, while the platform builders do not express these kinds of memories. Also, the working conditions are remembered as being far worse than they are nowadays. To quote from some of the interviews with former shipbuilders:

When I started to weld,..I had a foreman that didn't ..He didn't like me. He wanted me to quit because I wasn't up to the pace..In his opinion. Too slow..So he wanted to get rid of me..He wanted me to quit. (BA3)

I think many..Many were given status as skilled workers because.. they were on good terms with the foreman(AE1)

In the days when I started at Rosenberg..It was.. We were the first ones..who had long hair.And there was a struggle..They whistled when we passed..Carried scissors...Would always cut us..I remember it well..But there was another thing..Respect for the oldtimers! Wasn't much we could do before they would nail us to the wall by the ears!! To be respectful was important.

J.Hj: So the oldtimers had the power, if I understand what you're saying?

- Oh yeah! They really had! It was useless to be a cocky young fellow in these days. They would get you! Push you into a corner..They didn't mean any harm, ...We wouldn't try!(AE5)

When I started,..we were often given jobs that were poorly paid. Poor piece-rates..The guys who had been there for some years got the best piece-rates. (AG3)

I remember once..I was standing in the queue at the kiosk..A scaffolder..Came over to me..I had hair down to my shoulders..He says..Or he looks at me..What did he say?.."Semi-

albino!! You're not allowed to stand here!" So he dragged me out of the queue. Gripped my hair and just dragged me out!

J.Hj: A rough social atmosphere!

- Yeah. They were really tough guys. The whole bunch was just muscles. (AG9)

The oldtimers..they really shrewed ones..They'd stick together..And we ..the newcomers..We would always get the poorly paid, dirty jobs... I saw it as a damn unjust system!! /.../ But when we entered the oil sector..They had to improve the standards of all the welders..We cut ahead of the crabby old men! Because we passed the test for the new welding certificates. So in the end, we took the profit! (BE4)

The apprentices..could be told to go and get things that didn't exist..Sledgehammer grease..a green "overledning" (untranslatable and context dependent, meaning electric current leakage)..Things like that..

J.Hj: So it was really more humorously than anything else..?

- Well, you might say..Some were fooled..Others not ..But if you didn't do it..You had to do it..If you didn't go, they would be really scolded! Scolded because the orders not were obeyed.. This was a place where you were supposed to learn. And you just had to do as you were told!..It was part .. of the baptism, I guess.(BF6)

Memories of older workers hitting the apprentices over the fingers with screwdrivers, of severe electric shocks due to wet and dangerous working conditions, or of the tough regime of the foremen, are seldom reported by the platform builders.

Thus, there is what might seem to be a paradox here: the ones with the clearest subjective generational consciousness, the former shipbuilders, are the ones the *platform builders* might be expected to see as their "opponents". This is not the case. At the risk of overextending this argument, the former shipbuilders seem to have been caught historically in a double set of dominance relations: having advanced to occupy the positions of their nearest "opponents" on the shop floor (the once so dominant oldtimers) or at least to equal their power, they perceive their own positions today as threatened or disempowered because of the changed logic in the field. Once they have "conquered" what used to be stronger positions on the shop floor, they are confronted with changed standards, work procedures, capital values and capital types, and thus relations in the occupational field; these in turn reduce the newly achieved positions' power so they are not shown the same respect by the apprentices and younger workers that they once had to show skilled workers. In addition, the skills they have achieved through years of work experience are challenged or questioned by managers who place a strong emphasis on school education. The youngsters are even becoming

foremen (sometimes as early as in their mid-20s), which never would have happened when the former shipbuilders entered the yard in the late 1960s or early 1970s. Referring to this common past, and emphasizing the importance of the skills acquired and the experiences gained in their careers at the yard (important features in what has been conceptualized as 'tacit knowledge'), is a way of "legitimizing" their own positions and their capital values and struggling for upholding these; a way of trying to ascribe symbolic capital status to their common history and experiences. Having worked "up the material of their common experiences" within this particular system of relations, this also makes it possible for them to see themselves as belonging to a specific generation of yard workers.

To distinguish between *position-specific* generations is far more problematic. Although specific events are clearly linked to particular positions, such as "struggles" over the control of drawings, and although the level of internal conflict may have varied, these episodes on their own can hardly be said to constitute a formative event in Mannheim's sense. Nevertheless so, they may enjoy the status of important elements in a larger *set of formative experiences*. The best example of a formative position specific event is provided by one of the welders when he refers to cutting ahead of the oldertimers because of the need for new welding certificates (ASME G6). In this case, the event is linked to the acquisition of a valuable, position-specific capital: the new welding certificates that allow a welder to weld on offshore projects. Although this makes it *analytically* possible to distinguish between different position specific generations in Mannheim's sense, and although this is unique for the welders, it is still difficult to claim that this event has affected the structures of these welders' habituses in ways that radically distinguish them from those of others at the yard in the same period. Instead, it is more plausible to include the memory of this experience in the larger set of formative experiences unique to this specific generation of yard workers; it coincides with the experiences of other workers of the same age, working at Rosenberg in the same period.

To conclude from these data that the former shipbuilders subjectively acknowledge that they are a distinct generation of yard workers, while the same cannot be stated as clearly for the platform builders, might seem somewhat problematic. The reasonable objection may be raised, that the platform builders may do the same given time, and that the formative experiences they have in their youth and early adulthood may be "activated" by future events and structural changes in the occupational field. It may also be objected that the

former shipbuilders, as a consequence of the historically high turnover rates at the yard, may have become more homogenous over the years than they were in their youth and early adulthood.

Nevertheless, I would maintain that it is unlikely that the platform builders will develop a similar generational awareness to that found among the former shipbuilders. The reason for this is that yard relations and yard hierarchies were radically different in the 60s and 70s from the 80s when the platform builders entered the yard workforce. As indicated in chapter 5, the structures in the local social space have also changed from T1 to T2 with the arrival of the oil industry. Thus, to start work at the yard in Stavanger around 1970 is not the same as to start work around 1986. While both these persons are presently working within the same yard, the processes by which they become yard workers have been different, because of changes at the yard, in the city, in the national educational system and in the occupational field.

In order to justify the claim that today the platform builders' generational awareness is qualitatively different from that of the former shipbuilders, a closer examination will be carried out of the relations between the latter's memories of formative experiences and one of their central "lieux de mémoire". As this analytical strategy implies, a similar, distinct relation is not to be found among the platform builders. Given the outlined theoretical approach, a reasonable conclusion would be that the latter's generational framework of memories cannot be considered to be of equal importance to that of the former shipbuilders. For the latter, this framework is an extremely important organizational factor when they are thinking about their own positions and autobiographies at the yard. The same is not the case for the platform builders.

8.4. Formative experiences and yard generational "lieux de mémoire"

For the older workers living on the city side of Byfjorden, the ferry to and from the yard is not remembered as just a ferry. This daily trip to and from work definitely belongs to their generational set of formative experiences. The main reason for this is that, in retrospect, the stratifying principles and power relations of the yard are remembered as being extremely active in arenas outside the actual workplace. On the ferry, positions in the yard hierarchies are remembered as acquiring a *visible* expression. Two of the interviewees expressed this as follows:

You know.. "Folkebåten" was something special..'Cause..when I started as an apprentice...."Aha! Nice little ferry..". I didn't want to sit on the deck..So I went

upstairs..Right under the bridge..That was a nice place..So I entered and found a seat. It didn't take long before I went out again! That was the foremens' place! The functionaries..So it was..,"Svisj! Out you go!" so I thought to myself.. "OK..We have to find another seat." Where... but people had their regular seats! So we were put in the bow.. down below deck...That was our place! We, the youngsters...../.../But after being there a while..The boat had to be hoisted up on the slipway..some guys repaired a pipe..So we wanted to take a look..And one of them put his pick right through it... I said: "I'm never going to sit here again." So from that day on..I stood at the stern..No matter the weather, I would always stand there. Damn if I would be down in that rathole! (AE7)

-The guy who started to work at Rosenberg..hah...He had a hard time [in the beginning]!! He didn't know where to stand....or sit..On "Folkebåten"...People had had their seats.. year in, year out..And if you stood on the deck..An oldtimer could come over and say.."This is my place..Get lost!" He had been there.. Gangs had been standing in the same spot for twenty years..Out on the deck..On special spots....And God damn if anybody didn't mind their own business!!..So you had to..grope your way..Get into a gang..Get a "hunting ground"(E6)

As newcomers, you not only had to show respect for the adults when at work, but also on the ferry. For those living on the city side (the majority of the workers), knowing one's place at the yard also meant knowing one's place on the ferry. As a youngster, if you stepped out of line, you would immediately be put back in place on both arenas. When remembering the trips to work, workers who started at the yard in the 1950s can tell similar stories about their own social mobility; as they advanced in the hierachies at the yard, they advanced to better places to sit on "Folkebåten". In this way, hierarchies and other structural oppositions or struggles at the yard would find a visible and a highly concentrated expression on the ferry. Thus, the fact that the ferry still enjoys the status of a "lieu de mémoire" among the former shipbuilders, is not primarily because it was a means of transportation. Social problems of yard workers, suchs as alcoholism and social misery constitute an important feature of the experiences remembered when talking about the ferry:

Hah. You might say...taking the boat..gave you insight into working in the industry..Just by travelling by the ferry. From the city and to Rosenberg.... In the way that ..There were a hell of a lot of ..Many were heavy drinkers..Being drunk...at work..Having grown up in the country side, I didn't know much about these things../../But I noticed..There were quite a lot of people who were always drunk..And there were foremen who would cover for them..In a way...We accepted it..And they would just walk around all the day..In the morning,.. I remember there was a gang who would sit below deck..I was a bit curious so I took a look..They'd always pass the bottle...Once there was a guy .. Took a sip..His stomach couldn't hold it..Had to vomit..So the others held a wash basin under his...After two, three attempts...He'd manage to hold on to it..It was almost like a daily ritual.. They'd go around at Rosenberg..sweeping..Never saw them doing any real work. It was ... tragic really. But there were some foremen who would..be nice guys and cover for them. ..It's not like that today. Not at all. (BE13)

In all these memories, there is a stratified vision of the people working at the yard. On the top deck, close to the bridge, you found the directors. Below deck, at the bottom, you found the apprentices and the old alcoholics. For all these reasons, the boat becomes a highly saturated symbol, and therefore also an important "lieux de mémoire" when remembering what it was like to work at the yard in the shipbuilding years. While there are still hierarchies at the yard, these are perceived as radically different from those in the shipbuilding years.

By expanding the analytical scope to include memories of experiences not directly related to the daily trips to and from RMV, the centrality of "Folkebåten" in the former shipbuilders' network of "lieux de mémoire" can be further demonstrated. Up until the mid-1970s, payday was once a week (every Thursday), and the workers would line up (usually outdoors) in front of their foreman to get their pay envelopes. When asked about payday, one of the more articulate among the interviewees answered:

It was always exciting to see...how much there was in the envelope..It was like...If we...Speaking of "Folkebåten".. On payday... I experienced when I was an apprentice..When we got to the city side..The wives of some..Would be there and watch them...coming up the gangway....So that...Get the envelope..so that it did not go off in other ways..

J.Hj: Must be a direct look into the private lives of people..Seeing the wife on the quay waiting...I guess you were aware of..

- Oh yeah! We understood right away why they were there..One guy said..I remember..You know..The boat would come alongside the quay...Close to the old Liquor store..Do you know where it is?

- No. Not exactly, but...

- Anyway..This guy said..I remember it even today..He was walking along [the quay].. He said: "I'm wearing my "trained" shoes today!".. Did like this (the interviewee demonstrates his walk)..He would turn [his body, but his feet would take another direction because of the "trained" shoes] ..Because the liquor store was [in the other direction].. That is something that really sticks [to your memory].. So I can understand very well why the wives stood on the quay and met them..these guys. (AF21)

Not everyone would be as direct and outspoken in their answers as this person, but similar stories are recounted by the majority of the former shipbuilders. Without going into a long and detailed analysis of all the interviews, therefore, memories of payday provide yet another example of a stratified perception of work mates and own positions that is not evident among the platform builders. To put it simply, the patterns indicate that the former shipbuilders' classifications of work mates and their practices on payday can be summed up in three main

categories: those who took their pay envelopes home (the ones with family responsibilities), those who took it to the bank (the ones with a somewhat better economy), and those who went directly to the liquor store (the young ones without family responsibilities getting ready for the weekend, and more importantly, the alcoholics). The relative sizes of these categories, and whether or not those interviewed are 100% trustworthy or accurate in their descriptions of the ways things were, is not the important issue. The point is that with the arrival of electronic banking systems and the construction of the Buøy bridge, more than the weekly, public display of the Rosenberg workers and their social situation has come to an end; it is also a particular set of formative experiences that no longer are gained. In turn, this implies that these experiences might serve as a central distinguishing parameter between the former shipbuilders and the platform builders. Viewed in relation to the differences in the workers' respective capital volumes and capital structures, these changes strengthen the distinctiveness of the habituses of the former shipbuilders and of the platform builders; the process of becoming a shipyard worker has changed, and so it makes sense to distinguish between these two groups of agents as belonging to two different *sociological* generations of yard workers.

An important element in Mannheim's conceptualization of a generation is the notion that formative events or experiences have a lasting effect on the ways people think about themselves and their society. Similar ideas are also important elements in Bourdieu's notion of a habitus: across different fields, variations in two or more multiple habituses tend to be reproduced, resulting in field homologies, but not necessarily an exact structural replication from one field to the next. If not similarly organized differences can be found to distinguish between the former shipbuilders and the platform builders in other areas, the above outlined patterns will be of little but historical (and folkloric?) analytical relevance. A key question is therefore: Are similarly structured differences and stratified perceptions also evident in the agents' practices, opinions, and perceptions of more recent events and phenomena? For instance, can clear differences be identified in the same agents' opinions of the changes which have taken place at the yard over the last 25-30 years, in their perceptions of important principles governing wage setting, and/or in their perceptions of their own positions in society? If not, one may conclude that the agents' memories and opinions of historical matters both at the yard and in the city, are of little or even marginal interest to a sociological analysis of practices. This chapter's analyses will conclude, therefore, with an examination of some of the patterns in the

survey data, that throw additional light on the generational differences, and must be seen in relation to the above outlined patterns of generational frameworks of memories.

8.5. Further patterns of generational attitudes and stratified consciousnesses

Statistically significant differences can easily be identified in the set of questions about events and changes which have taken place at the yard, but sociologically, these differences can generally be considered a function of the time the respondents have spent at the yard, so they will not be presented in any detail. For instance, it is not surprising that the youngest workers are more inclined to answer "no opinion/don't know" on the items in questions that deal with events that occurred perhaps 15-20 years before they entered the workforce (questions 16a and 16b, see the complete questionnaire in the appendix for details). With regard to the respondents opinions on more recent events and changes in this set²⁰⁸, the differences on *these* items are only marginal. For instance, there is a commonly shared negative opinion on the most recent reorganization program "Omstilling 93". However, the uneven distribution of "Don't know/No opinion" is of analytical and methodological interest.

Throughout the survey, the former shipbuilders have been more willing than others to express opinions on all sorts of questions. This may be a product of methodological aspects having to do with the general willingness to respond to the survey: these respondent may find the survey more relevant than others do, and therefore have a stronger predisposition to express their opinions on the various items included. But it may also be seen as related to the agents' incorporation of the structures in the local social space. As stated elsewhere (see Hjellbrekke 1993:167) the disposition to answer the questions in a survey may also be considered a way of claiming that you both have the competence and the right to express an opinion on the topics in the survey. Those answering "Don't know/No opinion" are implicitly saying that they do not have enough knowledge about or insight into the subjects covered. Expressing and not expressing opinions can therefore be analyzed as part of the struggles in a field, resulting in position and generation specific patterns of censorship. According to

²⁰⁸The reorganisation programs ("Omstilling 93", question 16a.5), contract working for other firms (16a.6), working on projects outside the yard (16a.7) and the last reorganisation to Kværner Oil and Gas (16a.8).

Bourdieu's distinction between the universe of the undiscussed and universe of discourse (Bourdieu 1977: 168-169), some positions may be considered to "secure" their power or (using Bourdieu's own words) defend their integrity by strongly expressing their "orthodox" opinions on the field history, field events and matters, while others might challenge their views in a call for heterodoxy, and still others are "confirming" a dominated position by being silent.

To claim that the differences outlined above between the former shipbuilders and the platform builders can be described in terms of this "ideal" field opposition might seem a bit far fetched. Nevertheless, a greater portion of the platform builders are less orthodoxic in their views of the present principles of organization and of the present types of worker resistance. Inspired by Blackburn & Mann's (1975: 131- 160) study of ideology in the non-skilled working class and by the 1997 ISSP survey on work and work orientation, a set of indicators measuring ideological orientations were also included in the survey (question 39, see questionnaire in the appendix).

With respect to the set of questions raised above, Bourdieu's notion of 'habitus' and Mannheim's basic notion of a generation-specific stratified consciousness, the results on the items listed in the survey are interesting:

Table 8.3: Attitudes towards the statement "Workers need strong unions in order to protect their interests."

	Rosenberg- 78	Rosenberg 1979-85	Rosenberg 1986-1993	Total
Totally agree	90%	67%	53%	69%
Partly agree	7%	27%	26%	19%
Neither/nor	2%	2%	8%	5%
Partly disagree	0%	0%	5%	2%
Totally disagree	1%	3%	5%	3%
Don't know/no op.	1%	2%	3%	2%
Total	101%(107)	101%(64)	100%(137)	100(308)

Cramér's V=.27058 Significance = .000

One item (question 39/3) concerns the workers' need for strong unions to protect their interests. Although a majority in all three cohorts are in total agreement with this statement, the differences between the former shipbuilders and the

platform builders are still very clear: the former shipbuilders are in almost complete internal agreement, while the others are less homogenous, although only a small portion "dare" say the "unthinkable" (that workers *don't* need strong unions to protect their interests). These results prove to be consistent over a wider specter of related issues.

Strikes have not been frequent at Rosenberg, and during the last 10-15 years the number of open conflicts have been few. Still, the RMV-workers belong to the more radical factions of the national union the metal workers, "Fellesforbundet". For instance, the 1996-agreement reached with the employers (TBL) in the national negotiations, was voted down. When it comes to perceptions of the unions' ultimate power in labour conflicts, strikes, a similarly organized, generational difference is also evident. Although a great minority (27%) of the former shipbuilders totally or partly agree with the statement about strikes' lost function²⁰⁹, they still favor the use of this weapon in a labour conflict far more than the platform builders:

Table 8.4: Attitudes towards the statement "In labour conflicts, strikes have outplayed their historical function."

	Rosenberg- 78	Rosenberg 1979-85	Rosenberg 1986-1993	Total
Totally agree	4%	12%	15%	10%
Partly agree	23%	16%	22%	21%
Neither/nor	8%	14%	18%	14%
Partly disagree	13%	9%	9%	10%
Totally disagree	48%	44%	22%	35%
Don't know/no op.	5%	5%	15%	9%
Total	101%(105)	100%(64)	101%(138)	99%(307)

Cramér's V = .24202 Significance = .000

Internally, the platform builders are almost equally divided, so it is reasonable to ask whether this intragenerational opposition is more important than the intergenerational differences: are there indications of yard internal generation units, if only among the former platform builders? However, since there are no

²⁰⁹The fact that hardly any of those interviewed, apart from former and present union representatives had clear memories of strikes or open labour conflicts, adds further complexity to these distributions.

indications of this in the interviews, to claim that this is actually the case would be based more on speculation than on the available data.

Similar results (but not statistically significant on the .05-level) are revealed in the analysis of the respondent' perceptions of their own class locations:

Table 8.5: Perceptions of subjective class locations.N=316.

	Rosenberg - 1978	Rosenberg 1979-85	Rosenberg 1986-1993	Total
None, there are no classes in Norway	11%	13%	13%	12%
Working class	52%	48%	35%	44%
Lower middle class	5%	10%	7%	7%
Middle class	25%	19%	33%	27%
Upper middle class	2%	3%	0%	1%
Don't know	6%	8%	13%	9%
Total	101% (105)	101%(63)	101%(133)	100% (301)

Cramér's V = .16622

Significance = .08

As table 8.5 indicates, the former shipbuilders are more likely to see themselves as members of the working class than the platform builders. In contrast, the platform builders are once again more clearly split into two almost equal parts; 1/3 see themselves as belonging to the working class, and 1/3 see themselves as belonging to the middle class (this increases to 39% when the categories "lower middle class" and "middle class" are combined).

At first glance, it may seem that these results are not following the patterns found in tables 8.1 and 8.2. With regard to the various positions' *internal* statuses at the yard, the former shipbuilders proved to be both more positive than the platform builders, and also more divided. However, tables 8.1/8.2 and 8.5 are not directly comparable. While the first two are based on dichotomized questions about social *statuses*, table 8.5 is based on a question about *class identification*. Without the necessary detailed information to analyze the relation between the respondents' answers on these two parameters (for instance their evaluations of the various classes' social statuses), it is not possible to claim that these results are manifest examples of a discrepancy.²¹⁰

²¹⁰This possibility was not seen as very likely one when carrying the interviews, and, therefore, was not asked about or followed up in any detail.

Even if it prove to be a discrepancy, it is only possible to speculate about the underlying factors. As indicated in chapter 6, to work at the yard as a skilled worker was not historically a position that all the yard workers would achieve. In some job categories, such as the shipwrights, only 50% of the workers had the status of skilled workers as late as 1971 (see table 6.1.3). A hypothesis to explain the split at this point is therefore that some of the former shipbuilders perceive the positions in terms of their historical statuses. Yet, at the same time, these respondents display a more homogenous and stratified vision of society than the others.

So far, this may seem to be a paradox: while the platform builders have proven to be more homogenous (and also more negative) than the former shipbuilders when asked about the social esteem of positions at the *yard* (see tables 8.1. and 8.2), the former shipbuilders are more homogenous not only when asked about their own class location, but also on almost every related item in the survey and in the structures revealed by the interview data. Of course, this does not necessarily exclude the possibility that the platform builders might *develop* a more homogenous subjective class identification over time, or that they might become more homogenous as turnover rates start to have an effect. If this was to happen, I would suggest that that they are also likely to develop a generational identity, i.e. that their generational frameworks of memories will be strengthen as a part of this process. Not having data on the former shipbuilders' answers to the same question 20-30 years ago, it is not possible to draw further conclusions about this process.

There are also items indicating that the former shipbuilders have a somewhat stronger disposition to identify with the classical working class symbols. Presuming that there would be a relation between a respondent's subjective class identification and his or her opinion on the May first celebration, a question was included in the survey regarding the relevance of this institution, which may be considered an institutionalized "lieux de mémoire". The distributions are similar to the ones presented above, but in this case more homogenous:

Table 8.6: Relevance of May first celebration. N=321.

	Rosenberg - 1978	Rosenberg 1979-85	Rosenberg 1986-1993	Total
There has never been reason to celebrate May first.	3%	3%	8%	5%
Even though there was a reason to celebrate May first. earlier, there is no reason to do so nowadays	13%	25%	27%	22%
There is as good a reason to celebrate May first. nowadays as there was before	84%	72%	65%	73%
Total	100% (108)	100% (64)	100% (134)	100% (306)

Cramér's V=.14544 Significance = .00

In all three respondent groups, there is a solid majority of respondents that still see the relevance of the May first celebration. Once again, the younger generation is more likely to see this as a relic from the past, resulting in an internal split.

Similar patterns are also evident in responses to the question about the party voted for in the 1997 general election:

Table 8.7: Party voted for in last general election. N=312.²¹¹

	Rosenberg - 1978	Rosenberg 1979-85	Rosenberg 1986-1993	Total
LABOUR PARTY	54%	45%	36%	43%
PROGRESSIVE PARTY	14%	28%	33%	26%
CHRISTIAN DEMOCRATS	2%	5%	6%	4%
LIBERAL PARTY	5%	0%	1%	2%
CENTER PARTY	6%	3%	1%	3%
SOCIALIST LEFT PARTY	8%	2%	1%	3%
THE CONSERVATIVE PARTY	6%	2%	5%	5%
RED ALLIANCE	2%	2%	1%	1%
OTHERS	2%	3%	4%	3%
DIDN'T VOTE	3%	11%	11%	8%
TOTAL	102% (102)	101% (63)	99%(134)	99% (312)

Cramér's V = .27105 Significance = .000

²¹¹The low percentages not voting indicate that this sample is probably not fully representative for all the union members.

While more than 50% of the former shipbuilders vote for the Labour Party, the platform workers are split in almost to equal halves between the Labour Party and the right wing Progressive party. While the clear majority of the former shipbuilders (64% in total) have voted for the traditional socialist parties, only 38% of the platform builders have done so. A further 38% of the latter category voted for the conservative parties (the Conservatives and Progressive parties combined). On the shop floor, therefore, the three parties that for decades in combination have dominated the local union, the Labour, Socialist Left and Red Election parties, must perceive their positions as strongly challenged. Among the platform builders, the political sympathies are clearly split.

On the national level, the 1994 EU referendum also split the Norwegians: 52.2% voted no, while 47.8% voted yes. Stavanger was one of the few, but densely populated pro-EU strongholds: 57.3% were in favor of EU membership. When the yard workers were asked about their vote in the EU-referendum in 1994, they are deviating from this overall trend. The majority of all respondent groups vote against membership.²¹² Yet, there are differences to be found, although not statistically significant:

Table 8.8: Voted in 1994 EU-referendum.

	Rosenberg - 1978	Rosenberg 1979-85	Rosenberg 1986-1993	Total
Didn't vote	4%	8%	9%	7%
Voted YES to membership in EU	27%	22%	36%	31%
Voted NO to membership in EU	70%	70%	56%	62%
Total	101% (102)	100% (63)	101% (137)	100%(302)

Cramér's V = .11293 Significance = .10

It must be concluded that the platform builders are less homogenous than their older work mates not only in their memories of becoming yard workers, but also in their actions and attitudes in the political field.. So where does this leave us? What are the implications of these results for a Bourdieusian field analysis?

²¹²As always, the fact that the majority voted no and that the referendum took place 3 1/2 years earlier, might have affected the distributions. Even so, the differences are very clear.

8.6. Concluding comments: a byproduct of formerly distinct power relations becoming blurred?

In chapter 7, one of the conclusions was that, the power relations at the yard are considered to have become blurred over the years: nobody can make decisions anymore, and the once so almighty foremen have had their wings clipped. Applying the logic of Mannheim's and Bourdieu's conceptualization of generations and fields, it is reasonable to consider the contrasts revealed between the yard generations as partly a byproduct of this overall trend: the emphasis on conflictual relations, oppositions and contrasts are key characteristics when it comes to fields, generations and generation units. It was postulated in chapter 3 that a relational study of memory might add an additional element of reflexivity to Bourdieu's sociology, thereby possibly highlighting limits of his theory of fields or the critical changes taking place in a field. It is tempting, therefore, to claim that the analyses in chapter 8 exemplify the latter: the former shipbuilders accumulated their common stock of formative work experiences within a system of work relations dominated by close and distinct power relations, not only between the worker and the foreman, but also between the skilled and the unskilled, the old and the young. While I would *definitely not* claim that the hierarchical organization has been eliminated, the platform builders have accumulated their common stock of work experiences within a different system of relations. Incorporating two different versions of the same history - the story of becoming and being yard worker at Rosenberg - the structures in their habituses also prove to be different. As the analyses have shown, systematic "disagreements" can easily be found between the two yard generations, both in the qualitative and in the quantitative data. Yet at the same time, a consistent pattern of internal oppositions is also to be found among the youngest yard workers.

Having stated earlier in this chapter that the formation of a subjective group identity cannot be reduced to questions about capital changes and capital volumes, this does *not* mean that these need not be taken into consideration. On the contrary, field struggles are also struggles over capital types and capital values, and inherent in the notion of 'habitus' is its relation to the capital structures in a field and in the social space. To incorporate the history of a field is therefore also to incorporate partly the capital structures in the field. As has been demonstrated, the oppositions in figs. 7.1-7.3 - oppositions between having or not having a formal vocational education, and having or not having years of practical work

experience - have turned out to be dominant structuring elements in the yard workers' memories, perceptions and classifications.

While experiences acquired at work are extremely important, the notion of formative experiences, events and processes cannot be reduced to include only processes, events and changes taking place at the yard. Work experiences must also be seen in relation to yard-external experiences, processes, events and structural changes. In the present case, this either means in the city of Stavanger and/or in the national arena. This brings us to questions that will be addressed in the next chapter: how have relations between the yard and the city changed over the last decades, and how are these changes remembered?

9.0. Yard worker frameworks of memories

9.1. Introduction

Focusing on positional and generational differences and oppositions, the analysis has so far been restricted mainly to yard-internal structures and relations. Following the logic outlined in the preceding chapters, the final step in what has been called a step-by-step field construction and field analysis, has been reached: the analysis of relations between yard-internal and yard-external positions and structures. Once again, the yard workers' memories of being and of becoming yard workers will constitute a core topic, but in this chapter the analysis will focus on their memories of being and becoming yard workers in the Stavanger area. In Halbwachs' terms, the social frameworks of memory to be investigated in this chapter are primarily *yard worker* frameworks.

In the analysis of these frameworks the structural changes outlined in chapters 5 and 6 must be born in mind; becoming and being a yard worker in Stavanger in the 1950s and 1960s is not directly comparable to becoming and being a yard worker in the city in the late 1980s. Partly for this reason, the relevance or applicability of 'yard-worker frameworks' as an overall analytical category cannot be taken for granted. In chapter 8, differences between yard-internal generations' opinions and perceptions of yard history were explored. These were mainly discussed in relation to the major structural changes that have taken place at the yard over the years. But as is pointed out in chapter 5, there have also been important changes in the local occupational field between these two moments in time. Moreover, there have been major changes in the local social space and the local field of power that must also be taken into consideration.

Expanding the argument in chapter 8, these processes will potentially generate generational differences not only in the yard-workers' perceptions of, and opinions on these historical changes, but also their perceptions and memories of relations between the city and the yard. These processes, in turn, cannot be seen as generating only "yard-internal" differences, but also "external" differences between other inhabitants in the Stavanger area. When possible and relevant, therefore, a comparison will be made, based on the data from the yard-worker survey and from a 1994 survey of a representative sample of inhabitants in the Stavanger area.²¹³

²¹³The fact that these two surveys have been performed differently, and also are separated by a gap of four years (the yard-worker survey was done in the spring of 1998 and the Stavanger survey in

An analysis of how the relations between the "yard-internal" capital structures and "yard-external" capital structures may have a structuring power on the yard workers' memories of being and becoming yard workers in the Stavanger area, can be carried out in various ways. The number of parameters to be compared are numerous, as are the possible thematic approaches to such a comparison.

Given the theoretical point of departure of this dissertation - the sociologies of Halbwachs, Mannheim, Elias and Bourdieu - the focus will be on the following three topics. First, the "us" and "them" distinction will be revisited, although applied in a slightly different way than in the previous chapters. While maintaining the focus on evaluations of social esteem, perceptions of positional hierarchies and memories of being and becoming yard workers, a distinction will be made between the agents' own perceptions of their social esteem, their perceptions of their presently "received" social esteem and their memories of their historically "received" social esteem from other positions in the local community, insofar as the data available allow us to make such distinctions. Typical attitudes towards the yard, the yard workers and/or typical yard worker occupational positions will therefore constitute central aspects in the analysis of the yard workers' "sense of their places" in the local social space. In this respect, the analysis will be closer to Elias & Scotson's 1964 study of insiders and outsiders in "Winston Parva". It has also been inspired by Patrick Champagne's work on political representations of groups, and his claim that the representations the dominated produce of themselves are always "indebted" to the representations the dominant produce of the dominated (Champagne 1990: 9)

Second, in the analysis of a generational awareness, memories of formative events, processes and experiences occurring *outside* the yard gates will be identified and discussed. Opinions and memories of processes of social stratification in the city of Stavanger must be addressed, therefore, as must yard-related events taking place in the city. Moreover, a comparative analysis will be carried out of the yard workers' and other Stavanger residents' opinions on recent historical events.

Third, in the concluding analysis in this chapter, the analysis of the yard-workers' positions in and perceptions of the occupational field will be expanded: their opinions on the principles of wage formation and their attitudes towards work and work relations will be compared to those of other metal workers as

1994) makes this strategy somewhat problematic. Nevertheless, it is the only possible basis upon which this comparison can be made.

revealed in two ISSP surveys (1989 and 1997) on work orientations, which were distributed to a representative sample of the Norwegian population.²¹⁴ At first, this may seem to be at odds with the main topic of this dissertation. However, the Bourdieusian approach means that the relations between the yard workers' positions in the local and yard internal occupational field and their positions in the Norwegian occupational field in general must be addressed. Although this analysis must be tentative, it is still a necessary step in the field construction process.

9.2. Yard worker memories of "a sense of one's place" in the local social space

While the yard did not become involved in the oil sector until the late 1970s, this new occupational sector had made itself felt in the Stavanger area and at the yard. Wages had risen both in the city and at the yard, as had the number of people directly employed by the oil companies. The number of jobs indirectly dependent on the oil industry had also increased. From the late 1970s onwards, the yard employees had also become part of this sector. As has been demonstrated in chapter 5, this caused the occupational structures in the Stavanger area to change in radical ways. Moreover, as Rosenlund's studies demonstrate (Rosenlund 1998), the capital structures in the local social space underwent the same changes. Thus, to have grown up before or after the oil boom means to have grown up in two structurally different cities. In addition, there is every reason to believe that the structures in these agents' habituses also are different. The question, therefore, is whether the oil boom has resulted in major differences in the ways yard-worker generation units and other generation units of Stavanger residents perceive the structures in the local social space, for instance in terms of hierarchical perceptions of society.

Moreover, for reasons other than those analyzed in chapter 8, the histories of becoming and being a yard worker before or after the oil boom are two quite different histories. As outlined in chapter 5, the oil boom resulted in new positions being created in the local occupational field, and many Rosenberg workers found offshore jobs, or were actively recruited to these²¹⁵. From this point of view, the arrival of the oil industry not only changed the logic in the local occupational field, it also resulted in an increased mobility rate between

²¹⁴Once again, this strategy is problematic but is the only one possible.

²¹⁵For instance, one of those interviewed had been recruited by his football trainer.

positions in the field for some agents. However, the move into an offshore job was not without its costs. In the 60s and 70s, offshore jobs implied a very high personal risk factor and exposure to work regimes that were radically different from Norwegian traditions.²¹⁶ While the offshore wages were much higher than the onshore wages, the hazardous working conditions meant that lives could be (and were) lost. Put simply, when comparing their situation with that of the yard workers', the offshore workers remember, and are also remembered as, living their lives in the 1970s in "the fast lane": wages were high, as were the risks involved, and when onshore, they spent a lot of money on personal luxury and partying.

Given these overall structural changes, the first questions to be addressed concern the yard workers' memories of the attitudes of other Stavanger residents to the yard and themselves. How do they remember and perceive their "received" social esteem from other Stavanger inhabitants? How do "we" remember being classified and esteemed by "the others"? Are the societal changes outlined above remembered as having any impact on the yard workers' social status in the city? The answers presented in matrix 9.1 do not seem to indicate that this is the case:

MATRIX 9.1. HERE.

Working at the yard is definitely not remembered as *ever* having been a desirable occupational position in the city. Having been historically located in dominated positions in the local social space and the local occupational field, and still being so, both the platform builders and the former shipbuilders emphasize the negative attitudes of other Stavanger residents' to the yard: being a yard worker has meant being near the bottom in the yard-external occupational status hierarchies. On this point, therefore, there is a correspondence between the agents' positions in the social structures, their mental structures (i.e. structures in the habituses), and their memories of the history of these structures. In all cases, the keyword is stability: their positions in the local social space have remained stable throughout the changes, as has the social esteem of their positions. On these parameters, history is seen to repeat itself.

²¹⁶For reasons of anonymity, a longer section from an interview with a man who worked offshore for more than a decade cannot be cited. He does however recount stories of numerous dangerous episodes, of a very rough work milieu and of an intense life whenever onshore. American foremen and managers were clearly different from their Norwegian colleagues. For instance, in one case, the platform manager would shoot seagulls with his Colt 45 from the helicopter deck.

Matrix 9.1: Memories of other people's opinions of the yard and the yard workers.

Former shipbuilders	Platform builders
<p>Rosenberg is not the same as it used to be in those days.... When I started working over there..Getting a job was easier... Many [people] saw Rosenberg as the last way out..It they didn't get a job elsewhere..You see? Today, the qualifications needed are totally different ...for entering the yard.(CA14)</p> <p>It was the place where...all kind of trash was sent! If you couldn't get a job in the city or elsewhere, you had to go to Rosenberg. And you'd get a job. The employment agency sent over a lot... Say.... "Funny elements" from the city's more loose.....It was ...alcoholics... periodic alcoholics and ... social cases..A lots... That's what I've heard..Some of them stayed only until payday.."Yippi!"We've got money.. We're quitting. "...Hah..But .. it was strongly looked askance at..working at Rosenberg..The ones who worked at Rosenberg did not boast about where they worked! They said as little as possible about it..Because there were...a lot of "graps"²¹⁷ ".... strange/funny people..</p> <p>J.Hj: Has this changed?</p> <p>Yes. I think so! When people ask me where I work,I straighten my back!..Must say..People who say otherwise don't know what they're talking about! Because... as a company, Rosenberg is really ...target oriented! (CB29)</p> <p>You'd hear ... in the town that ..it was a ... "protected" company (CD15)²¹⁸</p> <p>Rosenberg was.. an OK place to be..But the reputation was bad..But if you got a job, at least you'd have a place to stay..</p> <p>J.Hj: Why was the reputation a bad one?..What did people say.</p> <p>- Well...they called it a rest home!</p> <p>J.Hj: A rest home?</p> <p>- Earlier, there was a lot of ..everybody had a job at Rosenberg, or so it seemed. The whole town. (AC2-3)</p> <p>It wasn't..like.."So you're at Rosenberg?"..They said..There wasn't that much [esteemed] in becoming an apprentice at the yard. (EB2)</p> <p>It was a trade very few wanted! Didn't know much about it.. And I didn't plan to, but you had to obey your parents in those days..../ My buddies..wondered about what it was like at the yard..Heard the sledgehammers..Saw how dirty we were when we got home...None of them wanted to start at the yard..But later 4 (out of 6) started at Rosenberg. (AE4)</p> <p>You can say...When I started at Rosenberg...it was like.. "Ah! Your working at Rosenberg!?.Was .. almost second rate..That's the way it was.. But if you're looking back on it today..A shipyard was really a social ... work site. You had room for ..all kinds of people...You took care of ..of people..Today it has become totally different. ... No more retreat jobs.. (AF18)</p>	<p>People who have never been at Rosenberg...They've only heard about Rosenberg...They say: "People just sleep for eight hours and then go back home". I say: "You can't do it!..It's impossible!! /.../ The first thing you get to hear about Rosenberg is that..They would leave [the yard] during the lunch breaks and buy beer..and then go for a nap..That was the first I heard about Rosenberg... I thought..."It isn't possible..Can't be that way! (AAB4/5)</p> <p>It was like ... If you couldn't get a job elsewhere, you'd get a job at Rosenberg.</p> <p>- Is it still that way?</p> <p>- No! Today, they make demands on those who get employment..Your grades from vocational school must be really good if you want to start at Rosenberg today (CCA24)</p> <p>There are a lot of stories.. ..For instance... If you had a pipe wrench in your pocket you could walk around [all day] doing nothing, because it looked as if you were working..(AAA12)</p> <p>J.H: The opinion of the common Stavanger resident...How has he viewed working at Rosenberg..?</p> <p>- I don't know....It's like... They say that..It is.. It is a "protected" company, to put it that way! ... It's not ... the right place to start work.... The fence..The barbed wire is pointed inwards...instead of outwards..More afraid of letting us climb the fence and get out, instead of the opposite (laughs)..They think it's a... prison camp..And I've heard them say "protected" company, but I don't mean that!! (DDA21)</p> <p>When you tell people what you're doing [work] ..It seems as if you're one step down the ladder..But I don't see myself as any worse than others because work at Rosenberg..But I think that..a lot of people..The old boys.. My grandfather..He says: "Do you know how many people are working at Rosenberg?... Half of them!"..It has had a label attached to it..Been many lazy people and things like that..But when you have that many employees, there will always be somebody that sticks out, no matter what..</p> <p>J.Hj: ..Is this something you've heard yourself the time you've been at the yard? That Rosenberg is a place where they don't work?</p> <p>- Yes..Because ... I felt that "So you want start at Rosenberg?"..That was for the ones who didn't get good grades..They started at Rosenberg. ..And became welders or plumbers and such things..The rest would rather continue their education..Become lawyers and things like that....We've heard it... "Don't be stupid... starting at.... (CCB10)</p>

So far, it makes sense to analyze their memories of this history in terms of a yard-worker framework of memory, since the commonalities are clearly more dominant than the generation-specific differences, the interviewed workers present a unified memory of their history of being and becoming yard workers in Stavanger. In both cases, interviewees often mention the "outsiders"²¹⁸, i.e. other

²¹⁷ Local pejorative adjective.

²¹⁸ A company where social misfits and/or psychologically disadvantaged persons would work.

Stavanger inhabitants' perceptions of the yard history as a heavy burden on their own present status in the occupational field. In this way, the yard history constitutes a *negatively* valued symbolic capital that discredits their positions in the local occupational field.

Given their field positions, it is perhaps not surprising that the former shipbuilders and the platform builders are contesting the legitimacy of what they see as the Stavanger residents' historical and current perception of the yard and the yard workers. But at the same time, they also stress that there has been a rupture in the yard history. The outsiders' opinions of the yard and its workers might once have been legitimate, but more recent yard history has definitely proved that these are no longer correct: the levels of education and technical competence have risen, the quality and complexity of the installations built at the yard are claimed to be first class, and there is no longer room for social dropouts at the yard.²¹⁹ Whenever the outsiders, i.e. those not working at the yard, express these outdated opinions, they display that they "don't know what they're talking about". In this way, a dispute over the *relevance* of the yard history can also be seen as part of the wider "struggles" in the local occupational field.²²⁰

At the same time, this dispute may also be considered part of a wider struggle over legitimate and illegitimate visions of *di*-visions in the local social

²¹⁹To determine when the yard workers thought this historical rupture had taken place is somewhat problematic. An educated guess would be that it happened before 1986, as the following story, told to me by Svein Michelsen (Department of Administration and Organization Theory, Univ. of Bergen), indicates: In 1986, a newly returned graduate in medicine had complained in the local newspaper. As a graduate, his wage at the hospital was too low. He could just as well start welding at Rosenberg. The leader of the union replied rather ironically in a later issue of the paper: It's out of the question. You're not qualified for a job as a welder at Rosenberg!

²²⁰However, the RMV workers in the survey were divided when it came to their perceptions of the status of an RMV employee today compared to the situation 25 years ago. Although disagreeing with the "outsider" description of themselves, a high percentage still see their social status as unaltered:

Table 9.1: Yard generational opinions of the statement "Today, the social esteem of a Rosenberg worker in Stavanger is higher than it was 25 years ago". N=262.

	RMV -1978	RMV 1979-85	RMV 1986-93	TOTAL
Totally agree	28%	29%	14%	22%
Partly agree	20%	23%	20%	21%
Neither/nor	26%	18%	26%	24%
Partly disagree	11%	11%	13%	12%
Totally disagree	15%	20%	26%	21%
TOTAL	38% (100)	21% (56)	41%(106)	100% (262)

The differences between the youngest and the oldest category of yard workers are not statistically significant.

space, that may be relevant in a comparative analysis of the yard workers' perceptions of social hierarchies. On this point, survey data permit a multi-parameter comparison, of which the following three have been selected:

- 1) A comparison of the perceived social esteem *inside* and *outside* the yard gates of three positions: the engineers, the platers and the welders. These positions are located in different sectors in both the yard-internal and yard-external capital hierarchies. Do the yard workers rank them differently or identically in the yard-internal and yard-external esteem hierarchies?

- 2) A comparison of the yard worker responses and those of the Stavanger sample regarding seven positions' associated social esteem in the community (engineers, offshore workers, platers, psychologists, teachers, social workers and homehelpers). These positions are not only located in different sectors, i.e. in the hierarchy between the public and private sectors in the local social space (the second axis in fig. 5.3), but are also ranked hierarchically *within* the private and public sectors of this space (the first axis in fig. 5.3).

- 3) A comparison of generational differences between the yard workers and the Stavanger inhabitants in their opinions of the social esteem associated with the same seven positions.

While the first comparison makes it possible to address the yard workers' perceptions of the relation between a yard-internal and a yard-external positional esteem hierarchy, the second and the third make it possible to address the relations between the yard workers and other Stavanger inhabitants through an analysis of their perceptions of social hierarchies in the Stavanger area. In combination, these provide information not only about the yard workers' sense of their place in the local social space, but also about the structures in their habituses, i.e. how they have partially incorporated the structures in the local social space.

To begin with a comparison of the perceptions of the yard-internal and the yard-external social esteem of the engineers, the platers and the welders, important differences are found:

Table 9.1: Perceptions of the associated social esteem of engineers, platers and welders in Stavanger and at Rosenberg. Data from the Rosenberg survey 1998²²¹.

	Engineers' perceived esteem at Rosenberg	Engineers' perceived esteem in Stavanger	Platers' perceived esteem at Rosenberg	Platers' perceived esteem in Stavanger	Welders' perceived esteem at Rosenberg	Welders' perceived esteem in Stavanger
Very highly esteemed	42%	42%	9%	7%	10%	9%
Relatively highly esteemed	46%	51%	36%	20%	33%	19%
Relatively lowly esteemed	8%	5%	48%	55%	47%	53%
Very lowly esteemed	3%	2%	7%	17%	10%	19%
TOTAL	99%(370)	100%(363)	100%(369)	99% (366)	100%(372)	100%(368)

The only position seen as maintaining and even increasing its social esteem outside the yard gates is that of engineer, i.e. the position located in the field of power in the local social space. Both the platers and the welders are seen as having lower social esteem outside the yard gates than at the yard. Thus, employment at the yard is seen as affecting people in different ways, and must therefore also be analyzed in relation to yard external factors and hierarchies. For positions in the low capital volume sector, the yard-internal esteem is not seen as directly convertible into esteem in the local community. For positions in the high capital volume sector, the opposite impression is the dominant. In fact, the hierarchies that are seen as existing inside the yard gates become even clearer once the relation to yard-external esteem hierarchies is included in the analysis.

In themselves, these results do not tell us anything about the distances between these positions in the local social space. It would be highly problematic to carry out an analysis of social hierarchies and of structures in the local social space based simply on questions about a given set of positions' *perceived* social esteem. Nevertheless, the correspondence between the overall perceptions of esteem hierarchies and the classified positions' locations in the local social space is evidently strong. To return to Rosenlund's analyses of the local social space (as presented in chapter 5), an opposition existed between agents employed in the private and the public sectors. While the first axis was a global capital volume axis, the second axis was a capital structure axis.

These structures are also evident as organizing the distributions in tables 9.2 and 9.3, in which the yard workers' opinions of the overall social esteem of the seven positions in the social space are compared with the (1994) opinions of a

²²¹Question 43a/1-3 in questionnaire, see appendix.

representative sample of the residents in the wider Stavanger area. Despite some variations, the overall rankings and distributions prove to be strikingly similarly hierarchically organized in the two surveys:

Table 9.2: Perceptions of the associated social esteem of positions in the *private* sector of the social space among people in the Stavanger area in general. Engineers, Offshore Workers, and Platers compared. Data from the 1994 postal survey in the Stavanger area and the 1998 Rosenberg survey.

	Engineers RMV survey	Engineers Stav.surv	Offshore workers, RMV surv.	Offshore workers Stav. surv	Platers RMV survey	Platers Stav.surv
Very highly esteemed	42%	35%	15%	5%	7%	1%
Relatively highly esteemed	51%	60%	51%	53%	20%	12%
Relatively lowly esteemed	5%	5%	32%	37%	55%	59%
Very lowly esteemed	2%	0%	3%	1%	17%	24%
TOTAL	100%(363)	100%(878)	101%(362)	101%(874)	99% (366)	99% (873)

Given the distribution in table 9.1, the distributions for the engineers and the platers are of particular interest; they represent an opposition in the private sector of the local social space. When it comes to the yard workers' overall social esteem in the larger Stavanger area, they show, in Rosenlund's words²²², "a strong sense of reality". While engineers are ranked very highly in the status hierarchy by the "outsiders", the platers are ranked lowly by more than 80% of the respondents in the Stavanger survey. For once, "insiders" and "outsiders" are in agreement. Platers are ranked even lower by the outsiders than by the yard workers themselves, so the yard workers' "sense of their place" is confirmed by the yard external agents in the social space.

But their agreement goes further than this. In both cases, respondents in both surveys also distinguish between the positions in the public and private sectors of the social space. While the yard workers are more critical when ranking social workers, there is still an general "agreement" when it comes to the general patterns in tables 9.2 and 9.3. Positions located in the private sector of the social space are consistently ranked higher than positions in the public sector. In addition, the internal positional hierarchies within these two sectors are clearly perceived in the two samples.

²²²Personal communication.

Table 9.3: Perceptions of the associated social esteem of positions in *public* sector of the social space among people in the Stavanger area in general. Psychologists, social workers, secondary school teachers and homehelpers compared. Data from 1994 postal survey in the Stavanger area and the Rosenberg survey 1998.

	Psycholo- gists RMV survey	Psycholo- gists Stav. surv.	Secondary school teachers RMV surv.	Secondary school teachers Stav. surv.	Social workers RMV survey	Social workers Stav. surv.	Home helpers RMV survey	Home helpers Stav. surv.
Very highly esteemed	25%	20%	6%	2%	5%	4%	6%	3%
Rel. highly esteemed	54%	60%	36%	33%	24%	26%	14%	9%
Rel.. lowly esteemed	15%	18%	51%	60%	49%	63%	44%	46%
Very lowly esteemed	7%	2%	7%	4%	22%	6%	35%	43%
TOTAL	101% (357)	100% (870)	100% (358)	99% (880)	100% (360)	99% (871)	99% (359)	101% (878)

Rosenlund's analyses also indicate that there are no major positional disagreements regarding these perceived hierarchies throughout the social space.²²³ Instead, there seems to be a commonly shared sense of the reality of the structures in the local social space.

But are the respondents' perceptions of the local social space and its corresponding esteem hierarchies also related to generation specific habituses? For instance, are generational differences evident in the larger Stavanger sample set aside in some cases in the Rosenberg sample and replaced by an overall yard worker agreement as to a position's social esteem? And is an overall yard worker consensus sometimes set aside and replaced by generational differences also found in the Stavanger sample's evaluations of a position's social esteem? And most importantly: can any of these disagreements be plausibly analyzed as products of yard worker specific or generation-specific habituses?

Analytically, this set of questions again raises the problem of how to identify and delimit a generation or a generation unit, as does the problem of whether or not distinct generational differences are evident at all. With regard to the yard history, potentially formative events, changes and processes can be relatively easily to identified, but these yard events can hardly be given status as formative events for other residents in the Stavanger area. For people located in other field positions, i.e. in different subsystems of field relations, these events will probably be of no relevance whatsoever with respect to their ways of

²²³Unpublished work.

thinking in terms of generational belonging. In other words, the problem of how to analytically delimit a 'generation' once again arises.

Bearing in mind the structural changes outlined in chapter 5, and restricting the analysis only to respondents who have grown up and lived most of their lives in the Stavanger area²²⁴, the following four categories will be applied in the quantitative analysis of generational differences in the Stavanger region:

- 1) Respondents born in 1945 or earlier. The overall majority of this category will only have seven years of compulsory education, and only a small minority will have qualifications from higher educational institutions. Of the ones living in Stavanger, all were adults when the oil boom transformed the structures in the occupational field and in the local social space. Any generation-specific structures in their habituses will have been embodied in capital structures resembling, but not identical, to the "educated guess" presented in fig. 5.1,

- 2) Respondents born between 1946 and 1955. The majority of this category were in their youth and early adulthood when the oil boom started. From this point of view, they are the first potential "oil generation". With respect to their educational capital, they resemble the first category of respondents more than the third.²²⁵ The potentially generation-specific structures in their habituses will have been formed in the period when the Stavanger region was still staggering behind other Norwegian cities in economical, education and occupational terms (see 5.2). Of the interviewed yard workers, the majority of the former shipbuilders are located in this category.

- 3) Respondents born between 1956 and 1965. Being kids when the oil boom started, this category also entered their youth or early adulthood during the most intense period of changes in the structures in the local social space, and any generation-specific structures in their habituses will have been formed during this period of major capital transformations in the social space. The majority have spent more years in the educational system than the older respondents, not only because they have completed 9 years compulsory education, but also because

²²⁴This reduces the sample size to a maximum of 467 active cases when cross-tabulating generational position and the question about a given position's enjoyed social esteem. When combined, these variables will give a 4x4x4x4x4x4x3 table to analyze (giving a total of 49152 cells in the table), and because of the extreme number of structural zeros, I decided against doing a comparative latent class analysis of the two samples.

²²⁵The ones being born in Stavanger after 1952 will however had completed 9 years in public school (see chapter 5, and tables 5.5 and 5.6).

of the increased number attending upper secondary school or institutions of higher education.

4) Respondents born 1966 or later: everyone in this category entered their youth and early adulthood *after* the major transformations of the local social space had taken place. Educationally, they are the ones to have spent most years in the educational system. From this point of view, they have also (at least more directly than others) been confronted with the *decreasing* value of educational capital. Thus, the incorporation of social structures in potentially generation-specific structures in the habituses has occurred in a space of capital relations resembling that presented in Rosenlund's analyses (see fig. 5.2). Of the interviewed yard workers, the majority of the platform builders are located in this category.

However, the results obtained from a large number of cross-tabulations (see the appendix for individual tables) proved not to be conclusive. Although statistically significant differences are found in both the Rosenberg and the Stavanger samples, it would be wrong to claim that distinct generation-specific differences dominate the respondents' evaluations of positional esteem hierarchies. Nevertheless, there are some clear exceptions. First, in the Rosenberg sample, there is a generational split over the social esteem of lower secondary school teachers. While a majority in the two senior age categories ("Born -1945" and "Born 1946-55") tend to rank the esteem of this position high (a combined positive rating of 55% and 59%), a majority in the two junior age categories ("Born 1956-65" and "Born 1966-74") rank the teachers *low* (54% and 70% respectively). Secondly, while a majority of all yard workers rank the platers low, the youngest yard workers ("Born 1966-74") are more unanimous in this ranking than the other yard workers (a total of 86%, while the others vary from 51% to 73%).

With the exception of the result for the platers (which is probably more closely related to yard-internal than yard-external structural changes²²⁶), the patterns in the overall evaluation of the positions share one common denominator: being an engineer, psychologist or secondary school teacher also means having a high volume of educational capital. This makes it tempting, though speculative, to "link" these differences to the above described changes in the local social space, and thereby to generation-specific differences in the *yard worker* habituses. The question then arises as to whether the majority of the

²²⁶Historically, the platers have been among the stronger groups at the yard.

"oldtimers" at the yard also are more strongly inclined to focus on educational parameters when ranking a position's social esteem, since they in part have incorporated the capital structures in the fields and in the local social space (and having done so from "weaker" positions) in the shape of mental structures in their habituses in a period when higher education was not widespread in the Stavanger region. Given the changes in the educational structures and the decreased relative value of educational capital in both the local and the national occupational field and social space, it would not be surprising if the younger yard-worker respondents put less emphasis on this parameter, since they have spent their youth (and in many cases also their early adulthood) in school, and have come to take educational capital more or less for granted.

Although this hypothesis may seem reasonable, the patterns found in the Stavanger survey seriously complicate the matter. Not only are the generational patterns more distinct in this sample since it is more heterogeneous, but the generational oppositions in the evaluations of social esteem from the Rosenberg sample are often *inverted* in the Stavanger sample. Once again, the school teachers are ranked lower by the junior respondents when compared to the senior ones. In contrast, the positional esteem of the engineers is rated very high, by more than 50% of the junior respondents ("1966-"), which is 18 to 25 percent higher than any of the other generation categories. A similar, but less distinct opposition is evident in the ranking of the psychologists, with a split between respondents born in 1955 or earlier (tend to rank the psychologists lower) and the ones born in 1956 or later (tend to rank the psychologists more highly). Finally, there is an opposition over the homehelpers, whom the oldest respondents rank higher than the others, while more than 50% of the youngest respondents rank this occupation very low.

The question is: can these differences be interpreted as indications of a structural homology in the ways generation-specific habituses generate both yard-internal and yard-external generation differences in the evaluation of positions' social esteem? In one sense, the answer is yes. Although applied differently, one important distinguishing parameter may be the same, i.e. a generational opposition that seems to be related to the agents' recognition of the value of educational capital in the present local occupational field and in the local social space. In the yard-worker sample, and internally at the yard (as indicated in chapter 8), this is articulated in an opposition between the recognized relative value of practical skills/work experience vs. formal vocational education. In the *restricted* Stavanger sample (the lifelong Stavanger residents ["Siddis"] only),

there are also generational differences in the perception of the social esteem of the most highly educated. However, lacking the necessary data to analyze this discrepancy in a more direct way and in greater detail²²⁷, the speculative nature of the analysis must once again be emphasized. The problem of the inversion between the samples, and how the relations between structures in the habituses, formative experiences and field and space positions affect these evaluations, must thus await further investigation.

Shifting focus, let me approach the question of the yard workers' "sense of their place" from a slightly different angle, and consider the yard workers' memories of formative events, processes of social stratification and experiences acquired *outside* the yard gates before, during and after the oil boom. An effort will again be made to distinguish between the generation-specific memories of the former shipbuilders and the platform builders. However, in view of the questions raised in this chapter, a comparison of the yard workers' and other Stavanger residents' opinions of events, changes and processes during the last 20-30 years that will be of critical importance. This in turn means that a larger part of the analysis must be based on survey data.

9.3. Yard generational memories from changes in Stavanger

If the yard-related experiences of the kind presented in matrix 9.1 are excluded, an analysis of yard-generational memories of experiences acquired, and Stavanger based experiences, processes and events, is not without problems. Distinct patterns are not easily identified, and the interviewees found it very difficult to express their opinions on the changes that had happened in their local community over a period of 20 - 30 years. Not having anticipated this, my initial reaction was a great disappointment. It also forced me to confront directly my own preconstructions of the research object.

Put simply, their responses can be summed up in three main points:

- The oil companies became *the* most powerful agents in the city, and could do almost as they pleased. Local authorities would generally comply with their wishes, as they still do. Offshore workers were also paid radically higher wages than the yard workers.

²²⁷More specifically detailed data about the *subjectively* acknowledged parameters that the respondents are applying when they assign social esteem to a position.

- Because of the oil boom, houses became expensive, and the prices have continued to rise ever since the oil boom started.²²⁸
- There are far more pubs nowadays than in the old days.

Having little or no personal contact with the oil companies, and not seeing themselves as party animals, only the fact that houseprices rose is remembered as directly affecting their lives. On this point, the generational differences are of minor importance; all the interviewees emphasize that house prices have remained high in the area. This has had consequences for the economic situation of the platform builders, and although this might be analyzed as a formative experience with respect to their status as a generation unit, it is still not plausible to analyze it as a generation-specific formative experience. While this change might have been more directly experienced by the former shipbuilders²²⁹, all the interviewees born after 1946 have been exposed to the same situation, and their perception of the local house prices are also more or less the same.

The reasons why the interviewees were less willing or able to talk about other large-scale changes and events in the city and the local community may be many. For instance, the fact that the main part of the interviews dealt with Rosenberg-related matters may have influenced, i.e. "silenced", the interviewees. For many of them, the shift from talking about yard-internal to yard-external events felt like an abrupt change in the course of the interview. Talking about specific yard-internal changes was easy, while to suddenly shift focus and remembering and talking about more general yard external changes and events was not.²³⁰

At the same time, this "shift of arena" may also have been considered an invasion of the privacy sphere, resulting in a highly understandable unwillingness to answer the questions.²³¹ Talking about yard events to a complete stranger who has "union authorization", is one thing. Talking about leisure activities, yard-external events etc. is a completely different matter. Most of the interviewees stressed the importance of distinguishing between work and leisure.

²²⁸The following quote is in many ways typical: "Hah..The first thing we noticed was the Americans...Houses...House rents ... You could rent your house out for 10- 15 000 kroner a month. And the prices rose enourmously!" (CC25)

²²⁹They were the first to be exposed to these economic changes.

²³⁰This potential interview effect was sometimes allowed for by changing the order of some of the themes dealt with in the interview, but this resulted in no important differences when it came to the answers.

²³¹Other researchers had the same experience when interviewing Rosenberg workers: asking the interviewees about their lives outside the yard gates would often be met with silence and a feeling of uneasiness and of being intrusive.

Similar results were reported by Crozier (1963: 39-42), who found, for instance, that hardly any of the persons interviewed had other yard workers as close friends. Those who had once lived in, or had moved to Hundvåg (i.e. close to the yard and other yard workers) remembered the inability to separate between the work sphere and the privacy sphere as one of main disadvantages on the place; there were yard workers "everywhere", so work followed you home (sometimes even on your holidays), and invaded your privacy. For those who continued to live close to the yard, it took a long time to get used to and eventually ignore this.

However, there is an alternative explanation for the interviewees' lack of willingness to talk about the large-scale changes in the Stavanger region. Over the years, their positions have always been located in the dominated sectors of the social space. As indicated in chapter 5, the position of industrial workers in general has become ever more marginalized. The relative number of people employed in industrial trades has declined from 1960 onwards, with a radical drop in the five years from 1975 to 1980 (see table 5.8). Moreover, with the arrival of the oil industry, the offshore workers were paid radically higher wages than the onshore industrial workers. Thus, both the economic and the educational distances to other positions in the private sectors of the social space would have increased, and this would also have found direct expression in the yard workers' strength in the housing market; as the house prices increased, it became increasingly difficult for them to buy a house of their own. Since houses are an important symbol in (and of) the private sphere outside the yard gates, and since considerable emphasis is put upon the separation of work and privacy, it is not surprising that this particular aspect is often focused upon in the interviews. From this perspective, the house prices are also symbols of an increasingly weakened or marginalized position in the local social space. If their opinions on the changes in the local society are analyzed as integral to a local political field of opinions, their non-response on *these* topics may be analyzed as the result of a disposition to *not* going into discussions or controversies of a particular kind; these discourses are the arena of the powerful positions, i.e. the positions located in the area of highest capital volumes in the social space.

When it comes to having an opinion on the changes in the local society, therefore, their reluctance to answer may have a theoretical explanation. According to Bourdieu's (Bourdieu 1980b: 222-235) and Patrick Champagne's (Champagne 1990: 14) arguments, positions and distances in the social space can be converted into dispositions regulated by the structures in their habituses; the capacity to produce an opinion on a given subject is, therefore, not equally

distributed, but varies according to the individuals' capital volume, and in particular their cultural capital volume. Being located in marginal positions in the local social space, the yard workers' disposition to actively *take* positions in the local (political) field of (public) opinion may not be very strong. This field is not perceived as an arena in which they belong, so it is unlikely that they are strongly disposed to "fabricate" an opinion on a given set of questions (asked by a stranger in a position of vague status) when they don't have one, and/or when they have never asked themselves these questions.

Although distinct yard worker lieux de mémoire cannot be identified, I would still argue that it makes sense to talk about a yard worker framework of memory. When remembering processes, events and experiences that are actually associated with the city, the interviewees usually do so from their positions as yard workers; when remembering, it is the yard related aspects and stories containing many of the elements outlined in matrix 9.1 that dominate. In this way, their memories of processes of social stratification in the city of Stavanger are strongly related to their positions as yard workers. For example, although not shared by all the yard workers, memories of the Christmas parties for the yard employees' children are in this respect one of the clearest examples of the early establishment of a stratified vision of society. The reasons for this are relatively straightforward: this was one of the very few regular yard-related events that took place in the city. Furthermore, up until 1996, there were *separate* Christmas parties for the children of the yard's workers and the children of the yard's functionaries. When remembering, those who had attended these parties as children emphasize that the presents used to be paid for by Bergesen, and that there were *two* parties: one for "us" and one for "the others". The fact that the newest managing director has ordered that this "practice of parental stratification" be halted has not gone unnoticed. Nevertheless, the importance of this phenomenon must not be overexaggerated. Claiming that the Christmas parties constitute a commonly perceived institutionalized "lieu de mémoire" for yard-workers, for instance, would be wrong. Furthermore, it is hard to identify distinct generation-specific memories of these parties. The pattern points more in the direction of a generational memorial convergence.

To return to the survey data, it is possible only to compare the yard workers' responses to a set of questions about changes in the area the last 20-30 years, with the responses given by other Stavanger residents, but also to examine potential intragenerational and intergenerational differences. Given the arguments outlined above, however, this analysis cannot be carried out without

running into major methodological and theoretical problems. For instance, there is good reason to suspect that while some respondents have clear opinions on the items that have been asked about, others have barely considered the questions, and will produce an opinion on the spot in connection with answering the items in the questionnaire. In addition, there is a stronger tendency to respond "totally agree" and "partly agree" in the Rosenberg survey than in the Stavanger survey. Given the listed items, I find this result methodologically alarming, although a similar, but weaker trend is present in the Stavanger sample. When comparing the results, it must also be born in mind that the surveys have been performed at different moments in time, that two different survey techniques have been used, that the ordering of the questions in the two surveys is different, that the response alternatives are slightly different²³², and that the questionnaires will not be perceived in the same ways by all the respondents. Research on survey methods has revealed that these aspects have disturbing effects on the overall reliability and validity of the analyzed data.²³³

Doing four separate multiple correspondence analyses of the yard-worker respondents, the Stavanger area respondents, the lifelong Stavanger resident respondents and finally the "newcomer" respondents made it possible to do a four-way comparison of these groups and subgroups of respondents. Graphically, the results obtained proved not only to be complex, but also confusing and not particularly informative, due to the large amount of highly detailed information. Hence, a more direct and straightforward approach was selected. By carrying out four separate HOMALS²³⁴, exactly the same latent dimensions as obtained in the multiple correspondence analyses are revealed, but the main parameters of interpretation and comparison are the dimensions and their most important variables and their respective discrimination measures, and *not* the individual variable categories. However, this means that information on the categories' absolute and relative contributions is not obtained. Thus, a HOMALS implies gains in terms of interpretative simplicity, but unfortunately, losses in term of detail and complexity.

When reading the numerical outputs of a HOMALS, a simple rule of thumb may be applied: variables having discrimination measures (a correlation

²³²In the Rosenberg survey, respondents were allowed to answer "Don't know", whereas this possibility was not given in the Stavanger survey. The wording of the "extreme" response alternatives is slightly different. Whereas "Totally agree/disagree" is used in the Rosenberg survey, "Strongly agree/disagree" is used in the Stavanger survey.

²³³See Bøyum 1996 for a discussion of design effects in surveys.

²³⁴See Van de Geer 1993, Greenacre 1993 and Hjellbrekke 1999 for an introduction to the principles that distinguish HOMALS from a standard multiple correspondence analysis.

between a given variable and a given dimension) higher than the given latent dimension's eigenvalue are the most important variables with respect to the construction of that dimension. Since these are the variables with the categories having the highest absolute contributions to the dimension, they will in most cases also be the variables that generate the existing oppositions in the data.

Not surprisingly, the oppositions are clearer among the yard worker respondents than among the Stavanger respondents in general. The separation between the axes is better, as is the internal axis homogeneity. In the data from the Rosenberg survey, the first dimension describes yard internal oppositions regarding the more negative statements about the consequences of the oil activities, and the second dimension describes oppositions regarding the more positively oriented statements. Although the results from the HOMALS of the complete sample in the Stavanger survey are less clear, there are still structural similarities between the two:

Table 9.4: HOMALS of responses to seven statements about changes happening in the Stavanger area the last 20-30 years. Data from the 1994 Stavanger survey and the 1998 Rosenberg survey. Discrimination measures higher than threshold values are in bold.²³⁵

	Stavanger survey (N=892)		Rosenberg survey (N=382)	
	Eigenvalues and discrimination measures	Eigenvalues and discrimination measures	Eigenvalues and discrimination measures	Eigenvalues and discrimination measures
Eigenvalues of dimensions in analyses	Dimension 1 .3120	Dimension 2 .2882	Dimension 1 .3479	Dimension 2 .2962
People in Stav. have every reason to be proud of what they've achieved.	.496	.317	.323	.475
Stavanger has managed to preserve the best things from the years before the oil activities.	.414	.241	.290	.518
The many restaurants and pubs have enriched the city's environment.	.353	.230	.098	.407
The oil activities have given Stav. a central position on the European map.	.130	.174	.361	.166
The oil activities have made people care too much about money and material goods.	.392	.419	.499	.181
The Stavanger district has a new upper class of oil people.	.242	.362	.420	.157
The distance between those who govern and are governed has increased.	.157	.275	.444	.169

From the discrimination measures, it is evident that dimension 1 in the Stavanger sample has a resemblance to dimension 2 in the Rosenberg sample.

²³⁵ As expected, and for self-evident reasons, the youngest respondents are the ones who are most strongly inclined to answer "Don't know"/"No opinion" or not to answer at all. Generating statistically significant, but sociologically trivial results, these categories have been excluded from the analysis.

Internally (see details in the appendix), both dimensions generally describe an opposition between respondents who agree or disagree with items 1-3 (the items with discrimination measures higher than the threshold values in the analysis of the Rosenberg survey). Dimension 2 in the Stavanger sample, although internally more heterogeneous, bears a resemblance to dimension 1 in the Rosenberg survey. In the Rosenberg sample, the first dimension distinguishes between "extreme" and "moderate" opinions on items 4 and 5, and oppositional views on items 6 and 7. In the Stavanger sample, the patterns are the same for items 5 (discrimination measure just below the threshold value) and 7. On items 1 and 6, the axis describes an opposition between the "extremes" and the "moderates". In spite of these differences, it would still be difficult to claim that a distinct yard-worker habitus has manifested itself; internally, the yard workers tend to disagree on the same sets of items as other Stavanger inhabitants.

However, it is problematic to make a direct comparison between the yard workers and all the other inhabitants in the Stavanger area, since the majority of the yard workers originate from Stavanger and the North Jæren area, while the Stavanger sample also includes a high percentage of newcomers to the region. Applying the above outlined logic in the construction of generational categories, the latter respondent group will not have experienced the oil boom in the same way as the original Stavanger inhabitants (the so called "Siddis"). Thus, it is also necessary to distinguish between "the Siddis" and "the newcomers".

In an analysis on these two subsamples, the HOMALS revealed the following latent structures:

Table 9.5. HERE.

Compared to the results in table 9.4, although the distinction between the two dimensions in the "Siddis" subsample is virtually non-existent (a difference in eigenvalue of 0.0069), the internal homogeneity in the dimensions is clearly improved compared to the results obtained on the complete sample of Stavanger residents. It is also evident that the similarities between the discrimination measures obtained in the analysis of the yard workers and the "Siddis" respondents are clear. In short, the respondents in the two subsamples tend to disagree on the same sets of items.

Table 9.5: HOMALS of responses to seven statements about changes in the Stavanger area the last 20-30 years. Data from the 1994 Stavanger survey. Sample split in two subsamples: Lifelong Stavanger area residents ("Siddis") and Newcomers (respondents who have lived in their present municipality for a shorter period). Discrimination measures higher than threshold values are in bold.

	Respondents who have lived all or most of their lives in Stavanger ("Siddis") (N=514)		Newcomers (N=387)	
	Eigenvalues and discrimination measures	Eigenvalues and discrimination measures	Eigenvalues and discrimination measures	Eigenvalues and discrimination measures
Eigenvalues of dimensions in analyses	Dimension 1 .3008	Dimension 2 .2939	Dimension 1 .3500	Dimension 2 .3020
People in Stav. have every reason to be proud of what they've achieved.	.564	.113	.564	.368
Stavanger has managed to preserve the best things from the years before the oil activities.	.391	.174	.422	.371
The many restaurants and pubs have enriched the city's environment.	.297	.230	.310	.399
The oil activities have given Stav. a central position on the European map.	.390	.034	.173	.176
The oil activities have made people care too much about money and material goods.	.189	.658	.459	.353
The Stavanger district has a new upper class of oil people.	.182	.533	.259	.233
The distance between those who govern and are governed has increased.	.092	.305	.263	.214

Internally, however, the dimensions are organized slightly different in the two subsamples (see details in the appendix). In the "Siddis" subsample, dimension 1 distinguishes "extreme" from "moderate" views on items 1-3, whereas dimension 1 in the Rosenberg sample describes an opposition between respondents who agree or disagree with items 1-3. Dimension 2 in the "Siddis" subsample mainly describes an opposition between those who feel positive and negative about items 5-7, whereas dimension 1 in the Rosenberg sample describes the same kind of oppositional views of items 6 and 7, and distinguishes between the "extremes" and the "moderates" on item 5.

Once again, based on the patterns of the discrimination measures, it would be wrong to claim that the yard workers are radically different from the other inhabitants in the region; in retrospect, respondents who have been exposed to the same processes tend to have developed similar opinions on, or to disagree about the same sets of items, no matter what their positions is in the local social space. Instead, the greatest difference is between the "Siddis" and the newcomers.

The HOMALS of the subsample of newcomers reveal more complex, heterogeneous and unclear latent structures. Furthermore, the first and the second dimension prove to be almost similarly constructed; in both cases, the variables obtaining the highest discrimination measures are the more positively oriented statements.

However, as stated above, a HOMALS imply that the details in the individual distributions are lost, as has been the case in the analysis presented so far. Although the overall trends are the same on almost all the items - that the univariate distributions in general are similarly organized across the samples and subsamples - the distributions on two of the listed items merit closer examination. The first and most distinct, concerns the perceived distance between those who govern and those who are governed; the second the existence of a new upper class of oil people in the Stavanger district. Indirectly, both items concern the respondents' sense of their places in the local social space, and of changes that have taken place in this space. And in both cases, the responses of the yard workers differ from those of the other respondents:

Table 9.6: Attitudes towards statements "The distance between those who govern and are governed has increased." and "The Stavanger district has a new upper class of oil people." Data from the Stavanger survey 1994 (Stavanger sample split into two subsamples: Lifelong Stavanger area residents and Newcomers and the Rosenberg survey 1998.

	Attitudes towards statement "The distance between those who govern and are governed has increased."			Attitudes towards statement "The Stavanger district has got a new upper class of oil people."		
	Rosenberg workers (RMV survey)	Lifelong Stavanger residents	Newcomers to Stavanger	Rosenberg workers (RMV survey)	Lifelong Stavanger residents	Newcomers to Stavanger
Totally/ Strongly agree	45%	13%	8%	35%	22%	18%
Partly agree	30%	35%	32%	34%	34%	41%
Neither/ nor	17%	32%	39%	19%	20%	22%
Partly disagree	6%	16%	15%	8%	16%	15%
Totally/ Strongly disagree	2%	4%	5%	3%	7%	4%
TOTAL	100% (354)	100%(451)	(290)	99% (357)	99%(451)	(349)

As table 9.6 clearly demonstrates, the yard workers are far more strongly inclined to agree with the statement about the increased distance between those who

govern and those who are governed. Given their positions in the local social space, i.e. their distance to the local field of power, this is not surprising. As argued in chapters 5 and 6, historically, the yard workers have never been in this sector of the local social space. Based on the same logic, and against the background of the arguments presented above (subsections 9.1 and 9.2), it is not surprising that the yard workers are also strongly inclined to agree with the statement about the existence of a new upper class of oil people. Having been pushed onto the sideline economically during the early decades of the offshore industry, the yard workers' attitudes to these two items are easily understood. Nevertheless, it is not possible to claim that there are strong correspondences between the respondents' positions in the local social space and their overall opinions on the processes that have led to its present structures. When the whole set of items is analyzed, the dominant pattern is still one of convergence in opinions on the changes that have taken place in the area.

But is it possible to identify differences that are related to generational oppositions?²³⁶ And are there generational differences between the Rosenberg workers and other Stavanger inhabitants, i.e. that the members of yard internal generations distinguish themselves from other Stavanger area residents? Once again, the results from the examination of the complete set of crosstables (see tables in appendix) are not conclusive. While the senior respondents ("Born-1945" and "1946-55") are generally more critical of the changes than the junior ("1956-65 and "1966-"), the overall tendency is still for intergenerational agreement. As evident in 9.7, it is also problematic to distinguish between yard-worker generations and Stavanger-area generations in general. Distinct generational differences revealed in the "Siddis" subsample are present in the sample of Rosenberg workers as well. With regard to the items listed, therefore, there are no major differences between yard-worker generational and "Siddis"-generational opinions; the junior respondents are more inclined to view the increased number of pubs and restaurants as a positive factor, whereas the senior agree more strongly with the negative statements about materialism and increased distances to the local political authorities. In general, the "newcomers" not only constitute the most homogenous subsample, but these are also inclined to disagree with the negative statements more often than the "Siddis"-respondents:

²³⁶Due to lack of homogeneity in the set of variables, it was not feasible to examine this question by expanding the active number of variables in the HOMALS to include the variable indicating generational position.

Table 9.7: Generational differences in responses to seven statements about changes in the Stavanger area the last 20-30 years. Data from the Stavanger survey 1994 (Stavanger sample split into two subsamples: longterm Stavanger area residents and Newcomers and the Rosenberg survey 1998. Reported differences are statistically significant at .05-level for values of Cramér's V.²³⁷

	Complete Stavanger sample	Lifelong-Stavanger residents ("Siddis")	Newcomers to Stavanger	Rosenberg workers (RMV survey)
People in Stav. have every reason to be proud of what they've achieved.	- 1945 and 1966- more strongly in agreement with statement than 1946-55 and 1956-65			
Stavanger has managed to preserve the best things from the years before the oil activities.				Statistically significant differences but no distinct generational oppositions
The many restaurants and pubs have enriched the city's environment.	1956-65 and 1966- more strongly in agreement with statement	1956-65 and 1966- more strongly in agreement with statement	1956-65 and 1966- more strongly in agreement with statement	1956-65 and 1966- more strongly in agreement with statement
The oil activities have given Stav. a central position on the European map.	-1945 more strongly in agreement with statement	Statistically significant differences but no distinct generational oppositions		
The oil activities have made people care too much about money and material goods.	-1945 and 1946-55 more strongly in agreement with statement	-1945 and 1946-55 more strongly in agreement with statement		-1945 and 1946-55 more strongly in agreement with statement
The Stavanger district has a new upper class of oil people.				
The distance between those who govern and are governed has increased.	-1945 and 1946-55 more strongly in agreement with statement	- 1945 more strongly in agreement with statement		-1945 and 1946-55 more strongly in agreement with statement

Once again, it is evident that exposure to the same processes, changes and events has resulted in generational similarities in the opinions expressed about the consequences of these, regardless of the person's position in the local social space. While an opposition between the "newcomers" and the "Siddis" has been revealed, and while generational oppositions are evident which may be attributed in part to the overall changes in the local social space from the late 1960s to the 1990s, there is no evidence of distinct *positional* oppositions. It is therefore somewhat problematic to claim that the listed items reflect or represent major and distinct controversies in local field struggles - that they are objects with the potential to attain the status of field specific symbolic capital and thus constitute objects of field struggles. If there *are* manifest field conflicts over aspects in the recent history in the Stavanger area in general, they are, with the possible exception of the question of the increased distance between those who govern and those who are governed, likely to be dominated by items other than

²³⁷The total number of crosstables is 28 (see the appendix for the individual tables)

those listed above. Not having identified these controversies on the basis of the existing data, this problem remains open for further investigations.

9.4. Expanding the scope and facing the limits of the analytical design: Towards an analysis of the relations between the yard internal and the national occupational field

In the closing sections of chapter 8, the analysis of generational oppositions at the yard was expanded to include generational differences in the yard workers' evaluations of yard external features. Throughout the dissertation, the positions of the yard workers have also been analyzed in relation to other positions both inside and outside the yard gates. The yard internal qualificational profiles, have already been examined and set in relation to Korsnes' study of the Norwegian industrial qualificational space and the social construction of the skilled worker in Norwegian industry (see chapters 6 and 7). The notion of a local occupational field has also been central in this analysis. However, the hierarchical relations between the national and the local occupational field have not been discussed in any detail. Given the structural changes outlined in chapters 5 and 6, it cannot be assumed that these fields are identical.

The question arises, therefore, as to whether the outlined dual structural history also has resulted in a set of unique yard-worker attitudes towards work and work relations in general compared to other Norwegian employees in the manufacturing industries and industry in general. As stated in the beginning of this chapter, an exhaustive field analysis is not possible. In a fullscale analysis of the relations between the yard-internal and yard-external occupational field structures, a comparative historical analysis of Rosenberg and numerous other Norwegian shipyards, for instance, would be needed; since these yards compete for contracts in the same market and for people possessing the same or similar qualifications, they are likely to constitute a "subfield" within the larger Norwegian occupational field. Thus, there is reason to believe that not only the historical relations between the individual yards and their local communities, but also relations between the different shipyards may be of great importance, for instance with regard to the application of qualificational categories, and to the organization of skilled and unskilled workers and the definition of their tasks in the actual production at the individual yards. Lacking the time and the necessary data to carry out this analysis, these relations will not be investigated.

When constructing a national occupational field, an effort must be made to identify all major historically based oppositions and field struggles and to include this in the analysis. Likewise, relations must be analyzed between the agents' positions in this field, their practices and their dispositions towards *taking* positions in field struggles. For this reason, it is a somewhat problematic strategy to restrict the analysis to a set of respondents' attitudes towards various principles of wage formation²³⁸ and their perceptions of work and work relations.

Moreover, there are other reasons as well that make a comparison of the RMV workers and a sample of other metal workers problematic. The fact that the data is derived from two different surveys - the ISSP survey on work orientations and work experience which was distributed to a representative sample of the Norwegian population in 1997, and the 1998 Rosenberg survey covering a similar (but not identical) set of variables - adds further problems to the list. The set of questions, their ordering and also the response alternatives vary between the two surveys. As Bøyum's study (Bøyum 1996) demonstrates, this will most likely have had some effects on the results.

But despite all these problems, this is the only strategy within the bounds of this project which will provide insight into any historically established, unique characteristics associated with being a Rosenberg worker. The distributions in the following table suggest that such characteristics *do* exist:

Table 9.8: Opinions of the statement "A job is just a way of earning money - no more".

	ISSP 1997, employees in crafts and industry	ISSP 1997 Metal workers	Rosenberg Sample 1998
Strongly agree	2%	5%	27%
Agree	11%	12%	32%
Neither/Nor	16%	27%	5%
Disagree	45%	37%	19%
Strongly disagree	26%	18%	17%
TOTAL	100% (312)	99% (56)	100 (390)

As this table clearly reveals, the RMV workers and the ISSP respondents²³⁹, although being located in similar positions, still express different opinions about

²³⁸See question 38, 1-8 in questionnaire in appendix.

²³⁹Once again, the generational differences proved to be statistically significant; among the RMV respondents, the older workers are far more often in agreement with this state than the younger workers:

Table 9.8.2: Generational opinions of the statement "A job is just a way of earning money - no more". "Don't know" excluded.

the value of having a job. The final question to be addressed, therefore, is simply whether or not the historically established yard-worker characteristics that generate these patterns can be identified on the basis of a comparative analysis of existing survey data, and whether they comply with the above outlined oppositions?

As indicated in chapter 7, the conflicts over the piece-rate system, the principles of wage formation and the transition to fixed hourly wages are important elements when the yard workers are remembering the Bergesen and the Kværner years. Struggles over the principles of wage formation belong to the set of field constituting struggles in the occupational field. So this is an appropriate point to start the comparison, focusing on the respondents' attitudes to these various principles.²⁴⁰

In the RMV sample, the overall trend reveals lack of distinction between the relative importance of the various principles. Although the percentages vary and a hierarchy of principles can be established on the basis of table 9.8, *all* the listed principles are either seen as highly or as somewhat important factors when determining the wage of an individual worker:

Table 9.9: RMV workers' attitudes towards principles of wage formation.

	Formal qualifications	The individual worker's work effort	Supervising the work of others	Personal responsibility in work	Seniority in a firm	General work seniority	Character of work	Company profits or losses
Highly important	58%	49%	29%	47%	37%	29%	40%	33%
Somewhat important	33%	29%	50%	40%	39%	40%	37%	36%
Neither/nor	4%	10%	8%	5%	9%	16%	9%	14%
Of little importance	2%	4%	4%	3%	7%	7%	6%	6%
Of no importance	1%	5%	2%	2%	4%	4%	3%	6%
Don't know	2%	2%	6%	3%	4%	4%	5%	5%
TOTAL	100% (370)	99% (372)	99% (353)	100% (367)	100% (370)	100% (357)	100% (366)	100% (370)

	Born -1945	Born 1946-55	Born 1956-65	Born 1966-	TOTAL
Strongly agree	43%	41%	20%	21%	27%
Agree	24%	22%	30%	36%	31%
Neither/Nor	2%	5%	4%	6%	5%
Disagree	17%	10%	21%	21%	19%
Strongly disagree	13%	22%	24%	15%	18%
TOTAL	100% (46)	100% (59)	100% (89)	100% (154)	100% (348)

Cramér's V= .14948 Sign.: .05 DF = 12

²⁴⁰See question 38, 1-8 in questionnaire in appendix.

Nevertheless, formal qualifications (status as a skilled worker and/or education from vocational school) are considered *the* single most important wage formation principle; a total of 91% rank this principle as "highly important" or "somewhat important".

The internal variation in the sample is minimal, and major positional differences, for instance, cannot be identified. Based on the structures presented in figs. 7.1-7.3, however, there is an opposition between the oldest RMV workers (RMV-1978) and the youngest category of RMV workers (RMV1986-93). It is not surprising that a higher percentage of the oldest RMV workers place a stronger emphasis on seniority in a firm and on work seniority in general, not only because they are the oldest, but also because of the generational oppositions analyzed in chapter 8. As already demonstrated, the older respondents also emphasize strongly the importance and value of practical work experience, an element strongly related to seniority in work.

Compared to the youngest RMV employees they rank the individual worker's work effort and whether the company achieve profits or losses as more important principles of wage formation, which is perhaps more surprising. Their disposition to rank individual work efforts highly may be related to the habituses incorporated at RMV in the days of, or in the immediate aftermath of the piece rate system; as indicated in chapters 6 and 7, piece-rates meant that the individual worker's wages depended on their hourly output. When making the transition to fixed hourly wages, productivity agreements²⁴¹ were central elements in the contract between the management and the union, so that changing the wage system should not have a negative effect on the yard productivity. From this point of view, the productivity pressure on the individual worker was upheld, and starting to work at RMV in the shipbuilding years also meant embodying, or at least being confronted with, this officially recognized agreement and work ethic. For this reason, the result may be yet another element that makes it possible to distinguish between the generational yard-worker habituses, i.e. the embodied history of the oldest and the youngest workers.

Given the opposition to the piece-rate system and the information obtained in the interviews²⁴², it is somewhat problematic to explain their

²⁴¹This was a key word in the philosophy of one of the dominant figures in the local union, Kurt Nordbø, who led the union for ten years (1968-1978), the years when the wage system was changed. His point was that the workers should have their rightful share of the economic values created in the production at the yard (see for instance Årbok 1989, *Arbeidernes historielag i Rogaland, Varmen forlag* 1989).

²⁴²Many of the former platform builders for instance mention that the older workers would try to slow the work tempo. Two main reasons were given: in the long term, the youngsters would damage

disposition to link the workers' wages and company profits or losses. In the Kværner years, it was the exception rather than the rule that RMV reported losses. Moreover, for the majority of the offshore years, profits remained high. From this historical point of view, therefore, it would probably have been profitable for the individual worker to link wages to the yard's profit rates.

As explained above, a comparison of the yard workers' attitudes to principles of wage formation and those of the 1997 national sample is somewhat problematic. The number of ISSP respondents located in the occupations covered in the RMV survey is small (59 persons)²⁴³. A two-way comparison will be undertaken, in which the yard workers are contrasted to all respondents employed in a craft or industry, and to respondents located in the same occupational categories as themselves. Because the overall majority of the ISSP respondents in the "RMV occupations" are also located in the crafts and industry category, there are only marginal differences between these two ISSP subsamples:

Table 9.10: Attitudes towards the principles of wage formation, 1997 ISSP sample. Restricted to employees in crafts and industry only, and to occupations also present in the RMV sample.

	Education and formal qualifications, employees crafts and industry	Education and formal qualifications. RMV occupations in ISSP 97	How well the employee does the job, employees crafts and industry	How well the employee does the job. RMV occupations in ISSP 97	Length of time with the firm, employees crafts and industry	Length of time with the firm. RMV occupations in ISSP 97
Of crucial importance	11%	12%	29%	28%	12%	12%
Very important	27%	30%	32%	32%	27%	30%
Somewhat important	46%	41%	31%	21%	41%	36%
Of little importance	12%	12%	5%	10%	18%	18%
Of no importance	4%	2%	2%	5%	2%	2%
Don't know	0%	2%	1%	3%	1%	2%
TOTAL	100(315)	99%(56)	100%(316)	99%(57)	101(313)	100%(56)

Comparing the distributions in tables 9.9 and 9.10 (having first combined the values "Of crucial importance"/"Very important" in table 9.10), reveals certain differences. Overall, the Rosenberg workers rank formal qualifications as more important, and employee's work effort as less important with regard to wage

their health, and in the short term, they would threaten the profit margins in the piece-rate system. See also the memories of the piece-rate system analysed in chapter 7.

²⁴³ Plumbers (ISCO88 code 7136), electricians (ISCO88 7137), surface treatment workers and painters (ISCO88 7142), welders (ISCO88 7212) metal workers (ISCO88 7213-14), machine workers (ISCO88 7224), machine riggers/installers (ISCO88 8281), fork lift operators (ISCO88 8334) and helpers (ISCO88 9320).

formation principle than the ISSP respondents do. With regard to seniority in a firm, the results are more similar. What are the reasons for these differences?

To return to the RMV wage scales (see table 6.3 in chapter 6), the steps on the wage ladders are defined by a combination of qualificational categories and years of work experience. The relative weight of these two principles is more or less the same; the variation within the wage categories is almost equal to the variation between the categories. Nevertheless, the yard workers display a disposition to perceive formal qualifications as the single most important wage formation principle, and clearly more important than seniority in the firm. Their evaluations of the "correct" relative weighting of the types of capital present in this occupational subfield - their perceptions of "legitimate" structuring powers on the yard internal wage scales - are therefore at odds with the existing wage system, as is to be expected. As the analysis has indicated, the structures in this occupational subfield cannot be reduced to a mere reflection of the organizing factors in the wage system. The yard workers' evaluations are seemingly "in accordance" with the historical shifts that have taken place at the yard since the mid-1980s; nowadays, in order to gain access to this occupational subfield, a vocational school education is mandatory. The yard management's emphasis on vocational school education, and the construction of new qualificational categories²⁴⁴ point in the same direction. On this point, the structures in their habituses not only confirm the relative importance of the qualificational space in this industry in general and at Rosenberg in particular, but also reflect in part the capital changes that have taken place within this subfield.

Nevertheless, to claim that this development is a unique subfield characteristic would probably be wrong. As described in chapter 5, a general qualificational upgrading can be identified both at the local and at the national levels; in recent decades, higher school and university education have become ever more widespread. For the capital holders, the relative value of this capital has probably been reduced because of an "inflation" in the number of capital holders. In part, this also applies to the RMV workers, since increases in their qualificational level has not been followed by increased real wages (see table 6.8). This may seem to constitute a paradox in that a vocational school education is now of vital importance in order to gain access to the field in the first place, while within the field, the exchange rates between educational and economic capital have remained more or less the same.

²⁴⁴Being a skilled worker in two trades.

From this point of view, it is tempting to ask whether the yard worker results indicate that they are holding onto a historically based perception of the economic capital value of school education, not adjusting it to present realities. In some respects this may be considered an indication of what Bourdieu has called "the hysteresis effect":

The presence of the past in this kind of false anticipation of the future performed by the *habitus* is, paradoxically, most clearly seen when dispositions ill-adjusted to the objective chances because of a hysteresis effect (Marx's favorite example of this was Don Quijote) are negatively sanctioned because the environment they actually encounter is too different from the one to which they are objectively adjusted. (Bourdieu 1980: 104-105, cited from the English edition [1990], italics in original).

To claim on the basis of the available data that the yard workers' dispositions are generally ill-adjusted to the environment they daily encounter, and that they are therefore negatively sanctioned, would be both problematic and somewhat far-fetched. That the item in the questionnaire (question 38.1) addresses two different aspects of formal qualifications - formal status as a skilled worker *and* formal vocational school education - further complicates the matter.

Nevertheless, without pushing the analogy too far, the basic idea underlying the notion of the "hysteresis effect" may also be applied to display yet another potential element of yard-internal generational oppositions related to the experiences acquired on first entering the occupational field. While the former shipbuilders may react to what they perceive as the reduced capital value of seniority and the status of being a skilled worker (see chapter 8), the platform builders may react to the difference between the field *access* value of their vocational school education and the *field* value of that same education. If this hypothesis holds true, two *different* hysteresis effects - one related to the capital value of the status of the skilled worker and one related to the capital value of vocational school education - are generating similar opinions on a central issue in the struggle in the occupational field. Because of the analytical design employed in this dissertation, there is a lack of data on yard workers at other shipyards, as well as historical data on or knowledge of the Norwegian occupational field in general. For this reason, it is not possible to say whether or not this is a unique characteristic for the RMV workers, or a characteristic of these Norwegian occupational generations in general. Once again, the hypothesis must remain open for future investigations.

Turning to the questions about workers' perceptions of their present work situation and work environment, the differences between the two samples

proved to be more or less marginal. As table 9.10 illustrates, there is only one item in which the RMV workers clearly distinguish themselves from the ISSP respondents; a larger portion answer that they always or often work in conditions that are damaging to their health. But once again, it is problematic to compare these distributions. While the ISSP survey asks how often the respondent must "work in risky conditions", the Rosenberg survey asks whether the respondent must "work in conditions dangerous to health":

Table 9.11: Perceptions of their own work and working conditions, ISSP97 and Rosenberg 1998 compared. Part 1

	ISSP 1997 employees crafts and industry	ISSP 1997 Met. workers	Rosenberg Sample1998	ISSP 1997 employees crafts and industry	ISSP 1997 Met. workers	Rosenberg Sample1998
	Come home from work exhausted	Come home from work exhausted	Come home from work physically exhausted	Have to do hard physical work	Have to do hard physical work	Have to do hard physical work
Always	3%	6%	8%	4%	5%	6%
Often	36%	30%	32%	23%	34%	38%
Sometimes	50%	51%	48%	28%	40%	40%
Hardly ever	10%	12%	8%	25%	19%	9%
Never	1%	0%	1%	20%	2%	3%
Don't know/ no answer	0%	0%	4%	0%	0%	3%
TOTAL	100% (315)	100% (59)	101% (404)	100% (314)	100% (59)	99% (404)

Table 9.11: Perceptions of own work and working conditions, ISSP97 and Rosenberg 1998 compared. Part 2.

	ISSP 1997 employees crafts and industry	ISSP 1997 Met. workers	Rosenberg Sample 1998	ISSP 1997 employees crafts and industry	ISSP 1997 Met. workers	Rosenberg Sample 1998
	Find work stressful	Find work stressful	Find work stressful	Work in risky conditions	Work in risky conditions	Work in conditions dangerous to health
Always	3%	3%	3%	4%	5%	14%
Often	27%	22%	18%	14%	17%	23%
Sometimes	59%	55%	58%	25%	43%	30%
Hardly ever	11%	17%	16%	29%	22%	21%
Never	1%	2%	2%	27%	10%	7%
Don't know/ no answer	0%	0%	3%	1%	2%	4%
TOTAL	101% (314)	100% (59)	100% (404)	100% (314)	100% (59)	99% (404)

Despite the fact that both surveys address the same topic, it is possible that this difference in wording accounts for a portion of the observed differences.

On the other items listed, although a difference may be evident with respect to how often the respondents see themselves as doing hard physical work, the overall pattern is one of homogeneity in the views of the work situations. On this point, therefore, it may be concluded that the RMV respondents are not radically different from other respondents located in similar positions in the Norwegian social space and in the Norwegian occupational field. On this point, the history of Rosenberg Mek. Verksted and the yard workers non-personal and personal practices of remembering do not affect the field relations in ways that generate unique RMV worker views of their present work situation. With this the empirical analysis of yard workers' frameworks of memories draws to a close.

9.4. Concluding comments

The aim in this chapter has been to examine yard-worker frameworks of memories of the relations between yard-internal and yard-external structures. The results are not conclusive. With regard to the yard workers' evaluations of the social esteem of a yard worker in Stavanger, yard-internal positional and generational differences are set aside in a shared yard-worker memory of other people's comments and attitudes towards them. On this point, sharing the same positions in the local social space corresponds with a yard worker's framework of personal and non-personal remembering.

When considering the perceptions of the social esteem of other positions in the local social space, the differences between the yard workers and other inhabitants in the Stavanger area are set aside. In Rosenlund's words, there is a commonly shared "sense of reality" of the structures in the local social space, regardless of position. With regard to the opinions expressed on events, processes and changes that have taken place in the Stavanger region the last 20-30 years, the generational differences between the yard respondents and other respondents also proved to be minimal.

Finally, an effort was made to expand the scope in order to address the relations between the Norwegian occupational field and the local occupational field. Since it was problematic to identify unique yard-worker characteristics related to the RMV workers' history and practices of remembering, the analysis of yard-worker frameworks was brought to an end. Nevertheless, this highlighted the limits of the analysis and also some of the problems related to the analytical design that has been applied in this study. In the final chapter, I return to these problems in a discussion of classes, fields and practices of remembering.

Chapter 10. Studying 'Classes', 'Fields', 'Work Relations' and 'Practices of Remembering'

The individual or collective classification struggles aimed at transforming the categories of perception and appreciation of the social world and, through this, the social world itself, are indeed a forgotten dimension of the class struggle. But one only has to realize that the classificatory schemes which underlie agents' practical relationship to their condition and the representation they have of it are themselves the product of that condition, in order to see the limits of this autonomy. Position in the classification struggle depends on the position in the class struggle; and social subjects - including intellectuals, who are not those best placed to grasp that which defines the limits of their thought of the social world, that is, the illusion of the absence of limits - are perhaps never less likely to transcend 'the limits of their minds' than in the representation they have and give of their position, which defines those limits. (Bourdieu 1984:484-85)

10.1. Introduction

As repeatedly stated, the dialectics between history in its objectivated and embodied states is a central element in Bourdieu's theory of practice. In this dissertation, another basic assumption has been that field struggles over categories of perception may be closely related to struggles over legitimate and illegitimate ways of remembering and/or commemorating the past. The notion that history may be among the objects of struggle in a field, and may thus be given status as field-specific symbolic capital, has constituted been yet another theoretical presupposition underlying the analysis.

Empirically, however, the character and the openness of these struggles will however be subject to great variation. In struggles and oppositions in the political field, in processes of nation building and in relations between states, this phenomenon may be relatively easy to observe. For instance, two recent examples in the *Norwegian* political field would be the debates aroused by Slagstad's (1998) book on Norwegian political history 1814-1998, and by Nilsen's and Østerberg's (1998) book on the regime of former Prime Minister Brundtland.²⁴⁵ Internationally, the French debate concerning whether it was possible to commemorate the French revolution, and the protests aroused by former president Reagan's visit (in 1985) to the Bitburg cemetery demonstrate that this

²⁴⁵Multiple examples from other countries can also easily be found. See for instance Herf, J (1997): *Divided Memory. The Nazi Past in the Two Germanys*. Camb. Mass.: Harvard UP (in particular chapter 9), Smith, G. & Margalit, A. (1997): *Amnestie oder Die Politik der Erinnerung*, Frankfurt: Suhrkamp, Ferro, M (1986): *Comment on raconte l'histoire aux enfants à travers le monde entier*. Paris: Payot, Vidal-Naquet, P.(1987): *Les assassins de la mémoire*, Paris: La Découverte.

same visibility may characterize struggles over specific "lieux de mémoire" and over the legitimacy of commemorative ceremonies and practices.

Outside the political field, struggles over the past may be harder to observe, but nevertheless of central importance with respect to the analysis of the field's logic. For this reason, the present study has analyzed some of the ways past experiences are not only remembered, but also actively exerting a structuring power over present practices and perceptions. Empirically, the object of this study has been the relations between the Rosenberg yard workers' memories of the history of their work place and of their local community, and their present perceptions of yard-internal and yard-external structures and oppositions. Based on Bourdieu's theory of practice, the yard workers practices of remembering have been analyzed therefore in relation to their positions in yard-internal structures, in the local and partly the national occupational field, and in the local social space, as well as in relation to how the structures in these have changed over the last 30 years.

By carrying out a case analysis of the yard workers' practices of remembering, this dissertation has explored how practices of *personal* and *non-personal* remembering in the occupational field are structured by this particular field's logic, but also exert a structuring power on it. In this final chapter, the theoretical approach and the arguments presented will be summarized in a closing discussion of how practices of remembering may be analyzed within a methodological relationist framework.

10.2. Critique of Recent Theoretical Approaches to 'Collective Memory'

As Joël Candau (1996: 60-68) has pointed out, Maurice Halbwachs' original notion of 'social frameworks of memory' is theoretically more convincing than his later notion of a 'collective memory'. Although it would be incorrect to claim that Halbwachs himself saw groups as *actual* agents, the term "collective" easily implies an opposition between two different types of actual remembering agents, and between individual memories and group memories, i.e. a version of the individualism vs. holism debate. While Halbwachs' theory was clearly structuralist, the original terminology does not *per se* necessitate a structuralist explanatory framework of analysis. As stated in chapter 2, despite clear differences, his approach has also a clear resemblance to G.H. Mead's conceptualization of social action. Analytically, therefore, the notion of 'social frameworks of memory' can be upheld in an analysis of the relations between

practices of remembering and the social relations and capital structures in which these practices are situated. While rejecting the notion of 'collective memory' in favor of 'relational memory', the notion of 'social frameworks of memory' has therefore been retained.

The theoretical and methodological discussions in chapters 2, 3 and 4 are in part motivated by these terminological and theoretical differences. More recent sociological, historical, anthropological and social psychological perspectives on social memory have not (with the exception of Elizabeth Tonkin) been considered directly applicable in the analysis, in view of the standpoint of methodological relationism, and the aim of analyzing the relations between social 'classes', work and the social structuration of historical consciousness. Given that the "yardstick" in most cases has been "external" to the existing perspectives, the intention of the presented critique has not been to reject "tout court" the important empirical and theoretical insights that have been generated within these perspectives, but rather to outline a theoretical alternative in which these insights may be included.

With a foundation in Pierre Bourdieu's constructivist-structuralist theory of practice, therefore I have advocated an approach which may include elements from Halbwachs' work on memory, Karl Mannheim's work on generations, Norbert Elias figurational sociology and Dreyfus & Dreyfus' work on human learning, experience and expertise. By doing so, it is possible to develop a wider relational approach to the study of structured and structuring practices of personal and non-personal remembering.

Another central goal has been to analyze the social frameworks of memories in relation to 'classes' and work relations. This is in part motivated by the fact that Bourdieu yet has not carried out any major studies of work and work relations. While his theory of fields and his notion of a social space constitute a rupture with the more orthodox Marxist' class theories, he has not systematically sought to apply his own theory to the "classic" Marxist case, the study of work relations in capitalist enterprises. This study has sought to do this, but *not* with the intention of replacing industrial sociology-approaches to the study of work, work relations and work organizations. When undertaking this analysis, the centrality assigned to Bourdieu's theory of practice - i.e. the concepts of 'habitus', 'capital' and 'fields' - has had a series of analytical consequences.

10.3. Analytical Consequences of the Outlined Theoretical Approach

In order to understand how the structures in the agents' habituses have been formed, and how they in turn exert a structuring power over the yard workers' visions of social divisions and hierarchies, it is necessary to study the available information about the historical developments of the social space and the fields in which the habituses have been formed. For epistemological reasons outlined in chapters 3 and 4, the notion of 'class' has been replaced by Bourdieu's (1991:229-251) by the notion of a social space. In combination, these two factors have necessitated a detailed presentation of what may be called a double structural history. In chapter 5, I have made an "educated guess" about the structures in the local social space prior to the arrival of the oil industry, and gone on to locate the yard workers' positions within this space. This has necessitated a rather detailed description of the period in which the relevant structures were "fixed": in "the canning years" prior to World War II. Based on Lennart Rosenlund's studies (Rosenlund 1995a 1995b 1998), this construction was then contrasted to the local social space at *present*. Drawing upon official statistics, the more detailed changes that took place in the post-war years have also been studied whenever possible - for instance in the distributions of educational capital, in the occupational structures and in the city's residential zones. Based on survey data from 1994, the trajectories of intergenerational occupational and educational mobility have also been examined.

A similar approach was thereafter applied when studying the structural changes at the shipyard after 1945, the period when the interviewees had started to work at the yard. Given the aim of linking field history, positional history and the agents' personal histories in an analysis of their practices of remembering, the changes in the structures internal to the yard have been outlined in detail, focusing on changes in positions, changes in the educational and qualificational levels, and in the economic structures. Inspired by Korsnes' study of the social construction of the skilled worker in Norwegian industry, and based on information from internal archives and annual union reports, a space revealing the relation between qualifications and wages over time (1958, 1963, 1971/72 and 1975-1995) has been constructed. Finally, the positional histories of the platers, the plumbers, the welders and the mechanics have been outlined.

However, as repeatedly stated, the applicability of a field analysis cannot be taken for granted, although these kinds of structural oppositions can be identified. The next step therefore in the step-by-step field construction has been

to analyze potential oppositions in the yard workers' present perceptions of yard-internal and yard-external social hierarchies (their "sense of their place") and in their memories related to historically established patterns of hierarchical inclusion and exclusion both inside and outside the yard gates, and to consider whether these oppositions can be plausibly related to their locations in the yard-internal and yard-external capital structures. In accordance with the arguments presented in chapter 3, a crucial "test" of the validity of a field analysis will be whether or not the agents' memories can be analyzed as being related to past struggles over field-specific types of capital. For this reason, in chapters 7, 8 and 9, the relations between the agents' positions in the local social space, their positions in the yard internal capital structures and the structures in their habituses have been examined through an analysis of positional (chapter 7), generational (chapter 8) and yard-worker (chapter 9) frameworks of memories. In combination, these relations make it possible to analyze the yard workers' practices of personal and non-personal remembering.

10.4. Positional Frameworks of Memories

In the analysis of position specific structures in the habituses, the focus was initially on perceptions and opinions of yard internal positional oppositions, and on perceptions of intrapositional and interpositional yard-internal esteem hierarchies. As the analysis has demonstrated, a combination of past and presently perceived aspects of the work and working conditions are central parameters of both interpositional and intrapositional hierarchisation. Variation is contrasted with monotony, a high degree of job complexity with "assembly line" work, diversity of work knowledge with limited work knowledge and a high degree of job autonomy with a low degree of job autonomy. People located in the metal trades, such as the plumbers and particularly the platers, talk about "the real trade" in historical terms, and tend "link" the positive values on the central parameters to the memories of what the work used to be like. For instance, "real plating" is not assembling pieces of LEGO, and definitely not grinding, which historically had been the task of the unskilled workers. Intrapositionally, this has proved to be an important parameter in esteem hierarchisation, and when analyzing the skilled worker's social construction of 'skilled work', therefore I have argued that the position-specific personal and non-personal memories of work are of central importance.

The analysis of the yard-internal capital structures has revealed two major oppositions; while the first axis can be interpreted as an overall capital volume axis, the second axis distinguishes between social and qualificational capital (i.e. a field specific cultural), and can also be interpreted as describing the changes in recruitment policy over the last 30+ years. The *positional* oppositions that are evident in this structure cannot be directly translated into position-specific structures in the habituses or into the positional esteem hierarchies outlined. An underlying reason for this has to do with the historical dimensions of the positions; while some positions (such as surface worker) are relatively new yard worker positions, others (such as mechanic) have claimed the status of trades for decades and constituted key positions in the former production at the yard.

Since I was not granted permission to distribute the survey to *all* the employees at the yard, it was not possible to carry out a full-scale analysis of the present yard-internal capital structures, and of the corresponding structural oppositions. When analyzing the yard workers' memories of changes power relations and in capital values, it would therefore be highly problematic to assume that potential positional oppositions would be replicated in a direct reflection of the oppositions revealed in the correspondence analysis in chapter 7, because these structures have been changing. When applying the Bourdieusian field analysis in the analysis of positional frameworks of memories, this must be taken into account.

The analysis of personal and non-personal memories of the Bergesen years has confirmed that this is the case. For instance, the dominant elements in the memories of the Bergesen years demonstrate an interpositional agreement, in the form of a common opposition to the owner (Bergesen) and the managers, positions that are not included in the correspondence analysis of the *present* capital structures. In addition, the articulated memories of these years are still related to economic and qualificational aspects and/or changes, i.e. to the matters of field capitals. This is also true of the retrospectively recognized "lieux de mémoire" from those years. While it was very hard for the interviewees to remember the ships they had built, the two Shell tankers have become negative symbols of the Bergesen years. It is not the ships as such that the workers remembered, I have argued, but rather the fact that their symbolic status as skilled workers was at stake (their skills and formal qualifications were being called into question both by the contractor and the managers). I have further argued that in this case, the validity of the Bourdieusian field analysis has been proven insofar as the processes, epochs and/or events in which there have been struggles over

capital types and capital values (i.e. struggles over *former* capital structures), constitute the experiences, episodes and processes that structure the agents' epochal classifications and dominate the memories. When contrasting the piece-rate system with the system of fixed hourly wages, for instance, the main parameters of comparison proved to be the power of the foremen and the value and convertibility of social capital. Both of these parameters are related to struggles over the logic in the yard-internal occupational field. This also applies to the memories of the offshore years, but in this case it is the contrast between the shipbuilding period and the offshore years, and the "blurring" of power relations in the latter that are focused upon: in the practical work, there was no longer anyone with the authority to make the needed decisions. This perceived change is remembered in ways that discredit, challenge and question the present managers' ability to run the yard, and their knowledge about the yard's production, i.e. the legitimacy of the power assigned to the managers' positions in the local occupational field.

10.5. Generational Frameworks of Memories

In the analysis of generation-specific structures in the habituses, the focus was once again first on the respondents' perceptions of esteem hierarchies. Applying a latent class analysis, three main classes were identified: the "positives", the "mixed" and the "negatives". When examining the conditional probabilities of the three generational categories of yard workers (those who entered the yard in the shipbuilding years, those who entered the yard in the Statfjord years and those who entered the yard after 1985 in the late offshore periods, an opposition was revealed between the oldest and the youngest workers. The latter proved to be more critical (negative) in their evaluations of the social esteem of the various yard positions than the others, while the two senior yard worker generations were internally split in almost similar ways.

This generational opposition was reproduced in various other generation-specific patterns of perception, as well as being clearly related to the oppositions identified in the analysis of the yard internal capital structures in chapter 7. Having claimed that the relative weight of the capital types in the generation specific habituses exerts a structuring power not only over their practices of remembering but also other types of practices, I have gone on to argue that this can be analyzed as a product of formative field experiences in two different

systems of field relations. Qualifications, a field specific type of cultural capital, proved to be the key parameter.

When classifying each other, practical knowledge was contrasted to theoretical knowledge, and vocational experience with a formal vocational education. However, there was one important difference: the former shipbuilders (those located in the more capital weak sectors of the outlined capital structures) expressed this opposition the clearest, and emphasized most strongly the value of this kind of capital compared to the value a vocational school education, while the platform builders tended to take the value of their vocational education more or less for granted. Thus, perceiving that the value of practical skills and vocational experience were being challenged or questioned by the increasing importance that has lately been attributed to formal education, the former shipbuilders find themselves located in weaker field positions. In reacting to the changed field logic and changed capital values, they are also "objecting to" some the changes that have lately affected the position of the foreman. While this used to be a powerful position, its power has more or less been eroded: foremen without vocational school education have lost their positions, and a system of temporary foremen has been introduced. In retrospect, "Folkebåten" has also become a key "lieu de mémoire" for the former shipbuilders. Hence again, it is not the memories of the boat as such that are important, but the memories of the formative experiences that were acquired in this ferry. In their memories, "Folkebåten" has become a symbol of the way working at the yard used to be, and of the hierarchy of power relations that existed at Rosenberg. In each of these cases, the former shipbuilders' memories of how things used to be are contrasted with their perceptions of present field structures, events, ongoing processes and field relations.

As further indications of the existence of generation-specific structures in the habituses, these generational differences also reproduce themselves in the present ways not only in the ways the former shipbuilders and the platform builders perceive relations at work, but also in their more general political opinions. As indicated, they are differ in their perceptions of their subjective class locations, in their attitudes towards unions, strikes and the relevance of the May Day celebration, as well as in their party affiliations and voting patterns in the EU-referendum in 1994. On these points, the generation specific structures in the habituses that have been embodied at the yard have the power to structure what might be called yard-external practices.

10.6. Yard Worker Frameworks of Memories

Finally, the relation between the yard workers and other residents in the Stavanger area has been addressed in 1) an analysis of the Rosenberg workers' memories of becoming and being yard workers in Stavanger, 2) through a comparative analysis of the Rosenberg workers' and the other Stavanger residents' images of the social esteem hierarchies outside the yard gates, 3) and in a comparative analysis of their opinions of events, processes and changes that have taken place in the region the last 20-30 years. In this way, the structures in the yard workers' habituses have been compared to those of the other Stavanger residents.

The analysis the Rosenberg workers' memories of other people's opinions of the yard and the yard workers, has revealed that the workers perceive the yard history as a capital that is negatively valued by the other agents in the local occupational field; when looking back, none of the interviewees remember working at Rosenberg as being something that generated positive comments or responses from other Stavanger inhabitants. Instead, they remember "the others" as associating the position of yard worker with a set of discrediting characteristics: alcoholism, social problems, laziness etc. etc. Historically, being a yard worker has not been a privileged position. Not surprisingly, this image, and the validity of the parameters that in this case distinguishes "us" from "them", is strongly contested by those presently working at the yard. They either claim that this has never been an accurate description of the yard, or that significant changes have taken place at the yard which invalidate this description.

Nevertheless, the yard workers are still in overall "agreement" with the Stavanger residents when ranking the social esteem of their positions in the local space and the local occupational field; both respondent groups rank these positions near the bottom. When comparing the yard workers' and the Stavanger inhabitants' perceptions of the social esteem ascribed to seven positions in the local social space, the overall pattern is one of interpositional agreement; they share the same "sense of reality", and rank the positions similarly. On this point, therefore it would be incorrect to claim that a yard worker specific habitus can be identified.

This is also the case with regard to opinions expressed on events, processes and changes which have occurred in the region the last 20-30 years. As the results from the HOMALS show, the generational differences existing among the yard

worker respondents are generally found in the Stavanger sample as well. With regard to their opinions on these matters, therefore there is no opposition between the "Siddis" and the yard workers. At this point, the boundary of the occupational field, and thus the limits of the applicability of theoretical approach outlined in chapter 3, have been reached; so while interpositional polarities can be identified on other points, their location in polar positions in the local occupational field does not generate differing views on *these* aspects of the local history.

10.7. Implications of the Analysis. History, Sociology and Problems of Empirical and Theoretical Generalizability

So what are the more general implications of this analysis? In what ways, if any, can general conclusions be drawn from this study? The problem of generalizability from this and other case studies raises two different questions related to the levels from which the generalizations are to be made. First, there is the problem of *empirical* generalization: can it be claimed that the empirical results have validity outside the studied case? This question must be analytically separated from the second set of problems related to matters of *theoretical* generalizations, which gives rise to the question: to what extent can the theoretical scheme of analysis and/or the model of explanation developed from a case study, for instance, provide theoretical and/or empirical insights about more general phenomena that cannot will be obtained through other theoretical and methodological approaches? Furthermore; can the theoretical scheme provide *complementary* insights to those gained through other approaches? In the concluding discussion of this dissertation, I will address these two problems briefly.

As stated in chapter 9, the way this study was originally designed has proved to be a source of difficulties and limitations. Problems also arose during the data production. Given that general access to all the employees could not be obtained, a full scale analysis of the yard-internal relations for instance could not be carried out. For this reason, the examination of relations between the workers and the managers, had to be carried out solely from the workers' points of view. For this reason, it cannot be claimed that this has been a complete study of the ways occupational field relations exert power over the work relations at the yard, or that the outlined empirical results have validity beyond this particular case.

Historically, the position of a yard worker at RMV has not necessarily meant being located in exactly the same system of relations as, for instance, the yard workers at Akers Mek. Verksted in Oslo, at Leirvik (Stord)²⁴⁶ or at Ankerløkken Florø (now part of the Kværner Group). The fact that the transition to a system of fixed hourly wages took place at Akers Mek. Verksted in Oslo as early as in 1957, at RMV in 1970/71, and at Ankerløkken Florø in 1974 is just one of numerous indicators that support this hypothesis. Moreover, the individual yards had been organized in different ways, and responded differently to the changes triggered by the oil crisis and the arrival of the oil industry in Norway. Some yards, such as Rosenberg, made the transition and started to build oil production platforms. Others did not. Lately, an effort has been made by some of the shipbuilding yards to reintroduce the (former) qualificational category "shipwright" in order to distinguish themselves from the offshore yards: it is claimed that "shipbuilders" are not the same as "platform builders", i.e. being more knowledgeable in the handling of steel. Finally, the relations between the yards and their local communities have most likely also been different.

If empirical generalizations are to be made, all these points call for a new, broader, historical and comparative empirical study in which the relations between the various yard workers' positions in the occupational field, and in the social space, as well as their perceptions of yard-internal and yard-external hierarchies are analyzed in relation to their practices of remembering. One possible and promising model for the design and implementation of such a comparative study (in spite of her sharp criticism of Bourdieu), may be Michèle Lamont's (Lamont 1995) analysis of the value systems of 160 French and American "cadres".²⁴⁷

The problems related to theoretical generalizations are of a different character. For instance, there is the question concerning the generalizability of the analytical principles of Bourdieu's theory of practice, and whether this study has demonstrated that his theory and his notions of 'field' and 'social space' can be fruitfully applied in the study of work and work relations. Not surprisingly, I would claim that this is the case. Despite the problems outlined above, it is still possible to claim that the mechanisms that typically operate in this sector of the

²⁴⁶Personal communications with Svein Michelsen (Univ. of Bergen), for instance, indicate that this yard's figuration of relations between the qualificational space, the organisational space and the space of work relations is different from the case studied in this thesis.

²⁴⁷Even so, given the amount of work that would have to be done only when it comes to simply producing the necessary interview and survey data, an analysis of this kind can hardly be the work of one researcher only.

Norwegian occupational field have been identified and clarified on the basis of the analysis of this single case. The fact that the *empirical* results generated by these mechanisms may vary not only within but also between countries, and that the structures in the Norwegian, the French and the German occupational fields, for instance, will probably vary, does not per se constitute a challenge with respect to the validity of the *theoretical* framework.

To claim the opposite may instead easily lead to a position in which the theoretical and empirical objects of analysis and the empirical and theoretical generalizations are taken to be one and the same, i.e. a position in which the ontological and epistemological levels of analysis are conflated. Researchers advocating this position will claim that the theoretical validity, i.e. the generalizability, of a given theoretical model or analytical scheme is dependent on and judged by its ability to predict (and at best also "explain") empirical results in various cultural, economic and political contexts.²⁴⁸ This has often been, and still is a dominant analytical strategy within both neo-Weberian and neo-Marxist traditions of class analysis. The class models Erik Olin Wright's (Olin Wright 1985, 1997) and John. H. Goldthorpe (Goldthorpe and Erikson 1993) are two recent examples of this "class-as-variable" oriented tradition²⁴⁹, in which the theoretical generalizability of a class model are tested by the ability of the model specified parameters to predict results cross-nationally, for instance when comparing interpositional social mobility in country A and country B. Within these traditions, historically generated country specific characteristics that from a sociological point of view may be highly important, may be not only easily excluded from, but even obscured by the analysis.

The debate concerning the relevance of history to sociology, and whether sociology and history should be treated as two radically different academic enterprises, is not a new one. Goldthorpe, one of the advocates of a clear separation between the two, maintains that:

...sociologists should not readily and unthinkingly turn to history: they should do so, rather, only with good reasons and in full awareness of the limitations that they thereby will face. (Goldthorpe 1991: 214)

Arguing against Anthony Giddens' and Philip Abrams' pleas for a historical sociology, Goldthorpe's key argument is based on one single parameter of comparison; with regard to the availability of data, the historians must rely on

²⁴⁸See Olin Wright (1997) and Evans and Mills (1999) for two more recent examples.

²⁴⁹See for instance a recent article by Evans and Mills (1999) in which the class structures of Britain, Poland and Hungary are compared in a mechanical application of Goldthorpe's class scheme.

whatever is left of "relics" from the past whereas the sociologists can produce new, tailor-made data to test their theories.²⁵⁰ On this basis, he refutes Giddens' and Abrams' claims that methodologically, history and sociology are the same.

In order to save his case, Goldthorpe must do three things. First, as Michael Mann correctly has pointed out (Mann 1994:37), Goldthorpe's notion of 'methodology' must be highly empiricist²⁵¹, since what Goldthorpe claims distinguishes between sociology from history, is basically a question about data production. Compared to Boudon's definition of the concept (see chapter 4), Therefore, Goldthorpe's position is not only empiricist but also highly reductionist. It is possible to exclude systematic criticism of concepts, models and theories of action from the parameters of comparison. If Boudon's wider definition of 'methodology' is adopted, the demarcation line between history and sociology is no longer as clear as Goldthorpe would like it to be. Although differences between history and sociology, and different ways of *doing* history and sociology can easily be identified, important similarities between the two can also be found. Second, but closely related to the first flaw, Goldthorpe must introduce a modified version of the division into "idiographic vs. nomothetic" disciplines: historians, he maintains, focus on contexts, dates and places, while sociologists try to expand the time-space coordinates "over which their arguments can be widened" (Goldthorpe 1991: 212). If I understand Goldthorpe correctly, this once again implies that *empirical* and *theoretical* generalizations at a fundamental level will be one and the same.²⁵² For the above outlined reasons, I see this conflation of ontology and epistemology as constituting a highly problematic position. Finally, and as Olsen (1991: 21-36) has correctly pointed out, Goldthorpe must exclude at least two dominant schools of modern historical research from

²⁵⁰If his argument is to be consistent, he must exclude the methodology of oral history from the methodology of 'history'.

²⁵¹For a critique of Goldthorpe's views, see for instance Olsen (1991) and Mann (1994).

²⁵²In his reply to Mann's criticism, Goldthorpe (1994:59) goes on: "If the distinguishing trait of an empiricist is the supposition that 'the facts are independent of our perceptions' (Mann: 42 - I assume he really means 'conceptions') then I am not one. If, however, an empiricist is one who believes that data (facts from a certain conceptual standpoint) are essential to both evaluation theories and also to establishing the explananda to which theories are, presumably, to be addressed, then I accept the label". Later (p.71), he goes on: "...an appeal to theory to help decide between empirically-grounded, but still conflicting, interpretations or indeed to question particular 'facts' *could* be an acceptable methodological move. However, for this to be so, the theory would need to be of a quite powerful kind. It would have to permit the demonstration that one interpretation followed rigorously from it, while others did not; or, in the case of dubious 'facts', that these were so contrary to otherwise well-supported expectation that some error - of observation, recording etc. - might be reasonably be supposed. And, of course, in addition to having substantial confirmation, the theory would also be to be a rather general one, the applicability of which to the circumstances in question could safely be claimed".

his conception of 'history': the French Annales-school (represented by Marc Bloch, Lucien Febvre and Fernand Braudel, for instance) and the German "Geschichte und Gesellschaft" historians (such as Jürgen Kocka and Hans-Ulrich Wehler). Both schools have drawn extensively on sociological theories of social action, and on sociological concepts and models in their own research. Methodologically, examples of important similarities between historical and sociological research can easily be found.

It should not come as a surprise that I neither agree with Goldthorpe's conceptualization of 'methodology', nor with his views of the relation between history and sociology. My own position is far closer to that of Bourdieu, as stated in a recent interview (Bourdieu 1999: 157-186): history should be a historical sociology of the past, and sociology should be a social history of the present. In putting this program into effect in this dissertation, I have assigned both a central empirical and theoretical position to the agents' capacity to reflect on their own experiences and on the structures within which these have been produced; I have focused on their practices of remembering when analyzing classes, classification struggles and social practices in general.

10.8. Concluding Comments: Field Analysis and the Study of Work Relations and Practices of Remembering

Based on the outlined the *empirical* findings of the analysis, what conclusions can be drawn regarding the analytical relevance of the *theoretical* synthesis described? For instance, can it be claimed that insights that otherwise might have been difficult to obtain have emerged from this synthesis? The answer to the last question is not straightforward. To claim that this particular synthesis has been *necessary* (i.e. would be the only one possible) - necessary in order to analyze relations between structures in position-related perceptions of the past, structures in perceptions of positional social hierarchies, and structures in the practices of remembering, as well as to analyze how the interpretation, classification and commemoration of historical processes, events, epochs and persons can become arenas for symbolic struggles, and thus be important in the formation of generational identities, work identities and class-identities - would be to overextend the argument. It would also imply that I have grand-theoretical ambitions for the main framework of analysis: Bourdieu's theory of fields. Given the arguments presented in chapter 3, I find this position problematic.

I shall restrict my brief and concluding comments, therefore, to the problem of what analytical insights a study of work relations and practices of remembering, based on the theoretical synthesis presented, may add to Bourdieu's theory of fields. This problem can in turn be split into numerous questions. First, there is the question of what insights a study of work relations may add to a Bourdieu-inspired study of the genesis, reproduction and transformation of power relations in a given society. On this point, my answer will be of a presuppositional nature: work relations are central and primarily *hierarchical* relations. Thus, a study of the logic, the agents and the power relations in the occupational field will provide important, empirical and theoretical insights into to struggles over capital types and capital values, insights into processes of capital distribution and societal stratification. Moreover, a study of the structures in the social space, earlier defined as a theoretically "weighted" synthesis of the structures in the most important fields, should also take the agents' positions and practices in the occupational field into account theoretically and empirically.

Second, there is the question of what insights an analysis of practices of remembering may add to Bourdieu's more general theory of field practices. On this point, my conclusions are tentative, but at the same reassuring with respect to their analytical relevance. As stated earlier, Bourdieu has founded his theory of practice on a dialectic between objectivated and embodied history. Theoretically, an analysis of agental practices of remembering, of the agents' opinions of the history of the studied field and of their classifications of epochs, should provide further insight not only into *how* the history of a field actively structure field practices in the present, but also into the agents reflections on the field and themselves. As indicated, the yard workers tended, from their positions in the present, to focus more strongly on periods when new capital types were introduced in the occupational field, when the values of existing capital types were challenged or eventually changed, and when the logic of the field, and thus also the power relations in the field, were either challenged or changed. In other words, the yard workers' practices of remembering indicate not only that they have a sense of the logic in the field, but also that they are capable of reflecting on this logic.

Considered together with the agents' capital volumes and capital composition, I perceive these as two central premises influencing the agents creative, or transformational, capacity in a field. On this basis, therefore, I would claim that, if the aim is to analyze social practices employing a sociology of the

past and a social history of the present, the agents' practices of remembering should be assigned a central analytical position. By including this element, a study of social change may grasp both the relations between fields, the agents' reflections on their field trajectories, while at the same time being sensitive to universal and societal factors that affect both fields, field trajectories and practices of remembering. Considering the contemporary debates in the social sciences over diagnosis of imminent, broadscale structural changes in post-industrial societies, this also suggests a research strategy that enable us to avoid some of the main inherent problems in such diagnosis. One such problem is not new, but has dominated previous debates on the development of modern societies; that transformations are analyzed as universal, unidimensional and unidirectional (see Calhoun 1994, 1995, Wagner 1992). On this point, a major challenge is in my opinion to grasp what may be called divergent, exceptionalist or "path-dependent" development patterns relating to variations in constellations of social institutions and practices. Another problem is the tendency to conflate theoretical discourses about social change with changes in social practices. In this respect, the challenge is to grasp both elements of continuity and discontinuity, i.e. elements of stability and change. It is my hope that this study has demonstrated both the relevance and the importance of this research program.

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Appendix: The Data and the Data Production

1.0. Introduction

Having as my aim a field analysis of the local and the yard-internal occupational fields has had important consequences with respect to the data needed in the analysis. First, historical data about the development of both yard-internal and yard-external structures have been needed. Second, the construction of a local social space has necessitated survey data on the capital structures that are to prevail in the Stavanger area at present. Third, in order to achieve my aim of analyzing the yard employees' practices of remembering, interview data was required on their memories of and opinions on specific processes, changes and events that have taken place both at the yard and in the city, as well as survey data on the yard-internal capital structures and the respondents' positions within these.

With the exception of the archival data and the existing and accessible secondary data sources, the analyzed data have been produced in two separate stages. Originally, the plan was to interview a total of 50 persons and to distribute the survey to everyone working at Rosenberg. Due to capacity limitations and access problems that will be outlined below, this strategy could not be fully implemented, which has had important consequences for the analysis.

2.0. Producing the interview data

2.1. Constructing the sample. Selection principles for persons to interview

In the winter/spring of 1996, I carried out 39 semi-structured interviews with a total of 38 interviewees. After transcription, the 80 hours of interviews provided 1320 pages of information.

Initially, the criteria to be employed in selection related to three main goals:

- 1) To cover as many as possible of the positions that both historically and presently have been and/or still are central in production.
- 2) To cover three potentially different generations of workers in these positions.
- 3) To cover the major field positions in the yard-internal occupational field.

At the same time, any potential internal positional variations had to be covered. For this reason, the number of interviewees varies between the positions.

At first, the plan was to interview one cohort of workers who had started working at the yard preferably in the late 1950s or early 1960s, in the shipbuilding years and during the struggles over the piece rate system; one cohort who had started in the early years of the Kværner epoch, after the transition to fixed hourly wages and to building gas tankers had taken place; and one cohort who had started at the yard in the offshore period. Thereafter, the plan was to discuss whether it was reasonable to analyze these cohorts as distinct yard generations in Mannheim's sense. This strategy did not prove feasible. For instance, very few of the welders had worked at the yard for more than 30 years, so it was impossible to cover all four of the selected positions - the platers, the welders, the turners and the plumbers - in this way. A pragmatic revision of the original strategy was therefore necessary.

The focus was changed, therefore, and the sample was selected in a more pragmatic way. While retaining the basic goals of interviewing people belonging to different yard-worker generations who were located in central positions in production, the transition to offshore production was assigned the status of a key event, i.e. as a potentially formative event with respect to genesis of generation-specific patterns of inclusion and exclusion. In cooperation with representatives from the local union, a list of 40 persons from two main cohorts and from the above listed positions, was drawn up. The sample was to include people born between 1946-1955, having approximately 20 years of work experience at the yard; and people born after 1965, having approximately 8-10 years of work experience at the yard and having become skilled workers in the second offshore period. In all cases, the various work groups' union representatives were the ones who provided the names, and in some cases also the ones who first approached the workers about being interviewed.

In addition, a list of 10 junior and senior union representatives, foremen, higher functionaries was specified on the basis of yard-internal archives obtained from other researchers and on the basis of consultations with Svein Michelsen, Department of Administration Studies, University of Bergen, who has himself carried out extensive research at the yard. The guiding principle underlying this selection was once again to be found in Bourdieu's field theory; if field relations were to be analyzed, the hierarchical relations both within and between the production-worker positions, the functionaries and the managers had to be covered. Given the topic of the dissertation, special attention had to be paid to the way these relations are remembered changing over the years. In addition, the sample was selected to include persons whose field trajectories over the years had

led them from the lower positions in production into the yard internal field of power.

In the statistical sense of the term, this sample cannot be called a representative sample. However, I would maintain that central agents and positions in the yard internal occupational field have been included so that a field analysis can be justified; trajectories in the field are included, as well as the variety of capital types, and with the exception of the surface workers, all the central positions in production are also included in the sample. In this respect, although important positions in the field of power are not included, capital types and field relations that are constitutive for the formation of the structures in the interviewed agents' habituses and also for the field logic are present. Thus, I would claim that important field effects will be represented in the sample; and that, in line with Broady's discussion and definition of 'representativity', this will provide the basis for drawing analytical inferences about the yard-internal occupational field.

But this does not mean that the sample is an ideal one. Unfortunately, access problems and refusals meant that some interviews did not take place. The personnel manager at the yard denied me access to the functionaries on the grounds that the official history of the yard had just been completed to mark the centenary, and he did not see the relevance of yet another research project. However, what people did in their leisure time, and whether the union judged the relevance of my project differently, was not his business: thus, all the interviews had to be done outside the yard. Furthermore, the union came to be even more central in enabling me to produce the needed data. Given this situation, it did not prove easy to gain access to the functionaries and the managers: my project was probably (and rightfully so) perceived more as a "Rosenberg *union* project" than a Rosenberg project.

Without the blessing of the union representatives, the project would most likely have had to be abandoned. Yet at the same time, this much needed approval meant that some of the potential interviewees amongst the production workers refused to participate. Among the industrial plumbers, there was a reluctance that reduced the sample by three of the younger workers; among the platers, the sample was reduced by two. The reasons given were the same in all five cases: skepticism about being interviewed by a person "authorized" by the union representatives. In addition, the interviews with two of the older turners had to be cancelled because they had to work overtime. New appointments were made, but when I turned up to carry out the interviews again, the same thing

happened. Because the interview period had come to the end, these two turners were subsequently dropped from the sample. This decision made both this specific intrapositional and interpositional comparison problematic (see chapter 8).

2.2. List of interviewees

The final sample of interviewees was then drawn up including the following persons:

AA: Born 194X. Started work as a plater at Rosenberg late 196X. Skilled worker since 198X. Works in Hall 1.

AB: Born 195X. Started work as a plater at Rosenberg early 197X. Skilled worker since 198X. Works in Hall 1.

AC: Born 195X Started work as a plater at Rosenberg late 196X. Skilled worker 197X. Works in Hall 2/Outside (has varied)

AD: Born 195X. Started work as a plater at Rosenberg early 197X. Skilled worker 197X. Works in Hall 2/Outside (has varied)

AE: Born 195X. Started work as a plater at Rosenberg 196X. Pupil at the yard's vocational school. Skilled worker 197X.

AF: Born 195X. Started work as a plater at Rosenberg 196X. Worked in Hall 2 for 10 years+. Became foreman 198X.

AG: Born 194X. Started work as a plater at Rosenberg 196X. Has worked in Hall 1, Hall 2 and outside. Shifted position and became a welder 198X, and has worked as a welder since then.

AAA: Born 196X. Started work as a plater at Rosenberg 198X. Skilled worker since 198X. Has worked as a temporary foreman. Works in Hall 2.

AAB: Born 196X. Started work as a plater at Rosenberg 198X. Skilled worker since 198X. Works in Hall 2.

AAC: Born 196X. Started work as a plater at Rosenberg 198X. Skilled worker since 198X.

AAD: Born 196X. Started work as a plater at Rosenberg 198X. Skilled worker since 198X.

BA: Born 195X. Started work as a welder at Rosenberg in 197X. More than 20 years as a welder at RMV.

BB: Born 195X. Started work as a welder at Rosenberg late 196X. More than 20 years as a welder at RMV.

BC: Born 194X. Started work as a welder at Rosenberg 197X.

BD: Started work as a welder at Rosenberg 197X. 10 years+ in production. Became a foreman 198X.

BE: Born 194X. Started work as a welder at Rosenberg 197X.

BF: Born 194X. Started work as a welder at Rosenberg 196X.

BBA: Born 196X. Started work as a welder in 198X

BBB: Born 196X. Started work as a welder 198X. Has lately changed position (plumber), and has also been a leading union representative.

BBC: Born 195X. Started work as a welder 198X. Has worked for more than 10 years in the North Sea, and was interviewed because of his "double" experience; having worked both at the yard and in the offshore industry, this person could give me insight into both yard-internal and yard-external changes in occupational field in the offshore years.

BBD: Born 196X. Started work as a welder 198X.

CA: Born 195X. Started work as a plumber at Rosenberg 197X. Skilled worker since 197X. Also worked in the North Sea for a short period in the 1970s. Interviewed because of his "double" field position.

CB: Born 195X. Started work as a plumber at Rosenberg 197X.

CC: Born 195X. Started work as a plumber at Rosenberg 197X.

CD: Born 195X. Started work as a plumber at Rosenberg 197X.

CCA: Born 196X. Started work at Rosenberg as a plumber 198X.

CCB: Born 196X. Started work at Rosenberg as a plumber 198X.

DA: Born 193X. Started work at Rosenberg as a turner in 194X. Retired 198X. Interviewed because of his long experience and centrality in the union for more than a decade.

DB: Born 195X. Started work at Rosenberg as a turner 197X.

DDA: Born 196X. Started work at Rosenberg as a turner 198X. Skilled worker since 198X.

DDB: Born 196X. Started work at Rosenberg as a turner 198X. Skilled worker since 198X.

E: Born 194X. Started work at Rosenberg 197X. Grinder for 10 years+. E was a union representative for a long time.

EA: Born early 194X. Started to work as a plater at Rosenberg late 195X. Pupil at the yard-internal vocational school. Skilled worker since 196X. Foreman 197X. Advances to head foreman late 197X and to become part of the upper managerial layer 198X. Interviewed because of his unique trajectory in the yard internal occupational field.

EB: Started work at Rosenberg 195X. Pupil at the yard-internal vocational school. Foreman 197X. Head foreman 198X. Interviewed because of his experience and field trajectory.

EC: Born 192X. Started work at Rosenberg 194X. Functionary. Interviewed because of his long work experience and positional centrality at the yard.

ED: 194X. Started work at Rosenberg 195X as a lower functionary. Interviewed because this position underwent important changes with the arrival of offshore production, and also in order to cover at least one of the lower functionary positions.

EE: Born 194X. Started work at Rosenberg 195X as a plater. Worked as a plater for 10 years. Later shifted position to become a crane operator. Foreman late 197X. Interviewed because of his field trajectory.

EF: Born 1931. Started work at Rosenberg 195X. Technical staff.

2.3. Structure of the interviews

As stated above, the interviews were mainly semi-structured. This decision was made on the basis of experience acquired in the course of my master thesis, in which highly structured interviews had had a tendency to "silence" the interviewees. When interviewing the persons listed above, therefore, themes would be introduced and talked about as loosely as possible. If this proved inefficient, I would try to ask more specific questions based on the knowledge I had acquired from reading other studies of the yard, from official histories, from conversations with other researchers and from sociological and historical studies of work and work relations.

The thematic structure of an interview would typically be as follows:

1: Biographical data about the interviewee. Social background. Parents' and siblings' occupations and educations. Own education, work experience and formal qualifications. Memories associated with starting to work at the yard and with the interviewee's career at Rosenberg.

2: Questions about the interviewee's work group, its characteristics and how it has changed over time; about the social environment in the group and at the yard, and how this has changed or stayed the same.

3: Similar set of questions about the other work groups at the yard, the relations between "own" work group and the "others" and also about the relations to foremen and functionaries, both historically and at present.

4: Questions about the relation between the "oldtimers" and the "youngsters", both at present and earlier.

5: Questions about specific events and changes (for instance pay day and the piece-rate system), and how the interviewee remembers these events and processes.

6: Questions about the interviewee's leisure activities, closest friends, characteristics of the housing area.

7: Questions about Stavanger/the Stavanger region when the interviewee grew up/started to work at Rosenberg, about the most marked differences between the city as it is today, compared to how it used to be. Questions about specific events and changes that have taken place in the city.

8: Opinions on the union and past and present union leaders, on local politics and local political figures.

As always, the specific questions that related to these main topics have had to be modified slightly in the course of the interviews. Some items that I was not aware of at the outset, for instance specific changes that only affected one position in the production, had to be included. Others proved to be of little relevance, and was therefore dropped. The problems that are related to this process will be discussed below (see subchapter 2.5).

2.4. Problems in selecting the sample and in carrying out the interviews

Access problems meant that all but the first four interviews (which took place at the union's offices) had to be carried out in the interviewees' homes and without the blessing of the yard management. In order to obtain the interviews,

therefore, I had to rely on my contacts in the union. I specified the selection criterias as to who should be included in the population, and the union officials and board members representing various positions provided me with a list of people to choose the sample from. This strategy may be criticized on the grounds that it entail various kinds of problems. First, it might have led me to specific networks of yard workers, and to a more homogenous sample than I might otherwise have obtained. Although this might be the case, the interviewees' opinions towards the union representatives have nevertheless varied considerably. On these issues, any ties of loyalty towards the union do not seem to have affected the interviews

As stated above, a related problem arose in one of the subsamples in that none of those that first were contacted would initially talk to me. Seeing me as "authorized" by the union, they preferred to stay clear of my project. Two later changed their minds after we had talked on the phone, and I had outlined in some detail how the interviews would be handled, the principles of anonymity and their right to read trough, change or eventually withdraw the whole interview.

Not having worked as a yard worker, and not having had the opportunity to walk around the yard, to follow the production chain in any detail, or to interview people close to their own work locations, some problems arose during the interviews. For instance, the technical jargons have been difficult to grasp, and the interviewees have sometimes had to explained them to me in detail. Likewise, specific practical work operations also had to be explained in detail, for instance in plating. So, I cannot claim to have obtained a good understanding of important details in each trade. This in turn means that questions that might have provided additional, important information, not have been asked. In an ideal situation, a long fieldwork would have been the best method of data production. In practice, this was not possible. It would have taken me years and years to obtain the necessary qualifications to cover all the analyzed positions. Moreover, I strongly doubt whether the required positional shifts, for instance from welding to turning, would have been permitted.

I experienced the greatest difficulties when I started to ask questions about the interviewees' lives outside the yard and their opinions of events and changes that have taken place in Stavanger and the surrounding area. At first, I wondered whether this was a result of the way the topics were listed when carrying out the interviews, i.e. that interview-technical problems affected the situation. I tried shifting the order of the themes, but without any marked effect; it remained very

difficult to get the interviewees to talk about these themes. I discussed these problems with Svein Michelsen, who has also interviewed Rosenberg workers, and learned that others had had this same experience; in general, the yard workers would not talk about yard-external matters. Numerous reasons may be given for this somewhat unexpected result. For instance, the silence might be a result of a reluctance to talk to a stranger about private matters, of a tendency to separate clearly between work life and private life, of the yard workers' field positions and positions in the local social space, etc. Anyway, the main conclusion must be that on this point, the data production was only partly successful. (For further discussion and analysis see subchapter 9.2)

2.5. Analytical problems due to the double status of the interview data

Analytically, the topic of this dissertation and the production of interview data entail one specific problem deriving from its double status. The data may be analyzed both as data about the agents' practices of remembering, and at the same time as data about historical events (i.e. ascribing to it the status of potential historical evidence). In the first case, the standard and/or frequently discussed questions concerning the validity and reliability of interview data in general may be raised (see for instance Silverman 1993, chapter 7). In the second case, the problem of reliability takes on yet another dimension: can these data be analyzed as data about historical processes at all? Among historians, this question has resulted in a heated controversy. While the oral historians claim that this is possible, the more "classic" historians claim that this cannot be done; that only documents, statistics, minutes etc. can constitute historical evidence. In short, this question is not a new one, and has been discussed in great detail both by "classic" historians and oral historians, for instance by Paul Thompson (1978, in particular chapter 4).

Since both problems have been widely discussed in the sociological and/or in the historical communities, I will consider them only briefly from a somewhat different perspective: what project-specific analytical problems can derive from the fact that the data from the interviews has constituted a source of knowledge about practices of remembering and at the same time also about events, changes and processes in the yard history?

First, there is the above mentioned problem as to how information obtained from one or several interviews has affected the list of topics raised in the subsequent interviews. This may have had a negative effect on the data produced

by affecting the consistency between the individual interviews. If the data are to be used in a comparative analysis, the interviews should ideally also be as similar as possible in the questions asked and in the ordering of these. Yet at the same time, this is also a question of *degree* of similarity. While an overall thematic structural similarity may be (and has been) relatively easy to achieve, data from a semi-structured interview cannot for selfevident reasons be directly compared to the data generated from a questionnaire in a postal survey in this respect. Moreover, rigid application of this criterion would imply that new and analytically important information, that confronts the researcher with his/hers preconception of the research object, could not be incorporated in the further data production. This would in turn lead to completely absurd research practices.

Analytically, the second problem is far more fundamental in that the researcher constantly runs the risk of mistaking the agents' *views on* and *accounts of* the history of the field, for *the history of the field*. Not only does this imply that the researcher runs the risk of substituting one preconception of the research object for another favoured one; it also implies that the researcher may unknowingly be voicing the views of some positions, forgetting that these views always are views from a position. In this way, the analysis may easily end up as an unconscious reflection of the power structures in the analyzed field. At the same time, the researcher adds the power of his/hers own position when "authorizing" the views of the dominant field positions. This combination may have devastating effects in the interview situation: by uncritically adopting the problems and questions expressed by the more dominant field positions, others may be silenced. Thus, the analysis may easily end up as yet another element of symbolic domination in the field.

However, an integral element in the Bourdieusian approach is that specific attention must be paid to exactly these kinds of problems during both the interviewing and the analysis phases. Although a Bourdieu-inspired analysis may not eradicate the above mentioned risks, the researcher is nevertheless forced to be constantly aware of their presence. In my opinion, the necessity of a double structural history (in which changes in yard-internal and yard-external capital structures, and of intrapositional and interpositional changes) lies in precisely this aspect: in the analysis, the focus must be on the relations between these histories and the agents' views and accounts of these histories. In neither case can one be reduced to the other.

Third, there is yet another kind of problem related to the risk of destroying the anonymity of the interviewees when addressing topics that one interviewee

has raised in a later interview. Having previously discovered that information about who had and who had not been interviewed, and about the details of individual interviews, "flows" in the networks of yard workers, I paid special attention to this problem. Whenever I suspected that an interviewee possessed knowledge that only a few people could have, whenever they introduced topics that had not initially been on my list or emphasized events that I not had been aware of, I would be extremely careful about taking up these issues in later interviews. Depending on the information, I would not usually take them up unless the other interviewees explicitly mentioned the same topic independently. Although this probably has meant that certain information has been lost, it has hopefully ensured the anonymity of the individual interviewees internally at the yard.

3.0. The production and analysis of survey data

3.1. Access problems

At the outset, the plan was to mail a self-administered survey to all the employees at Kværner Rosenberg. One important reason for this plan is to be found in Bourdieu's field theory, which stresses that all positions should be covered when objectivating the capital structures in a field and in a social space. Even after I had failed to gain free admission to the yard's employees for the purpose of selecting people to interview, the plan was still to distribute a survey to all the yard employees and in this way generate the necessary material for a full scale analysis of the yard-internal occupational field structures. I contacted the personnel manager in October 1997, and it seemed this would be possible if only a deal could be reached: I would be granted permission if I was to produce something of value to the personnel department at Kværner Rosenberg. So I promised to write a report, to cover all the expenses, to do all the manual work of distributing the survey and coding of the data and even to include a set of questions of their choice.

I was surprised, therefore, to receive a *negative* response²⁵³ to my inquiry, in the beginning of January 1998. It was explained that since the yard planned to carry out surveys of their own in the future, they did not want to be "disturbed" by an external agent. A new attempt to gain access was made by my two supervisors, but once again the answer was negative. The only possible strategy therefore was to rely on my contacts in the local union, and once again, their

²⁵³See the end of the appendix for the (Norwegian) letters

cooperation made the project possible. In the spring of 1998, therefore, a postal survey was sent to all the members in the local union at the yard on the basis on the membership register for March 1998.

This setback had major analytical implications, since it meant that the aim to carry out a more complete analysis of the yard-internal occupational field had to be abandoned: the required data on the functionaries and the top managers could simply not be obtained. Thus, a full scale Bourdieusian analysis of all the yard employees' practices of remembering was not possible.

3.2. The questionnaire

When constructing the questionnaire, the intention was to include the requisite number of variables needed to produce an objectivation of the yard-internal capital structure in a multiple correspondence analysis. Thus, indicators of cultural, economic and social capital had to be included, as well as variables which would make it possible to identify positions and trajectories in the field and in the social space (see questions 1, 3, 5, 8a-c, 9-11, 13-14, 22-29a-c, 33-37a-b and 48-49). Furthermore, questions about potential objects of struggle in the occupational field - for instance principles of wage formation, the legitimacy of specific relations of power and strategies of cooperation - had to be specified (see questions 38-39).

At the same time, the goal was to compare the results of my own survey with results obtained in the 1997 ISSP survey on work relations and work experience (questions 2, 4, 7a, and also some items in questions 38 and 39). This would make possible a comparison with Norwegian patterns (see chapter 9) and a cross-national comparison. The latter comparison remains to be done because the international data (when writing these words) are not yet ready for distribution and analysis.

The data from Lennart Rosenlund's survey (Stavanger survey 1994) in the Stavanger area also made it possible to compare the yard workers' and other Stavanger area residents' images of societal changes and their opinions on historical events in the Stavanger region and local social hierarchies (questions 42 and 44). When constructing the latter set of variables, I was also inspired by English studies of working class images of society, in particular Blackburn's & Mann's 1975 analysis. Since a blueprint of the Blackburn/Mann-set would probably not work in a Norwegian survey, my own set was adapted to suit the Norwegian context. Information from the interviews was extensively drawn

upon in these questions, as well as when constructing the questions on perceptions of the work relations at the yard, and on the important events in the yard history (questions 15-21, some items in question 39, question 43 and one item in question 44). Also included were some questions requested by the union representatives on the social environment at the yard (covered by questions 2, 4, 7a-b). Finally, a set of more directly oriented political questions was included (questions 40-41a-b and questions 45-47)

The complete questionnaire (in Norwegian) is as follows:



Rosenberg-undersøkelsen.

Kjære mottaker.

Høsten 1994 ble det gjennomført en spørreundersøkelse i Stavangerområdet om ulike holdninger til lokale, nasjonale og internasjonale endringer som har funnet sted siden oljevirkosomheten for alvor kom i gang i Norge. I denne undersøkelsen ønsker vi å følge opp dette temaet gjennom å spørre de ansatte i den største mekaniske *industribedriften* i Stavanger i denne perioden, Rosenberg Verft, som idag er blitt en del av Kværner Oil & Gas.

Samtidig ønsker vi å vite mer om generelle arbeidsmiljø- og arbeidslivspørsmål i industribedrifter. Derfor har vi også inkludert spørsmål som omhandler slike temaer. For å kunne sammenligne resultatene, har vi også tatt med noen spørsmål fra utenlandske verftsstudier og ulike internasjonale undersøkelser. Disse kan kanskje virke noe merkelige i norsk sammenheng, men vi vil likevel be om at du tar deg tid til å svare på dem. Det er selvsagt frivillig å svare på spørsmålene, men for at undersøkelsen skal bli av virkelig verdi, er det viktig at alle individuelle synspunkt blir representerte.

Undersøkelsen går ut til samtlige medlemmer av Rosenberg Verft's KLUBB, og blir gjort i samarbeid med Sosiologisk institutt ved Universitetet i Bergen.

Den praktiske gjennomføringen av undersøkelsen, registereringen og bearbeidingen av data foregår isolert fra alle som har Rosenberg Verft som sin arbeidsplass, og er godkjent av Datatilsynet. Svarene du gir vil bli behandlet strengt konfidensielt, og dataene vil kun bli brukt i forskningssammenheng.

Løpenummeret på skjemaet blir benyttet til å registrere mottak av skjema. Når dette har funnet sted, blir du strøket fra adresselisten. Du får da ikke flere henvendelser fra oss. Det inngår to purringer i undersøkelsen. Kun prosjektleder har tilgang til skjema, navne- og nummerlister. Både skjema og navne- og adresselisten blir tilintetgjort etter datainnsamlingen.

Offentliggjøring av resultatene vil først skje etter at en fullstendig anonymisering av enkeltpersoner har funnet sted. Det vil derfor være helt umulig å identifisere dine svar på de ulike spørsmålene.

Vi ber vennligst om at du svarer på spørsmålene og returnerer skjemaet i vedlagte svarkonvolutt innen en uke. Porto er allerede betalt. Dersom du har spørsmål om undersøkelsen kan du kontakte oss på tlf. 55 58 91 65

På forhånd takk for hjelpen!

Johs. Hjellbrekke
Universitetsstipendiat
Prosjektleder

Først noen generelle spørsmål om ditt daglige arbeid på Rosenberg:

1. Hvilken jobb har du på Rosenberg?

Yrkestittel:.....

Arbeidsoppgaver:.....

.....

.....

.....

2. Hvor godt vil du si at du trives i jobben din?

1 Jeg trives svært godt

2 Jeg trives godt

3 Både og

4 Jeg trives ikke særlig godt

5 Jeg trives ikke i det hele tatt

3. Hvor på Rosenberg jobber du? (Hall 1, Hall 2, Hall 3, ute, er på prosjekt etc. etc.)

.....

.....

4. Hvor mye synes du at du til daglig kan bestemme over utformingen/planleggingen av ditt eget arbeid?

1 Kan bestemme *svært mye*

2 Kan bestemme *noe*

3 Kan bestemme *litt*

4 Kan *ikke* bestemme *særlig mye*

5 Kan *ikke bestemme noe* i det hele tatt

5. Har du lederansvar for andres arbeid?

1 Nei

2 Ja, av og til (se neste linje)

3 Ja, som oftest => Hvor mange personer leder eller administrerer du?

Ca..... personer

6. Hvor mange timer, sånn ca., jobber du i gjennomsnitt overtid i jobben din i løpet av en måned?

I gj.snitt ca.timer overtid pr. måned

7a. Hvor ofte

Alltid Ofte Noen ganger Sjelden Aldri

vil du si at du må utføre hardt fysisk arbeid..... 1 1 3 4 5

vil du si at arbeidet kjennes stressende..... 1 1 3 4 5

vil du si at du arbeider under helsefarlige arbeidsforhold..... 1 1 3 4 5

vil du si at du er utslitt når du kommer hjem fra jobben..... 1 1 3 4 5

7b. Hvor ofte

Alltid Flere ganger En gang Aldri

har du jobbet på prosjekter utenfor verftsområdet..... 1 2 3 4

har du jobbet som utleid til andre firmaer..... 1 2 3 4

8a. Hvilket år ble du første gang ansatt på Rosenberg?

19.....

8b. Hvor mange år er det siden din nåværende ansettelse på Rosenberg?

.....år

8c. Hvor mange år har du tilsammen arbeidet på Rosenberg?

.....år

9. Er du
- 1 to-faglig fagarbeider
 - 2 fagarbeider
 - 3 spesialarbeider
 - 4 hjelpearbeider
 - 5 lærling
 - 6 annet: (Spesifiser).....

10. Har du, eller har du hatt, tillitsvern i Verkstedklubben?

- 1 Ja, er tillitsvalgt nå
- 2 Ja, har vært tillitsvalgt tidligere
- 3 Nei

11. Hvor mange ganger, sånn ca., har du skiftet arbeidsgjeng på Rosenberg de siste fem årene?

..... ganger

12. Hvilke egenskaper mener du kjenner en god arbeidsleder ?

.....

Mange av de som har jobbet på Rosenberg har også hatt slektninger på verftet.

13. Har du, eller har du hatt, slektninger som arbeider/-et på Rosenberg?

- 1 Nei, aldri. Gå til spm. 15
- 2 Ja, har nå: Gå til spm. 14
- 3 Ja, har hatt før. Gå til spm 14

14. Hvilke slektninger? (Kryss for alt som passer)

- 1 Far
 - 2 Mor
 - 3 Søsken
 - 4 Onkler
 - 5 Tanter
 - 6 Andre:
-

Opp gjennom årene har Rosenberg hatt en rekke byggeoppdrag.

15. Av de vi har tatt med i kolonnene nedenfor, hvilket vil du framheve som *det mest positive for verkstedet*, og hvilket vil du framheve som *det mest negative for verkstedet*, alt tatt i betraktning? (kun ett kryss i hver linje)

	Shell-tankerne	Norman Lady	Statfjord B	Troll	Snorre	Draugen
Mest positivt	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Mest negativt	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>

I Rosenbergs historie har det skjedd en rekke større og mindre forandringer og begivenheter på verftet. Noen av disse har vi listet opp nedenfor.

16a. Sett under ett, vurderer du disse som positive eller negative *for verftet*, eller har du ingen mening om deres betydning?

	Stor positiv betydning	Litt positiv betydning	Hverken eller	Litt negativ betydning	Stor negativ betydning	Ingen mening/ vet ikke
Overgangen til fastlønnssystem.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Førtidspensjoneringen på midten av 80-tallet	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Avtale om bruk av innleiet arbeidskraft (1978)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Overgang til rørtrådsveising	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Prosjektet "Omstilling 93"	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Utleie av egne ansatte til andre firmaer	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Deltakelse i prosjekter utenfor verftsområdet	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Den siste reorganiseringen til Kværner Oil & Gas	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>

16b. Nedenfor har vi satt opp noen generelle påstander om noen begivenheter og prosesser i Rosenbergs historie. Hvor enig eller uenig er du i hver av disse?

	Helt enig	Litt enig	Hverken eller	Litt uenig	Helt uenig	Vet ikke/ Ingen mening
Kværnerkonsernets overtagelse av Rosenberg var en fordel for verftet.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Kværnerkonsernets <u>utenlandske oppkjøp</u> har vært til fordel for Rosenberg.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Overgangen til offhoreproduksjon førte til en svekkelse av arbeidsmoralen på Rosenberg...	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Overgangen til offshore-produksjon førte til at det ble for mange funksjonærer på Rosenberg.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>

17 Hva er, etter din mening, det mest positive som har skjedd i din tid på Rosenberg, sett fra din posisjon i bedriften?

.....

18. Og hva er, etter din mening, det mest negative som har skjedd i din tid på Rosenberg, sett fra din posisjon i bedriften?

.....

19. Hvilke(n) stilling(er) eller person(er) vil du si hadde mest å si på Rosenberg før overgangen til offshore-relatert produksjon?

.....

20. Hvilke(n) stilling(er) eller person(er) vil du si har mest å si på Rosenberg i dag?

.....

21. Nedenfor har vi satt opp noen påstander om ulike sider ved det å arbeide på Rosenberg. Hvor enig eller uenig er du i disse påstandene, *sett fra din posisjon i bedriften?*

	Helt enig	Litt enig	Hverken eller	Litt uenig	Helt uenig	Vet ikke/ Ingen mening.
Overgangen til offshoreproduksjon har medført mindre muligheter til å bruke mine fagkunnskaper	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Det er mindre samhold i arbeidsgjengene nå enn tidligere.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Arbeidsgjengene splittes for ofte.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Avstanden mellom Rosenbergs ledelse og andre ansatte er for stor.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>

Så noen generelle bakgrunnsspørsmål.

22. Er du 1 Mann
 2 Kvinne

24. Er du 1 Ugift
 2 Gift
 3 Samboer
 4 Enkemann/enke
 5 Skilt/separert

23. Hvilket år er du født? 19.....

25. I hvilken kommune vokste du opp? kommune.

26. Hvor mange år, sånn. ca., har du bodd der du bor nå? år

27. Har du, eller husstanden din, bil(er)?

1 Nei: Gå til spm. 28
 2 Ja=> Bilmerke(r):
 Type(r):
 Årsmodell(er):

28. Har du, eller husstanden din, båt?

1 Nei: Gå til spm. 29
 2 Ja=> Båttype.....
 Antall fot:.....
 Byggeår:.....

29a. Er boligen din av typen

- 1 Leilighet i blokk
 2 Rekkehus
 3 To-mannsbolig
 4 Enebolig.
 5 Annet: Spesifiser.....

29b. Eier eller leier du den boligen du bor i, eller er den en del av et boligbyggelag eller borettslag?

- 1 Eier
 2 Er en del av et boligbyggelag/borettslag
 3 Leier
 4 Annet:

29c. Omtrent hvor gammel er boligen? Er den

- 1 Bygget før 1940
 2 Bygget mellom 1940 og 1965
 3 Bygget mellom 1966 og 1980
 4 Bygget mellom 1980 og 1989
 5 Bygget etter 1990

29d. Har du pusset opp boligen du bor i?

- 1 Ja 2 Nei

29e. Og hva, sånn ca., tror du er den antatte salgsverdien til boligen?

- 1 Vet ikke.
 Ca.kroner

30. Dersom du kunne velge fritt, hvilke av de følgende stedene kunne du *tenke deg* å bo, og hvor kunne du *ikke tenke deg* å bo? (Kun ett kryss i hver kolonne)

	Kunne tenke meg å bo.	Kunne <u>ikke</u> tenke meg å bo.
	1	2
Stokka	<input type="checkbox"/>	<input type="checkbox"/>
Buøy/Hundvåg	<input type="checkbox"/>	<input type="checkbox"/>
Tasta	<input type="checkbox"/>	<input type="checkbox"/>
Eiganes	<input type="checkbox"/>	<input type="checkbox"/>
Sunde/Kvernevik	<input type="checkbox"/>	<input type="checkbox"/>
Storhaug	<input type="checkbox"/>	<input type="checkbox"/>
Våland	<input type="checkbox"/>	<input type="checkbox"/>
Madla	<input type="checkbox"/>	<input type="checkbox"/>
Hillevåg	<input type="checkbox"/>	<input type="checkbox"/>
Jåtten	<input type="checkbox"/>	<input type="checkbox"/>
Randaberg	<input type="checkbox"/>	<input type="checkbox"/>
Sola	<input type="checkbox"/>	<input type="checkbox"/>
Tananger	<input type="checkbox"/>	<input type="checkbox"/>
Tjensvoll	<input type="checkbox"/>	<input type="checkbox"/>

31. Hvilke av følgende aviser leser du regelmessig, hvilke leser du iblant og hvilke leser du aldri? (Kryss for alt som passer)

	Regelmessig	Iblant	Aldri
Stavanger Aftenblad	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
Rogaland Avis	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
Andre lokalaviser	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
Dagens Næringsliv	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
VG	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
Dagbladet	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
Vårt Land	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
Klassekampen	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
Utenlandske aviser	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>

32. Skriver du bokmål eller nynorsk?

- 1 Bokmål
 2 Nynorsk

Noen spørsmål om din utdanning.

33. Hvor mange års skolegang utover grunnskolen (dvs. ungdomsskole eller folkeskole) har du?år

34a. Hvilken allmennfaglig utdanning har du fullført? (Sett gjerne kryss i flere ruter)

- | | | | |
|----------------------------|---|----------------------------|---|
| <input type="checkbox"/> 1 | 7-årig folkeskole eller kortere | <input type="checkbox"/> 5 | Realskole eller middelskole |
| <input type="checkbox"/> 2 | Framhaldsskole eller fortsettelsesskole | <input type="checkbox"/> 6 | Fullført examen artium, eksamen fra øk. gymnas,
eller 3-årig vg,skole, allmennfaglig linje |
| <input type="checkbox"/> 3 | 9-årig grunnskole | | |
| <input type="checkbox"/> 4 | Folkehøgskole | | |

34b. Hvilken yrkesfaglig utdanning har du fullført? (Sett gjerne kryss i flere ruter)

- 1 Ingen
- 2 Grunnutdanning/grunnkurs ved yrkesskole, handelsskole, eller vg. skole
- 3 Videregående kurs ved yrkesskole, handelsskole, vg. skole
- 4 Fagbrev etter §20
- 5 Fagbrev eller fagutdanning i skole og etter utstått læretid
- 6 Teknisk fagskole
- 7 Diverse mindre kurs i regi av bedriften.
- 8 Annen yrkesfaglig utdanning (f.eks.ulike sveisekurs, LO-skole, ulike kurs i arbeidsledelse etc. etc.):

.....

.....

.....

9 Grunnutdanning i regi av bedriften: Hvilken og når?

.....

.....

35a. Har du fullført noen annen form for skole-utdanning, f.eks. ved en høyskole eller et universitet?

- 1 Nei
- 2 Ja => Hvilken utdanning:.....

35b. Har du planer om å ta ytterligere utdanning, f.eks. i form av kurs, videregående skole, eller utdanning ved en høyskole eller et universitet?

- 1 Nei
- 2 Ja => Hvilken utdanning:.....

.....

Når man studerer forskjeller og likheter mellom to eller flere generasjoner, spør man gjerne også etter foreldres og besteforeldres utdanning og yrke.

36a. Hvilke yrker har/hadde dine foreldre?

Fars yrke:.....

Mors yrke:.....

36b. Hvilke utdanninger har/hadde dine foreldre?

Fars utdanning:

Mors utdanning:.....

36c. Hadde noen av dine besteforeldre utdanning utover folkeskole?

1 Nei

2 Ja=>Hvem og hvilken utdanning?:.....

.....

I tillegg ønsker vi å kjenne til evt. ektefelles eller samboers utdannings- og yrkesvalg.

37a. Hva er/var din ektefelles/samboers utdanning ?

(kun skolegang)

.....

.....

.....

37b. Hva er/var din ektefelles/samboers yrke?

.....

.....

.....

For tiden diskuteres ofte ulike prinsipper for lønnsfastsettelse i en bedrift.

38. Hvor mye mener du følgende bør bety for fastsettelsen av den enkelte arbeidstakerens lønn?

	Svært mye å bety	Litt å bety	Hverken eller	Lite å bety	Ikke noe å bety	Vet ikke
Formelle kvalifikasjoner (fagbrev, utdanning osv)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Den enkeltes innsats i jobben	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Det å lede andres arbeid	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Det personlige ansvaret som følger med jobben	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Ansiennitet i en bedrift	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Generell yrkesansienitet	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Arbeidets art	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Om bedriften går med økonomisk overskudd eller underskudd	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>

Mer om arbeid og generelle arbeidslivspolitiske spørsmål.

39. Hvor enig eller uenig vil du si du i de følgende påstandene? (kun ett kryss for hver linje).

	Helt enig	Litt enig	Hverken eller	Litt uenig	Helt uenig	Vet ikke/ Ingen mening.
Et arbeid er en måte å tjene penger på, ikke noe mer.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Det vil være bedre om de beslutningene som idag blir tatt av formenn/andre overordnede isteden ble tatt av arbeiderne selv.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Arbeidere trenger sterke fagforeninger for å beskytte sine interesser.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
I arbeidskonflikter har streik utspilt sin historiske funksjon.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Det vil alltid vere konflikter mellom bedriftsledere og arbeidere, fordi de alltid vil ha motstridende interesser.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Lønnsforskjellene i Norge har aldri vært større enn nå.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
De ansatte bør få del i en bedrifts overskudd gjennom omfattende bonusordninger.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
I en bedrift bør aksjeeierne ha større innflytelse enn de ansatte.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Selv om bedrifter går med overskudd, må aksjeeierne ha rett til å flytte virksomheten for å øke avkastningen.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Utenlandsk eierdominans i norske bedrifter er en trussel mot arbeidsplassene.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
En forutsetning for å opprettholde norsk industri er at ledelse og ansatte samarbeider.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
I det lange løp vil ledelse og ansatte ha en felles interesse av produksjonsrasjonaliseringer.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
De fleste arbeidskonflikter kan løses gjennom forhandlinger.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Et inntektspolitisk samarbeid mellom LO og NHO vil være til beste for alle parter i arbeidslivet.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Fagopplæring og etterutdanning bør være et felles ansvar for ansatte og ledelse.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>

40. Nedenfor er det oppgitt fem sosiale klasser. Mener du det finnes sosiale klasser i Norge, og i så fall: hvilken klasse vil du si at du selv tilhører?

- | | | | | | |
|----------------------------|---|----------------------------|---------------------|----------------------------|-------------------|
| <input type="checkbox"/> 1 | Ingen, det finnes ikke klasser i Norge. | <input type="checkbox"/> 2 | Arbeiderklassen | <input type="checkbox"/> 5 | Øvre middelklasse |
| | | <input type="checkbox"/> 3 | Lavere middelklasse | <input type="checkbox"/> 6 | Overklassen |
| | | <input type="checkbox"/> 4 | Middelklassen | <input type="checkbox"/> 7 | Vet ikke. |

I de senere årene har det vært en årvisst debatt om 1. mai - feiringen.

- 41a. Går du selv i 1. mai-tog? (Kun ett kryss)
- | | |
|----------------------------|-------------------|
| <input type="checkbox"/> 1 | Ja, hvert år |
| <input type="checkbox"/> 2 | Ja, noen ganger |
| <input type="checkbox"/> 3 | Nei, bare sjelden |
| <input type="checkbox"/> 4 | Nei, aldri |

41b. Hvilken av de følgende tre påstandene dekker best din oppfatningen av 1. mai-feiringen? (Kun ett kryss)

- 1 Det har aldri vært grunn til å feire 1. mai.
- 2 Selv om det var grunn til å feire 1. mai før i tiden, er det ikke grunn til å gjøre det i dag.
- 3 Det er like god grunn til å feire 1. mai idag som det var før.

I de fleste samfunn nyter yrkene vi har satt opp nedenfor ulik anseelse

42. Kan du for hvert enkelt si om du tror at yrket *blant folk flest i Stavangerområdet* nyter meget høy, forholdsvis høy, forholdsvis lav eller meget lav anseelse?

	Meget høy anseelse	Forholdsvis høy anseelse	Forholdsvis lav anseelse	Meget lav anseelse
Billedkunstner	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Fiolinist i symfoniorkester	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Psykolog	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Sivilingeniør	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Sveiser	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Platearbeider	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Offshore-arbeider i Nordsjøen	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Lærer i ungdomsskolen	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Hjemmehjelp	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Sosialarbeider	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

43. Hvor høy status/anseelse tror de ulike yrkene/posisjonene vi har listet opp har *blant de ansatte på Rosenberg?*

a)Yrker:	Meget høy anseelse	Forholdsvis høy anseelse	Forholdsvis lav anseelse	Meget lav anseelse
Sivilingeniør	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
Platearbeider	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
Sveiser	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
Industrirørlegger	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
Mekaniker	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
Overflatebehandler	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
Tekniker	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
b)Posisjoner:				
Fagarbeider	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
Verksmester	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
Overformann	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
Driftsdirektør	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>

De siste 20-30 årene har Stavanger-området gjennomgått en omfattende utvikling

44. Hvor enig eller uenig er du i disse påstandene?

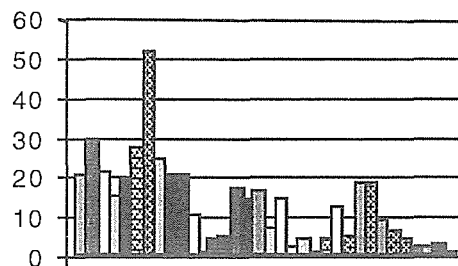
	Helt enig	Litt enig	Hverken eller	Litt uenig	Helt uenig	Vet ikke
En Rosenberg - ansatt sin anseelse i Stavanger er høyere i dag enn for 25 år siden.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Folk i Stavanger har all grunn til å være stolte over det de har fått til.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Stavanger har greidd å ta vare på det beste i byen fra tiden før oljevirksomheten.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
De mange restaurantene og utestedene i Stavanger har beriket bymiljøet.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
I dag er for mye av næringslivet i Stavanger knyttet til oljevirksomheten.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Oljevirksomheten har gitt Stavanger-regionen en sentral plass på det europeiske kartet.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Oljevirksomheten har ført til at folk flest er blitt for mye opptatt av penger og materielle ting.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Stavanger-distriktet har fått en ny overklasse av oljefolk.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Oljevirksomheten har ført til at tomte- og boligprisene i Stavanger er blitt altfor høye.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Idag er Stavanger en by som er preget av stor sosial ulikhet.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Avstanden mellom de som styrer og de som blir styrt er blitt større.....	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>

3.3. The survey and the response rate

The survey was designed and carried out according to the total design method developed by Don A. Dillman (see Dillman 1991) and was distributed on April 16th 1998 to a total population of 867 union members. One week later, on April 23rd, a reminder card was sent to the total population. Two weeks later, on May 6th, the first follow up (questionnaire included) was distributed to 617 union members (71% of the total population), and the final follow up was distributed May 25th. At this point, 342 union members ($\approx 39\%$ of the total population) had completed and returned the questionnaire.

As expected, the responses came in four major waves, with the peaks following the first distribution and the following reminder and the two follow-ups:

Fig. A1: Number of responses (Y-axis [vertical axis]) by date of return (X-axis [horizontal axis])



When the survey was closed on the first of August, a total of 407 union members had returned the questionnaire. For various reasons²⁵⁴, the population was reduced by 13 to 854 persons, giving an adjusted response rate of $\approx 48\%$. Furthermore, three questionnaires had to be excluded from the analysis because they were not complete, resulting in a net response rate of $\approx 47\%$. This cannot be considered a high or a satisfactory response rate. When carrying out surveys according to the total design method on a representative sample of the Norwegian population, the Norwegian Social Science Data Services, for instance, has usually achieved a response rate of 60-65% in their ISSP-surveys, i.e. 12-17 points higher than in my own survey.

²⁵⁴Mainly because the potential respondents had quit their jobs, but in 3 cases because of active refusals.

There are several potential reasons for the result obtained. Historically, the Rosenberg workers have been found to be reluctant to respond to surveys. For instance, the union representatives told me that other surveys had obtained response rates in the *single* digits. Given this reluctance, my own result must be called acceptable. Furthermore, the yard management carried out a smaller survey at the same time.²⁵⁵ Given two questionnaires to complete, there is reason to believe that the shorter one was preferred by some respondents. In addition, some of the respondents, both in their comments and to me on the phone, complained about the detailed questions in the questionnaire: would their anonymity be ensured if they answered the questions? This has most likely put off some potential respondents. One item (16a: Prosjektet Omstilling 93) resulted in two phone calls from people who wanted to express their negative opinions to me anonymously on the phone, and not in writing. One of these was persuaded to also complete and return the questionnaire. Finally, judging from comments on the completed questionnaires, the number of historically oriented questions probably had a negative effect on the response rate among the *youngest* yard workers. All these factors must, although based on speculation, be taken into consideration when judging the external stability of the data.

3.4. Problems of external stability when drawing inferences from the sample for the population

When drawing inferences from a sample for a population, the question of sample size is usually central. Whenever the sample satisfies the condition of being a random sample, the statistical error margins and the required sample size in order to minimize the error margins can be easily calculated.²⁵⁶ However, it

²⁵⁵In one case, the wrong questionnaire was returned to me.

²⁵⁶In this case, the question to ask is whether a sample of 404 respondents is sufficient when the (net) population consisted of 854 persons? In order to calculate the sample size, Narins (1998) suggests the following formula:

$$\frac{(Py)(Pn) + Std.error^2}{Std.error^2 + \frac{(Py)(Pn)}{N_1}} = N$$

- where (Py) and (Pn) are the probabilities of "yes" or "no" on a dichotomous variable (set to 0.5 for the most conservative estimate
- where the standard error is given by $(.05/1.96)^2$
where N_1 is the size of the finite population
- and where N is the size of the sample.

cannot be claimed that the yard worker sample has been "drawn" in ways that are similar to the procedures in simple random sampling. We do not know whether the refusals are randomly distributed in the population, but as indicated above, there is reason to believe that this not is the case. The problem of external analytical stability (see Greenacre 1984) must therefore be addressed.

Another shortcoming is due to the fact that the membership register used does not include the variables needed to produce a weighting of the individual respondents in the sample (age, income, gender, position in production, location in production, formal qualifications and whether or not the individual has or has had relatives at the yard). Any problems of external stability could therefore not be examined in this classic way.

One possible alternative strategy could have been to carry out a bootstrap (see Greenacre 1984, Mooney & Duval 1993 for the principles) on each of the univariate and bivariate distributions and also on the solution obtained in the multiple correspondence analysis (see figs. 7.1-7.3 in chapter 7)²⁵⁷. In the first case, bootstrapping the univariate or bivariate distributions would in my opinion equate shooting sparrows with a very large cannon; it would be an interesting technical exercise of rather limited analytical value. In the second case, I did not have access to the necessary software. Nevertheless, I do not think that a bootstrapped solution would have revealed structures that were *radically* different from the central ones revealed in chapter 7. These elements considered, it seems reasonable to conclude therefore that the external sample stability is sufficient, although not as good as the total design method will usually provide. In my opinion, the fact that it has been possible to externally validate the main oppositions revealed in the correspondence analysis in the analysis of the interview data, further supports this claim.

4.0. Secondary data sources

In the analyses in chapters 5-9, various secondary data sources have been used. These can be classified in four main types: survey data, archival data, interview data and published material.

Following the formulas presented by Narins with respect to finite population correction, it would be sufficient to have a sample of 266 persons when using a simple random sampling methodology. As already indicated, the sample size in this study is far larger.

²⁵⁷I have so far not seen anybody carry out a bootstrap on a latent class analysis (see chapter 8).

4.1. Secondary survey data

The Stavanger Survey 1994 (see Rommetvedt and Rosenlund 1994 for details) consists of two parts: one computer assisted telephone survey (CATI) with 1305 respondents, and a postal follow up with 911 respondents who were willing to complete a questionnaire. The response rates were 69% and 79% respectively, and in total, the number of variables is 600. The two surveys cover a wide variety of themes, and only a few of the variables have been used in my own analysis (see chapters 5 and 9 in particular). However, as a secondary source, the set has been extremely important, not at least because of the extensive analyses done by Lennart Rosenlund (see chapter 5 for further details).

The ISSP survey of 1997 on work orientations is a follow-up of a similar survey in 1989. Only data from the Norwegian part of the survey have been available for analysis, and the survey has mainly focused on four topics: time spent on various activities, workers' attitudes towards work, perceptions of their own work situation and wages and principles of wage formation (see Lund & Skjåk 1999 for a complete report of the Norwegian survey, including the questionnaire). In accordance with the total design method (see above), the adjusted response rate was 63.1%, and the total number of respondents 2199 persons. Data from the ISSP survey have mainly been used in the restricted comparative analyses in chapter 9.

4.2. Archival data

The archival data on RMV has mainly been obtained from the archives of Svein Michelsen and other researchers at the Department of Administration and Organization Theory, University of Bergen. These data consist of numerous internal reports and overviews from the personnel department, of minutes from union meetings, and of various written accounts. Archived material was also obtained from one of the interviewees, in which detailed reports from the meetings negotiating the transition from piece-rate wages to fixed hourly wages are central. The reliability of these data sets can without doubt be considered very good: in many cases, I have had access to or taken photocopies of the original reports. Several of the tables and figures in chapter 6 are based on this archival data.

4.3. Secondary interview data

When preparing for my own interviews in Stavanger, the union allowed me access to 9 interviews with older Rosenberg workers (in most cases 70 years+) carried out by the historian Silja Arvola. I have not quoted from any of these interviews, and have not made any extensive use of these data, partly due to their somewhat doubtful quality²⁵⁸. Nevertheless, they have provided me with valuable information about work at the yard and about living at Buøy in the years prior to 1945.

²⁵⁸For instance, one of the interviewees had suffered a stroke that had badly damaged his ability to speak. Nevertheless, a detailed transcription is provided. There is reason to question the reliability of the data in this interview.

4.4. Published material

Various books and other types of published material (for instance official statistics) have been used, enabling me to make an "educated guess" as to the structures in the local social space in Stavanger in the years prior to the oil industry, and to calculate the development in the yard workers' real wages. These sources are all referred to in the text and in relation to tables constructed on the basis of statistical information in the original publications. The reliability of these sources may vary, but whenever possible, I have checked the information against other sources. In some cases, the accounts must clearly be treated as positional statements; for example this applies to Thorstensen's book (1985) and the interview with Nordbø in the "Årbok, Arbeidernes historielag i Rogaland" (1989) since both have been leading union members and union leaders, and have had lifelong histories of political engagement. In the written accounts, this can easily be discovered. Whereas these texts cannot automatically be accepted as authoritative accounts of "how things really were", they have been important supplementary sources to my own interviews. In an eventual analysis of union frameworks of memories, these texts would have to be studied in great detail.

5.0. Correspondence with the personnel office at
Kværner Rosenberg

Johs. Hjellbrekke
Sosiologisk institutt
Fosswinckelsgate 6
5003 Bergen.
Tlf. 55 58 91 65

Personalsjef Rolf Norås Pettersen
Kværner Rosenberg a.s
Rosenberg Verft
Skipsbyggergt.20
Postboks 139
4001 Stavanger.

Bergen 23.10. 1997

Søknad om løyve til å gjennomføre ei spørjeundersøking på Rosenberg verft i samarbeid med Verkstedklubb og verftsledelse, og om tilgang til naudsynte adresselister.

Som De kanskje hugsar frå eit møte vi hadde i mars 1996, arbeider eg for tida med ei doktorgradsavhandling i arbeidslivssosiologi ved Universitetet i Bergen. I samband med denne har eg så langt gjennomført tilsaman 39 intervju med noverande og tidlegare tilsette ved Rosenberg Verft. Denne delen av undersøkinga er no på det næraste avslutta, og så langt utgjør dette datamaterialet ca. 1350 utskrivne sider med intervjudata. I tillegg kjem ymse typar materiale frå diverse historiske arkiv.

Det er likevel avgjerande for omfanget av og kvaliteten på min eigen analyse å samle inn ytterlegare informasjon om ulike sider ved det å arbeide på Rosenberg verft frå alle som har dette som sin arbeidsplass.

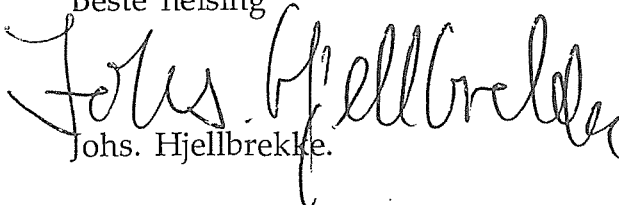
Til slutt i datainnsamlingsarbeidet ynskjer derfor eg å gjennomføre ei spørjeundersøking, aller helst i samarbeid med Verkstedklubben og verftsledelsen, representert ved Personalavdelingen. Eg har derfor utarbeidd eit forslag til spørjeskjema og introduksjonsbrev som eg sender ved denne søknaden (sjå kopi), og søker med dette om løyve til å få gjennomføre ei slik undersøking på Rosenberg, og også om å få tilgang til dei naudsynte adresselistene i den tida (ca. 3. månader) undersøkinga vert gjennomført.

Vonaleg vil det vere spørsmål i det vedlagde skjema som også kan vere relevante både for Verkstedklubben og Personalkontoret sitt arbeid. Etter at undersøkinga er

gjennomført, vil eg derfor gjere resultata kostnadsfritt tilgjengelege både for Verkstedklubb og Personalkontoret i form av ein tabellrapport som summerer opp dei viktigaste funna. Når dei meir omfattande analysane er endelege fullførte i doktoravhandlinga mi, vil eg sjølvsagt også sende denne til dei impliserte partane.

Alt arbeid og alle utgifter totalt (ca. 65 000 kroner) til undersøkinga, vil bli fullt ut dekkja av underteikna. Den praktiske gjennomføringa vil sjølvsagt følgje dei retningslinene som er utarbeidde av Datatilsynet og nedfelte i Lov om personregister, både i høve til anonymitet, oppbevaring av skjema og registerdata, og om overlevering av data til Norsk Samfunnsvitskapleg Datateneste for eventuell framtidig bruk i forskningsøyemed.

Med håp om positivt svar på søknad

Beste helsing

John Hjellbrekke.

Kopi til Verkstedklubben

Kværner Oil & Gas

Johs. Hjellbrekke
Sosiologisk Institutt
Fosswinkckelsgate 6
5003 Bergen

Attn.: Dag Sandberg

Your ref.

Our ref. 6781-JK/kf

Date 02.01.98

Spørreundersøkelse Rosenberg Verft

Det vises til skriftlig søknad om å gjennomføre en spørreundersøkelse ved Rosenberg Verft.

Rosenberg Verft er nå fusjonert med bedriftene Kværner Engineering a.s, Kværner Concrete Construction a.s, Kværner Installasjon a.s og Kværner Egersund til Kværner Oil & Gas a.s. Det nye selskapet har 5.000 ansatte.

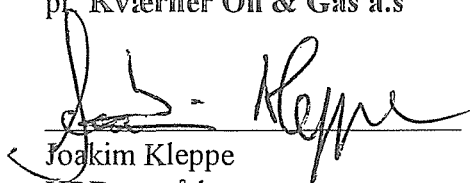
Kværner Oil & Gas a.s er sterkt opptatt av å få til en ny og enhetlig bedriftskultur i dette nye selskapet. Enkeltsekskapenes gamle bedriftskulturer skal i hovedsak endres.

Kværner Oil & Gas a.s skal gjøre bruk av diverse klimaundersøkelser de neste årene for å kartlegge bedriftskulturen og hvor vi skal sette inn tiltak for å oppnå den ønskelige endringen.

For å få best mulig oppslutning av våre egne klimaundersøkelser vil vi ikke delta i noen form for eksterne spørreundersøkelser.

Kværner Oil & Gas a.s beklager derfor at vi ikke finner det riktig på nåværende tidspunkt å delta i eksterne spørreundersøkelser.

Med hilsen
pr. Kværner Oil & Gas a.s


Joakim Kleppe
HRD-området

Kopi: Verkstedsklubben

UNIVERSITETET I BERGEN
SOSIOLOGISK INSTITUTT

Korsnes

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Førsteamanuensis Olav Korsnes

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8. januar 1998

Kværner Oil & Gas a.s
v/Joakim Kleppe
P.O.Box 8006
4003 Stavanger

Ang. avslag på søknad om gjennomføring av spørreundersøkelse ved Rosenborg Verft fra dr.polit.-kandidat Johs. Hjellbrekke, Universitetet i Bergen, Deres ref. 6781-JK/kf, 02.01.98

Undertegnede, som er oppnevnte veiledere for dr.polit.-kandidat Johs. Hjellbrekke, respekterer den begrunnelsen som er gitt for avslaget, men vil med dette sterkt anmode om at beslutningen revurderes, ut fra andre grunner og hensyn.

Det viktigste hensynet er faglig. Johs. Hjellbrekke skal, som øvrige kandidater som er tatt opp i vårt dr.polit.-program, i løpet av 4 år gjennomføre en obligatorisk opplæring, et individuelt forskningsprosjekt, samt skrive en avhandling. Skal kandidatene komme i mål med dette opplegget, kreves det nøye planlegging og få forstyrrelser. Johs. Hjellbrekke har både de beste forutsetninger for og en sterk vilje til å gjennomføre sitt planlagte doktorgradsarbeid. Den angjeldende spørreundersøkelsen er usedvanlig godt fundert faglig og empirisk, og den er en kvalitativt viktig del av hans forskningsprosjekt. Det vil derfor være svært beklagelig om han ikke kan få gjennomført spørreundersøkelsen.

Mer allment vil vi understreke undersøkelsens vitenskapelige begrunnelse og karakter, og hensynet til behovet for tilgang til data som all vitenskap - og ikke minst samfunns- vitenskapene - er så helt avhengig av. Vi innser at dette behovet må veies opp mot praktiske og økonomiske hensyn, som i dette tilfellet, men er ikke overbevist om at Hjellbrekkes spørreundersøkelse nødvendigvis vil skape problemer for de påtenkte klimaundersøkelsene. Kan det ikke tvertom tenkes at den kan gi informasjon som kan danne et godt grunnlag for den slags undersøkelser?

Vi er heller ikke overbevist om at spørreundersøkelsen nødvendigvis vil ha negativ betydning m.h.t. oppslutningen om framtidige interne klimaundersøkelser. Hvis undersøkelsene er svært like m.h.t. innhold og metode er det selvsagt en viss fare for en slik negativ effekt, men ettersom formålene med undersøkelsene er så ulike, er denne faren neppe overhengende.

Vi vil derfor sterkt anmode om at Hjellbrekke får adgang til å gjennomføre den planlagte spørreundersøkelsen. For å lette gjennomføringen har han i samråd med veilederne allerede redusert omfanget av spørreskjemaet, og ytterligere modifikasjoner kan diskuteres. Ettersom tidspresset på kandidaten er sterkt, vil vi be om et svar på denne henvendelsen så raskt som mulig.



Sigmund Grønmo

Professor

Vennlig hilsen,



Olav Korsnes

Førsteamanuensis

Kværner Oil & Gas

Universitetet i Bergen
Fosswinckelsgt. 6

5007 Bergen

Attn.: Sigmund Grønmo

Your ref.

Our ref. 6787-JK/kf

Date 28.01.98

Vedr.: Spørreundersøkelse Rosenberg Verft

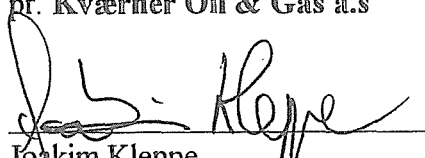
Det vises til Deres sterke anmodning om at Johs. Hjellbrekke får adgang til likevel å gjennomføre spørreundersøkelsen.

Etter at ledelsen har diskutert saken på nytt ser vi ikke å kunne endre på vår tidligere beslutning.

Rosenberg Verft er nå totalt reorganisert som en del av Kværner Oil & Gas a.s. Endringene har vært store både for den enkelte ansatte og den totale organisasjonen. Ledelsen er opptatt av at for å lykkes må den enkelte ansatte bidra i forhold til endringsprosessen og vi skal alle ha fokus på framtiden.

Vi håper Universitetet i Bergen har forståelse for vår avgjørelse.

Med hilsen
pr. Kværner Oil & Gas a.s


Joakim Kleppe
HRD-området

6.0. Tables to chapters 5-9

6.1. Table to chapter 5

Table A: Elected municipal representatives, 1910 - 1945.

	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
	1910	1913	1916	1919	1922	1925	1928	1931	1934	1937	1945
Party											
Conservative Party	19	18 ²⁵⁹	11	17 ²⁶⁰	22	23 ²⁶¹	22	23	13	20	12
The Liberal Party	No list	No list	No list	11	15	17	20	20	17	17	14
The Sobriety Party	13	16	12	8	No list	No list	No list	No list	No list	No list	No list
Labour	22	18	30	19	18	18	26	24	29	28	32
Socialdemocrates. ²⁶²	12	16	15	No list	9	No list	No list	No list	No list	No list	No list

²⁵⁹Joint list between Conservative Party and "Frisinnede Venstre".

²⁶⁰Joint list between Conservative Party and "Frisinnede Venstre".

²⁶¹Joint list between Conservative Party and "Frisinnede Venstre".

²⁶²Includes "Democratic workers" in the 1910- and 1916-elections.

6.2. Tables to chapter 7

Table B: Result matrix from correspondence analysis in chapter 7.

		Axis 1	Axis 2	Axis 3	Axis 4	Axis 5	Correla...	Correla...	Correla...	Correla...
1	Plumbers	0.490	0.301	-0.234	-0.405	0.371	0.043	0.016	0.010	0.029
2	Welders	-0.622	0.197	-0.092	-0.201	-0.114	0.127	0.013	0.003	0.013
3	Transport	0.128	-1.122	-1.188	0.000	0.436	0.001	0.060	0.067	0.000
4	Plumbing/P	1.008	0.601	0.975	0.940	0.665	0.069	0.024	0.064	0.060
5	Various ser	-0.286	-1.257	0.880	0.564	0.106	0.006	0.119	0.058	0.024
6	Platers	-0.225	-0.214	-0.130	-0.271	-0.097	0.012	0.011	0.004	0.018
7	Surface wo	0.245	0.269	0.307	0.268	-1.172	0.007	0.008	0.010	0.008
8	Turners/Mec	-0.236	-0.004	0.142	0.732	0.424	0.003	0.000	0.001	0.025
9	Foremen/Fu	1.141	0.485	-0.596	0.737	0.734	0.055	0.010	0.015	0.023
10	Before '70	-0.019	-1.056	-0.267	0.321	0.450	0.000	0.124	0.008	0.011
11	'71_'78	0.189	-1.035	0.201	0.184	0.284	0.008	0.242	0.009	0.008
12	'79_'85	0.268	-0.224	-0.670	-0.491	-0.170	0.014	0.010	0.090	0.048
13	'86_'89	0.289	0.702	-0.312	0.262	-0.443	0.016	0.095	0.019	0.013
14	'90_'93	0.197	0.726	0.497	-0.064	-0.213	0.011	0.146	0.068	0.001
15	Dual compet	0.890	0.345	0.507	0.454	0.735	0.154	0.023	0.050	0.040
16	Skilled wor	0.080	-0.031	-0.209	-0.175	-0.222	0.011	0.002	0.077	0.054
17	Special wor	-1.064	-0.753	0.421	0.877	-0.322	0.110	0.055	0.017	0.075
18	Helper	-1.793	-0.466	-0.162	-1.545	1.116	0.030	0.002	0.000	0.022
19	No rel. RMV	-0.476	0.409	-0.513	0.287	-0.013	0.188	0.139	0.218	0.068
20	Rel. now	0.485	-0.122	0.899	-0.199	-0.224	0.081	0.005	0.278	0.014
21	Rel. bef.	0.394	-0.535	0.020	-0.362	0.318	0.048	0.089	0.000	0.041
22	Father RMV	0.842	-0.813	0.314	-0.823	0.088	0.143	0.134	0.020	0.137
23	Father NOT	-0.214	0.159	-0.060	0.165	-0.014	0.215	0.118	0.017	0.129
24	Siblings RM	0.595	-0.861	0.843	-0.102	-0.191	0.064	0.133	0.128	0.002
25	Siblings NO	-0.151	0.150	-0.148	0.020	0.038	0.121	0.119	0.115	0.002
26	Uncles RMV	0.630	-0.525	0.855	-0.555	-0.036	0.080	0.056	0.148	0.062
27	Uncles NOT	-0.172	0.102	-0.168	0.112	0.011	0.138	0.048	0.133	0.059
28	Cousins	0.255	0.157	0.832	-0.733	0.294	0.005	0.002	0.049	0.038
29	Nephews	0.371	-0.084	1.620	0.126	-0.443	0.005	0.000	0.092	0.001
30	Grandparent	0.700	-0.596	0.138	-0.175	0.193	0.016	0.011	0.001	0.001
31	Don't own h	-0.674	-0.146	0.132	-0.287	0.348	0.191	0.009	0.007	0.035

		Axis 1	Axis 2	Axis 3	Axis 4	Axis 5	Correla...	Correla...	Correla...	Correla...
32	House_500'	0.121	0.367	0.307	0.308	0.033	0.001	0.008	0.006	0.006
33	House500_7	-0.062	0.284	0.123	0.167	-0.491	0.000	0.009	0.002	0.003
34	House800_1	0.532	-0.402	-0.324	-0.343	-0.193	0.059	0.034	0.022	0.025
35	House1''_12	0.333	0.499	0.359	0.106	-0.112	0.012	0.026	0.014	0.001
36	House1250'	0.725	0.221	-0.510	0.393	-0.034	0.077	0.007	0.038	0.022
37	House_3000	-0.095	0.222	-0.118	0.775	-0.041	0.001	0.004	0.001	0.046
38	1 y ed+	0.531	-0.436	-0.652	-0.429	-0.223	0.092	0.062	0.139	0.060
39	2 y ed+	0.106	0.391	0.199	0.495	-0.352	0.004	0.052	0.014	0.084
40	3 y ed+	-0.059	0.285	0.435	-0.069	0.429	0.001	0.020	0.046	0.001
41	4 y ed+	-0.718	0.406	0.102	-0.130	0.972	0.021	0.007	0.000	0.001
42	5 y ed++	-0.909	0.284	0.331	-0.907	0.593	0.072	0.007	0.010	0.072
43	No voc. ed	-1.434	-1.550	0.646	0.734	-0.695	0.109	0.127	0.022	0.028
44	3 4 / 1	0.038	0.082	-0.034	-0.039	0.041	0.023	0.112	0.019	0.025
45	Basic voc ed	0.203	0.442	0.053	-0.258	0.045	0.051	0.240	0.004	0.082
46	3 4 / 2	-0.331	-0.540	-0.061	0.315	-0.048	0.087	0.231	0.003	0.079
47	VGK	-0.099	0.831	0.484	0.012	0.138	0.004	0.251	0.085	0.000
48	3 4 / 3	-0.016	-0.310	-0.177	-0.002	-0.047	0.001	0.256	0.083	0.000
49	\$20	0.658	0.077	0.178	0.408	0.251	0.169	0.002	0.012	0.065
50	3 4 / 4	-0.306	-0.033	-0.066	-0.154	-0.092	0.232	0.003	0.011	0.059
51	Skilled wor	0.245	0.340	-0.170	-0.486	-0.240	0.033	0.064	0.016	0.131
52	3 4 / 5	-0.192	-0.188	0.095	0.266	0.135	0.065	0.062	0.016	0.124
53	Techn. colle	-0.395	0.665	0.828	-0.658	1.058	0.009	0.024	0.038	0.024
54	3 4 / 6	-0.019	-0.039	-0.044	0.038	-0.055	0.006	0.024	0.030	0.023
55	Various cour	0.541	-0.177	-0.394	0.186	0.415	0.173	0.019	0.091	0.020
56	3 4 / 7	-0.370	0.098	0.228	-0.104	-0.233	0.226	0.016	0.086	0.018
57	O voc. ed	0.333	-0.132	-0.322	0.175	0.593	0.044	0.007	0.042	0.012
58	3 4 / 8	-0.185	0.049	0.129	-0.067	-0.229	0.082	0.006	0.040	0.011
59	Basiv voc ed	0.550	-0.004	-0.546	0.037	0.591	0.052	0.000	0.051	0.000
60	3 4 / 9	-0.137	-0.002	0.094	-0.004	-0.095	0.104	0.000	0.048	0.000
61	100' _200'	-1.098	0.148	0.170	-0.584	1.184	0.112	0.002	0.003	0.032
62	201 _220'	-0.352	-0.535	0.719	0.689	0.022	0.008	0.019	0.034	0.031
63	221' _240'	-0.186	-0.515	-0.026	0.142	0.233	0.005	0.037	0.000	0.003
64	241' _250'	0.334	-0.382	-0.016	0.759	0.038	0.014	0.018	0.000	0.071
65	251' _270'	0.238	-0.060	-0.279	-0.269	-0.198	0.005	0.000	0.007	0.006

		Correla...	Contrib...	Contrib...	Contrib...	Contrib...	Contrib...	Quality ...	Weights
32	House 500'	0.000	0.000	0.003	0.003	0.003	0.000	0.020	0.003
33	House500' 7	0.026	0.000	0.003	0.001	0.001	0.013	0.039	0.005
34	House800' 1	0.008	0.017	0.011	0.009	0.011	0.004	0.148	0.009
35	House1'' 12	0.001	0.004	0.009	0.006	0.001	0.001	0.054	0.005
36	House1250'	0.000	0.024	0.002	0.016	0.011	0.000	0.144	0.006
37	House 3000	0.000	0.000	0.001	0.000	0.024	0.000	0.051	0.004
38	1 y ed+	0.016	0.024	0.019	0.051	0.025	0.007	0.369	0.012
39	2 y ed+	0.042	0.001	0.016	0.005	0.035	0.018	0.196	0.013
40	3 y ed+	0.044	0.000	0.006	0.019	0.001	0.021	0.112	0.010
41	4 y ed+	0.039	0.007	0.003	0.000	0.000	0.022	0.068	0.002
42	5 y ed++	0.031	0.025	0.003	0.005	0.039	0.017	0.191	0.004
43	No voc. ed	0.025	0.039	0.051	0.011	0.016	0.014	0.311	0.003
44	3 4 / 1	0.028	0.000	0.003	0.001	0.001	0.001	0.207	0.050
45	Basic voc ed	0.002	0.008	0.044	0.001	0.021	0.001	0.379	0.029
46	3 4 / 2	0.002	0.018	0.054	0.001	0.026	0.001	0.401	0.024
47	VGK	0.007	0.001	0.077	0.032	0.000	0.003	0.346	0.014
48	3 4 / 3	0.006	0.000	0.029	0.012	0.000	0.001	0.345	0.038
49	§ 20	0.025	0.044	0.001	0.004	0.026	0.010	0.273	0.015
50	3 4 / 4	0.021	0.025	0.000	0.002	0.010	0.004	0.325	0.038
51	Skilled wor	0.032	0.008	0.017	0.005	0.047	0.012	0.277	0.018
52	3 4 / 5	0.032	0.009	0.009	0.003	0.026	0.007	0.298	0.034
53	Techn. colle	0.062	0.003	0.009	0.018	0.013	0.034	0.156	0.003
54	3 4 / 6	0.048	0.000	0.001	0.001	0.001	0.002	0.130	0.050
55	Various cour	0.101	0.039	0.005	0.029	0.007	0.036	0.404	0.019
56	3 4 / 7	0.089	0.032	0.002	0.017	0.004	0.020	0.435	0.033
57	O voc. ed	0.141	0.011	0.002	0.015	0.005	0.057	0.247	0.015
58	3 4 / 8	0.126	0.009	0.001	0.006	0.002	0.022	0.265	0.038
59	Basiv voc ed	0.060	0.016	0.000	0.022	0.000	0.029	0.164	0.008
60	3 4 / 9	0.050	0.006	0.000	0.004	0.000	0.005	0.202	0.045
61	100' _ 200'	0.130	0.038	0.001	0.001	0.017	0.070	0.279	0.005
62	201' _ 220'	0.000	0.003	0.007	0.016	0.017	0.000	0.092	0.003
63	221' _ 240'	0.008	0.002	0.013	0.000	0.001	0.004	0.053	0.006
64	241' _ 250'	0.000	0.004	0.006	0.000	0.035	0.000	0.102	0.006
65	251' _ 270'	0.003	0.002	0.000	0.003	0.003	0.002	0.022	0.004

		Correla...	Contrib...	Contrib...	Contrib...	Contrib...	Contrib...	Quality ...	Weights
1	Plumbers	0.024	0.013	0.006	0.004	0.014	0.012	0.122	0.008
2	Welders	0.004	0.035	0.004	0.001	0.006	0.002	0.160	0.013
3	Transport	0.009	0.000	0.023	0.032	0.000	0.005	0.137	0.002
4	Plumbing/P	0.030	0.023	0.009	0.030	0.031	0.016	0.247	0.003
5	Various ser	0.001	0.002	0.045	0.027	0.013	0.000	0.209	0.004
6	Platers	0.002	0.004	0.004	0.002	0.008	0.001	0.048	0.010
7	Surface wo	0.150	0.002	0.003	0.005	0.004	0.077	0.183	0.005
8	Turners/Mec	0.009	0.001	0.000	0.000	0.014	0.005	0.038	0.002
9	Foremen/Fu	0.023	0.019	0.004	0.007	0.012	0.012	0.127	0.002
10	Before '70	0.022	0.000	0.045	0.004	0.006	0.012	0.166	0.005
11	'71 '78	0.018	0.002	0.081	0.004	0.004	0.009	0.285	0.010
12	'79 '85	0.006	0.004	0.003	0.037	0.022	0.003	0.169	0.009
13	'86 '89	0.038	0.005	0.032	0.008	0.006	0.018	0.182	0.008
14	'90 '93	0.013	0.003	0.046	0.026	0.000	0.006	0.238	0.011
15	Dual compet	0.105	0.045	0.008	0.021	0.019	0.049	0.372	0.008
16	Skilled wor	0.086	0.001	0.000	0.014	0.011	0.018	0.230	0.033
17	Special wor	0.010	0.038	0.021	0.008	0.040	0.005	0.268	0.005
18	Helper	0.012	0.012	0.001	0.000	0.013	0.007	0.067	0.001
19	No rel. RMV	0.000	0.038	0.032	0.061	0.021	0.000	0.612	0.024
20	Rel. now	0.017	0.021	0.002	0.103	0.006	0.007	0.394	0.013
21	Rel. bef.	0.032	0.013	0.028	0.000	0.017	0.014	0.210	0.012
22	Father RMV	0.002	0.043	0.045	0.008	0.064	0.001	0.435	0.009
23	Father NOT	0.001	0.014	0.009	0.002	0.013	0.000	0.480	0.044
24	Siblings RM	0.007	0.019	0.046	0.054	0.001	0.003	0.333	0.008
25	Siblings NO	0.007	0.007	0.008	0.009	0.000	0.001	0.365	0.045
26	Uncles RMV	0.000	0.024	0.019	0.062	0.029	0.000	0.347	0.009
27	Uncles NOT	0.001	0.009	0.004	0.012	0.006	0.000	0.379	0.044
28	Cousins	0.006	0.001	0.001	0.022	0.019	0.003	0.099	0.003
29	Nephews	0.007	0.002	0.000	0.043	0.000	0.004	0.104	0.002
30	Grandparent	0.001	0.005	0.004	0.000	0.001	0.001	0.030	0.002
31	Don't own h	0.051	0.050	0.003	0.003	0.014	0.021	0.293	0.016

		Axis 1	Axis 2	Axis 3	Axis 4	Axis 5	Correla...	Correla...	Correla...	Correla...
66	271'_290'	-0.017	0.275	-0.335	-0.351	-1.030	0.000	0.009	0.013	0.015
67	291'_310'	0.484	-0.103	-0.066	-0.317	-0.619	0.036	0.002	0.001	0.015
68	311'_350'	0.751	0.694	0.307	-0.197	0.165	0.065	0.055	0.011	0.004
69	351'+	0.870	0.743	-0.562	1.332	0.367	0.041	0.030	0.017	0.096
70	HI_200'	-1.762	0.378	0.027	-1.076	2.319	0.139	0.006	0.000	0.052
71	HI200_300'	-0.252	-0.253	0.204	0.405	-0.174	0.012	0.012	0.008	0.030
72	HI301'_350	0.163	0.099	0.039	-0.578	-0.277	0.005	0.002	0.000	0.059
73	HI351'_400	0.230	-0.015	0.259	0.251	-0.204	0.009	0.000	0.012	0.011
74	HI401'_450	0.428	-0.138	-0.592	0.125	-0.139	0.023	0.002	0.044	0.002
75	HI451'_500	0.288	-0.111	-0.654	-0.152	-0.065	0.011	0.002	0.057	0.003
76	HI501'+	0.757	0.662	0.323	0.601	0.348	0.046	0.035	0.008	0.029

		Correla...	Contrib...	Contrib...	Contrib...	Contrib...	Contrib...	Quality ..	Weights
66	271' _290'	0.126	0.000	0.003	0.006	0.007	0.064	0.163	0.005
67	291' _310'	0.058	0.011	0.001	0.000	0.007	0.028	0.111	0.007
68	311' _350'	0.003	0.020	0.020	0.005	0.002	0.002	0.138	0.005
69	351'+	0.007	0.014	0.011	0.008	0.050	0.004	0.192	0.003
70	H1_200'	0.241	0.050	0.003	0.000	0.029	0.139	0.438	0.002
71	H1200_300'	0.006	0.003	0.004	0.003	0.014	0.003	0.066	0.008
72	H1301' _350	0.014	0.001	0.001	0.000	0.028	0.006	0.079	0.008
73	H1351' _400	0.007	0.003	0.000	0.005	0.005	0.004	0.040	0.008
74	H1401' _450	0.002	0.007	0.001	0.019	0.001	0.001	0.074	0.006
75	H1451' _500	0.001	0.003	0.001	0.025	0.001	0.000	0.073	0.006
76	H1501'+	0.010	0.015	0.013	0.004	0.015	0.005	0.128	0.004

6.3. Tables to chapter 9
Result matrices from HOMALS

DATA FROM ROSENBERG SURVEY

The number of observations used in the analysis = 382

List of Variables
 =====

Variable	Variable label	Number of Categories
S44_2	Reason to be proud	5
S44_3	Managed to preserve the best things	5
S44_4	Pubs and restaurants positive	5
S44_6	Stavanger on Bur. map	5
S44_7	Care too much money/material objects	5
S44_8	New upper class of oil people	5
S44_11	Increased distance govern/governed	5

Marginal Frequencies
 =====

Variable	Missing	Categories				
		1	2	3	4	5
S44_2	20	194	110	47	5	6
S44_3	38	79	147	59	42	17
S44_4	14	168	114	44	25	17
S44_6	14	222	127	15	3	1
S44_7	19	130	152	51	20	10
S44_8	26	126	120	69	28	13
S44_11	33	159	106	58	20	6

The iterative process stops because the convergence has been reached in 50 iteration(s).

Dimension	Eigenvalue
1	,3479
2	,2962
3	,2345

Discrimination measures per variable per dimension
 =====

Variable	Dimension			
	1	2	3	4
S44_2	,323	,475	,271	,071
S44_3	,290	,518	,236	,137
S44_4	,098	,407	,159	,173
S44_6	,361	,166	,046	,047
S44_7	,499	,181	,256	,527
S44_8	,420	,157	,336	,292
S44_11	,444	,169	,336	,344

Hi-Res Chart # 1:Discrimination measures

Marginal Frequencies and Category Quantifications

Variable: S44_2 Reason to be proud

Category	Marginal Frequency
1 Totally agree	194
2 Partly agree	110
3 Neither nor	47
4 Partly disagree	5
5 Totally disagree	6
Missing:	20

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	,44	,54	-,15	-,06
2	-,49	-,54	,08	,21
3	-,68	-,69	-,26	-,47
4	-1,03	1,71	2,15	1,46
5	2,30	-3,06	3,47	,28

Variable: S44_3 Managed to preserve the best things

Category	Marginal Frequency
1 Totally agree	79
2 Partly agree	147
3 Neither nor	59
4 Partly disagree	42
5 Totally disagree	17
Missing:	38

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	,62	,92	-,25	-,42
2	-,12	,20	-,01	,25
3	-,88	-,89	-,48	-,35
4	,03	-,28	,67	,61
5	1,39	-2,10	1,76	-,59

Variable: S44_4 Pubs and restaurants positive

Category	Marginal Frequency
1 Totally agree	168
2 Partly agree	114
3 Neither nor	44
4 Partly disagree	25
5 Totally disagree	17
Missing:	14

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	,07	,60	-,11	-,28
2	-,33	-,18	-,20	,56
3	-,06	-,80	,34	-,55
4	,30	-,25	-,16	,31
5	1,13	-1,90	1,69	-,32

Variable: S44_6 Stavanger on Eur. map

Category	Marginal Frequency
1 Totally agree	222
2 Partly agree	127
3 Neither nor	15
4 Partly disagree	3
5 Totally disagree	1
Missing:	14

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	,45	,23	-,08	-,07
2	-,85	-,13	,12	,21
3	-,08	-1,74	,19	-,81
4	,72	1,06	-2,14	,44
5	,54	-,99	-,07	,85

Variable: S44_7 Care too much money/material objects

Category	Marginal Frequency	
1	Totally agree	130
2	Partly agree	152
3	Neither nor	51
4	Partly disagree	20
5	Totally disagree	10
	Missing:	19

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	,94	-,31	-,05	,19
2	-,47	,07	-,24	,39
3	-,72	-,19	-,02	-1,68
4	-,88	,64	1,43	,78
5	,10	2,15	2,19	-1,33

Variable: S44_8 New upper class of oil people

Category	Marginal Frequency	
1	Totally agree	126
2	Partly agree	120
3	Neither nor	69
4	Partly disagree	28
5	Totally disagree	13
	Missing:	26

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	,89	-,14	-,24	,12
2	-,33	-,22	-,25	,50
3	-,67	-,09	-,21	-1,07
4	-,63	,65	1,40	,17
5	-,63	1,75	2,08	-,26

Variable: S44_11 Increased distance govern/governed

Category	Marginal Frequency	
1	Totally agree	159
2	Partly disagree	106
3	Neither nor	58
4	Partly disagree	20
5	Totally disagree	6
	Missing:	33

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	,74	-,17	-,05	-,04
2	-,48	,09	-,31	,59
3	-,74	-,22	-,18	-1,09
4	-1,08	,09	1,66	,94
5	-,67	3,05	3,19	-1,12

Hi-Res Chart # 2: Object scores

Hi-Res Chart # 3: Category quantifications

H O M A L S - VERSION 0.6
 BY
 DEPARTMENT OF DATA THEORY
 UNIVERSITY OF LEIDEN, THE NETHERLANDS

HOMALS ON UNRESTRICTED STAVANGER SURVEY 1994

The number of observations used in the analysis = 892

List of Variables
 =====

Variable	Variable label	Number of Categories
@9OSTV.2	Stavanger on Eur. map	5
@9_AVST2	Increased distance govern/governed	5
@9PENCM2	Care too much money/material objects	5
@9OLJOV2	New upper class of oil people	5
@9STOLT2	Reason to be proud	5
@9BEV2	Managed to preserve the best things	5
@9UTSTD2	Pubs and restaurants positive	5

Marginal Frequencies
 =====

Variable	Missing	Categories				
		1	2	3	4	5
@9OSTV.2	14	576	236	44	17	5
@9_AVST2	149	84	249	259	116	35
@9PENCM2	46	180	327	205	87	47
@9OLJOV2	56	167	313	176	130	50
@9STOLT2	20	333	337	169	22	11
@9BEV2	96	179	289	214	88	26
@9UTSTD2	15	360	249	151	64	53

The iterative process stops because the convergence has been reached in 37 iteration(s).

Dimension	Eigenvalue
1	,3120
2	,2882
3	,2306

4 ,2014

Discrimination measures per variable per dimension
 =====

Variable	Dimension			
	1	2	3	4
@9OSTV.2	,130	,174	,194	,126
@9_AVST2	,157	,275	,227	,111
@9PENCM2	,392	,419	,365	,389
@9OLJOV2	,242	,362	,382	,381
@9STOLT2	,496	,317	,164	,183
@9BEV2	,414	,241	,215	,155
@9UTSTD2	,353	,230	,066	,065

Hi-Res Chart # 4:Discrimination measures

Marginal Frequencies and Category Quantifications

Variable: @9OSTIV.2 Stavanger on Eur. map

Category	Marginal Frequency
1 Strongly agree	576
2 Partly agree	236
3 Neither nor	44
4 Partly disagree	17
5 Strongly disagree	5

Missing: 14

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	,26	-,26	-,26	-,01
2	-,46	,61	,31	,07
3	-,36	,70	,85	-,74
4	-,98	-,59	1,06	,28
5	-,96	-,24	3,48	4,14

Variable: @9_AVST2 Increased distance govern/governed

Category	Marginal Frequency
1 Strongly agree	84
2 Partly agree	249
3 Neither nor	259
4 Partly disagree	116
5 Strongly disagree	35

Missing: 149

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	-,88	-1,52	,25	-,27
2	-,18	,01	-,65	-,03
3	,05	,43	,17	-,23
4	,34	,14	,47	,42
5	1,22	-,25	1,30	1,30

Variable: @9PENGM2 Care too much money/material abjects

Category	Marginal Frequency
1 Strongly agree	180
2 Partly agree	327
3 Neither nor	205
4 Partly disagree	87
5 Strongly disagree	47

Missing: 46

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	-,87	-1,17	-,12	-,23
2	-,12	,25	-,56	,54
3	,36	,43	,14	-,73
4	,41	,79	1,12	-,63
5	1,88	-,58	1,50	1,43

Variable: @9OLJOV2 New upper class of oil people

Category	Marginal Frequency
1 Strongly agree	167
2 Partly agree	313
3 Neither nor	176
4 Partly disagree	130
5 Strongly disagree	50

Missing: 56

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	-,72	-1,15	-,34	-,37
2	-,02	,24	-,55	,54
3	-,07	,16	,30	-,20
4	,50	,75	,79	-1,00
5	1,39	-,39	1,61	1,34

Variable: @9STOLT2 Reason to be proud

Category		Marginal Frequency
1	Strongly agree	333
2	Partly agree	337
3	Neither nor	169
4	Partly disagree	22
5	Strongly disagree	11
	Missing:	20

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	,84	-,52	-,31	,03
2	-,23	,46	-,02	-,32
3	-,86	,41	,33	,77
4	-1,22	-,87	1,36	-,54
5	-1,74	-2,62	2,23	-1,41

Variable: @9BEV2 Managed to preserve the best things

Category		Marginal Frequency
1	Strongly agree	179
2	Partly agree	289
3	Neither nor	214
4	Partly disagree	88
5	Strongly disagree	26
	Missing:	96

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	1,08	-,73	-,03	-,04
2	,11	,24	-,43	-,31
3	-,49	,25	,32	-,12
4	-,79	,41	,11	1,09
5	-1,42	-1,70	2,10	,25

Variable: @9UTSTD2 Pubs and restaurants positive

Category		Marginal Frequency
1	Strongly agree	360
2	Partly agree	249
3	Neither nor	151
4	Partly disagree	64
5	Strongly disagree	53
	Missing:	15

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	,67	-,29	-,04	-,17
2	-,19	,57	-,01	-,05
3	-,65	-,05	-,06	,51
4	-,56	,64	-,36	,22
5	-1,07	-1,11	,97	-,31

Hi-Res Chart # 5: Object scores

Hi-Res Chart # 6: Category quantifications

H O M A L S - VERSION 0.6
 BY
 DEPARTMENT OF DATA THEORY
 UNIVERSITY OF LEIDEN, THE NETHERLANDS

DATA FROM STAVANGER SURVEY - SAMPLE RESTRICTED TO RESPONDENTS HAVING LIVED
 ALL OR MOST OF THEIR LIVES IN STAVANGER

The number of observations used in the analysis = 511

List of Variables
 =====

Variable	Variable label	Number of Categories
@9OSTV.2	Stavanger on Eur. map	5
@9_AVST2	Increased distance govern/governed	5
@9PENGM2	Care too much money/material objects	5
@9OLJOV2	New upper class of oil people	5
@9STOLT2	Reason to be proud	5
@9BEV2	Managed to preserve the best things	5
@9UTSTD2	Pubs and restaurants positive	5

Marginal Frequencies
 =====

Variable	Missing	Categories				
		1	2	3	4	5
@9OSTV.2	10	347	123	19	9	3
@9_AVST2	60	58	156	146	71	20
@9PENGM2	20	114	187	115	49	26
@9OLJOV2	26	105	167	99	78	36
@9STOLT2	10	214	192	83	7	5
@9BEV2	32	126	171	118	49	15
@9UTSTD2	9	203	136	96	38	29

The iterative process stops because the maximum number of iterations is reached,
 the difference between last two iterations is ,0000166.

Dimension	Eigenvalue
1	,3008
2	,2939
3	,2395

4 ,2025

Discrimination measures per variable per dimension
 =====

Variable	Dimension			
	1	2	3	4
@9OSTV.2	,390	,043	,123	,035
@9_AVST2	,092	,305	,265	,138
@9PENGM2	,189	,658	,438	,394
@9OLJOV2	,182	,533	,301	,429
@9STOLT2	,564	,113	,212	,195
@9BEV2	,391	,174	,278	,114
@9UTSTD2	,297	,230	,059	,113

Hi-Res Chart # 7:Discrimination measures

Marginal Frequencies and Category Quantifications

Variable: @90STV.2 Stavanger on Eur. map

Category	Marginal Frequency
1 Strongly agree	347
2 Partly agree	123
3 Neither nor	19
4 Partly disagree	9
5 Strongly disagree	3
Missing:	10

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	-,41	,04	,17	-,06
2	,92	-,14	-,18	,19
3	1,13	-,59	-,72	,13
4	,07	1,18	-2,05	,15
5	2,07	-,04	-,49	-1,98

Variable: @9_AVST2 Increased distance govern/governed

Category	Marginal Frequency
1 Strongly agree	58
2 Partly agree	156
3 Neither nor	146
4 Partly disagree	71
5 Strongly disagree	20
Missing:	60

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	-,75	1,33	-,60	,49
2	,05	,21	,53	,00
3	,29	-,39	,12	,08
4	,10	-,44	-,64	-,09
5	-,18	-,73	-1,40	-1,66

Variable: @9PENGM2 Care too much money/material abjects

Category	Marginal Frequency
1 Strongly agree	114
2 Partly agree	187
3 Neither nor	115
4 Partly disagree	49
5 Strongly disagree	26
Missing:	20

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	-,48	1,28	-,30	,14
2	,18	,10	,66	-,40
3	,01	-,68	,09	,68
4	,89	-,90	-1,25	,60
5	-1,00	-1,47	-1,46	-1,96

Variable: @9OLJCV2 New upper class of oil people

Category	Marginal Frequency
1 Strongly agree	105
2 Partly agree	167
3 Neither nor	99
4 Partly disagree	78
5 Strongly disagree	36
Missing:	26

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	-,69	1,19	-,07	,26
2	,21	,03	,61	-,54
3	,19	-,09	-,02	,27
4	,47	-,96	-,58	1,03
5	-,67	-1,20	-1,35	-1,43

Variable: @9STOLT2 Reason to be proud

Category		Marginal Frequency
1	Strongly agree	214
2	Partly agree	192
3	Neither nor	83
4	Partly disagree	7
5	Strongly disagree	5

Missing: 10

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	-,86	-,29	,23	-,10
2	,55	,02	,11	,29
3	,92	,48	-,48	-,63
4	,14	,64	-1,71	2,61
5	-,41	1,88	-3,33	-,06

Variable: @9BEV2 Managed to preserve the best things

Category		Marginal Frequency
1	Strongly agree	126
2	Partly agree	171
3	Neither nor	118
4	Partly disagree	49
5	Strongly disagree	15

Missing: 32

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	-,94	-,53	-,17	,07
2	,00	-,06	,48	,30
3	,69	,27	-,14	-,05
4	,81	,38	,00	-,93
5	-,22	1,57	-2,53	-,05

Variable: @9UTSTD2 Pubs and restaurants positive

Category		Marginal Frequency
1	Strongly agree	203
2	Partly agree	136
3	Neither nor	96
4	Partly disagree	38
5	Strongly disagree	29

Missing: 9

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	-,63	-,47	,01	,26
2	,51	-,05	,18	-,08
3	,29	,64	-,22	-,56
4	,84	,23	,36	-,19
5	,05	1,04	-,75	,61

Hi-Res Chart # 8:Object scores

Hi-Res Chart # 9:Category quantifications

DATA FROM STAVANGER SURVEY - SAMPLE RESTRICTED TO RESPONDENTS HAVING LIVED
 IN THE STAVANGER AREA FOR SHORTER PERIODS OF THEIR LIVES

The number of observations used in the analysis = 378

List of Variables
 =====

Variable	Variable label	Number of Categories
@9OSTV.2	Stavanger on Eur. map	5
@9_AVST2	Increased distance govern/governed	5
@9PENGM2	Care too much money/material abjects	5
@9OLJOV2	New upper class of oil people	5
@9STOLT2	Reason to be proud	5
@9BEV2	Managed to preserve the best things	5
@9UTSTD2	Pubs and restaurants positive	5

Marginal Frequencies
 =====

Variable	Missing	Categories				
		1	2	3	4	5
@9OSTV.2	4	226	113	25	8	2
@9_AVST2	88	25	93	113	44	15
@9PENGM2	25	65	139	90	38	21
@9OLJOV2	29	62	144	77	52	14
@9STOLT2	10	118	143	86	15	6
@9BEV2	63	53	118	95	38	11
@9UTSTD2	6	157	112	53	26	24

The iterative process stops because the convergence has been reached in 48
 iteration(s).

Dimension	Eigenvalue
1	,3500
2	,3020
3	,2316

Discrimination measures per variable per dimension
 =====

Variable	Dimension			
	1	2	3	4
@9OSTV.2	,173	,176	,519	,139
@9_AVST2	,263	,214	,023	,134
@9PENGM2	,459	,353	,089	,303
@9OLJOV2	,259	,233	,387	,504
@9STOLT2	,564	,368	,225	,264
@9BEV2	,422	,371	,277	,175
@9UTSTD2	,310	,399	,102	,046

Hi-Res Chart # 10:Discrimination measures

Marginal Frequencies and Category Quantifications

Variable: @9OSTV.2 Stavanger on Eur. map

Category	Marginal Frequency
1 Strongly agree	226
2 Partly agree	113
3 Neither nor	25
4 Partly disagree	8
5 Strongly disagree	2

Missing: 4

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	-,34	-,12	-,15	-,02
2	,45	,32	,15	-,02
3	,51	,30	,08	,54
4	,87	-,06	-,02	-,19
5	1,45	-4,94	9,70	-4,74

Variable: @9_AVST2 Increased distance govern/governed

Category	Marginal Frequency
1 Strongly agree	25
2 Partly agree	93
3 Neither nor	113
4 Partly disagree	44
5 Strongly disagree	15

Missing: 88

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	1,41	-1,35	-,18	-,45
2	,22	,12	-,04	-,30
3	,01	,36	-,11	,42
4	-,42	-,03	-,03	-,47
5	-1,57	-1,13	,64	,69

Variable: @9PENGM2 Care too much money/material abjects

Category	Marginal Frequency
1 Strongly agree	65
2 Partly agree	139
3 Neither nor	90
4 Partly disagree	38
5 Strongly disagree	21

Missing: 25

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	1,15	-,92	-,42	,22
2	,02	,35	-,09	-,68
3	-,19	,41	,01	,55
4	-,66	,28	,69	,65
5	-1,78	-1,44	,37	,41

Variable: @90LJOV2 New upper class of oil people

Category	Marginal Frequency
1 Strongly agree	62
2 Partly agree	144
3 Neither nor	77
4 Partly disagree	52
5 Strongly disagree	14

Missing: 29

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	1,01	-,71	-,63	,42
2	-,11	,21	-,05	-,86
3	,05	,13	-,12	,52
4	-,51	,44	,40	1,00
5	-1,18	-1,66	2,82	,30

Variable: @9STOLT2 Reason to be proud

Category		Marginal Frequency
1	Strongly agree	118
2	Partly agree	143
3	Neither nor	86
4	Partly disagree	15
5	Strongly disagree	6

Missing: 10

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	-,93	-,52	-,55	-,14
2	,06	,42	,54	,38
3	,73	,42	,08	-,74
4	1,41	-,91	-,50	,68
5	2,38	-3,02	-,73	1,91

Variable: @9BEV2 Managed to preserve the best things

Category		Marginal Frequency
1	Strongly agree	53
2	Partly agree	118
3	Neither nor	95
4	Partly disagree	38
5	Strongly disagree	11

Missing: 63

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	-1,22	-,98	-,99	-,31
2	-,22	,29	,26	,05
3	,36	,07	,08	,61
4	,77	,59	-,35	-,71
5	1,90	-2,44	1,89	-,74

Variable: @9UTSTD2 Pubs and restaurants positive

Category		Marginal Frequency
1	Strongly agree	157
2	Partly agree	112
3	Neither nor	53
4	Partly disagree	26
5	Strongly disagree	24

Missing: 6

Category Quantifications

Category	Dimensions			
	1	2	3	4
1	-,56	-,44	-,05	-,18
2	,08	,60	,29	,17
3	,57	,46	-,62	-,06
4	,32	,74	,59	-,13
5	1,41	-1,51	,03	,59

Hi-Res Chart # 11: Object scores

Hi-Res Chart # 12: Category quantifications

Tables D1-D7

Tables E1-E7

Tables F1-F7

Tables G1-G7

Table D1:

09STOLT2 Reason to be proud by GENERASJ GENERATION

		GENERASJ				Page 1 of 1
Count	Row Pct	Born - 1	Born 194	Born 195	Born 196	Row
Col Pct	Col Pct	945	6-55	6-65	6-	Total
Tot Pct	Tot Pct	1,00	2,00	3,00	4,00	
09STOLT2						
1						323
Strongly agree	24,8	61	18,9	27,6	28,8	38,7
	45,7	33,7	33,1	44,5		
	9,6	7,3	10,7	11,2		
2						320
Partly agree	20,0	81	25,3	31,9	22,8	38,4
	36,6	44,8	37,9	34,9		
	7,7	9,7	12,2	8,8		
3						160
Neither nor	14,4	35	21,9	41,9	21,9	19,2
	13,1	19,3	24,9	16,7		
	2,8	4,2	8,0	4,2		
4						20
Partly disagree	25,0	4	20,0	30,0	25,0	2,4
	2,9	2,2	2,2	2,4		
	,6	,5	,7	,6		
5						11
Strongly disagree	27,3		45,5	27,3		1,3
	1,7		1,9	1,4		
	,4		,6	,4		
Column		175	181	269	209	834
Total		21,0	21,7	32,3	25,1	100,0

Chi-Square	Value	DF	Significance
Pearson	22,11560	12	,03624
Likelihood Ratio	24,34762	12	,01824
Mantel-Haenszel test for linear association	,54238	1	,46145

Minimum Expected Frequency - 2,308
Cells with Expected Frequency < 5 - 6 OF 20 (30,0%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,16284			,03624 *1
Cramer's V	,09402			,03624 *1

*1 Pearson chi-square probability

Number of Missing Observations: 70

Table D2:

09BEV2 Managed to preserve the best things by GENERASJ GENERATION

		GENERASJ				Page 1 of 1
Count	Row Pct	Born - 1	Born 194	Born 195	Born 196	Row
Col Pct	Col Pct	945	6-55	6-65	6-	Total
Tot Pct	Tot Pct	1,00	2,00	3,00	4,00	
09BEV2						
1						169
Strongly agree	25,4	43	23,7	40	26,6	22,1
	25,0	23,5	17,9	24,0		
	5,6	5,2	5,9	5,4		
2						277
Partly agree	18,4	51	22,0	61	34,7	36,3
	29,7	35,9	38,2	40,4		
	6,7	8,0	12,6	9,0		
3						207
Neither nor	24,6	51	19,8	41	35,7	19,8
	29,7	24,1	29,5	24,0		
	6,7	5,4	9,7	5,4		
4						85
Partly disagree	21,2	18	27,1	23	30,6	11,1
	10,5	13,5	10,4	10,5		
	2,4	3,0	3,4	2,4		
5						26
Strongly disagree	34,6	9	19,2	5	10	7,7
	5,2	2,9	4,0	1,2		3,4
	1,2	,7	1,3	,3		
Column		172	170	251	171	764
Total		22,5	22,3	32,9	22,4	100,0

Chi-Square	Value	DF	Significance
Pearson	14,00376	12	,30047
Likelihood Ratio	14,79030	12	,25311
Mantel-Haenszel test for linear association	1,16784	1	,27985

Minimum Expected Frequency - 5,785

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,13539			,30047 *1
Cramer's V	,07817			,30047 *1

*1 Pearson chi-square probability

Number of Missing Observations: 140

Table D3:

@9UTSTD2 Pubs and restaurants positive by GENERASJ GENERATION

Page 1 of 1

		GENERASJ				
Count	Row Pct	Born - 1	Born 194	Born 195	Born 196	Row Total
Col Pct	Col Pct	945	6-55	6-65	6-	
Tot Pct	Tot Pct	1,00	2,00	3,00	4,00	
@9UTSTD2						
1		37	69	128	111	345
Strongly agree		10,7	20,0	37,1	32,2	41,1
		21,4	37,7	46,9	52,6	
		4,4	8,2	15,2	13,2	
2		38	49	91	62	240
Partly agree		15,8	20,4	37,9	25,8	28,6
		22,0	26,8	33,3	29,4	
		4,5	5,8	10,8	7,4	
3		48	37	36	23	144
Neither nor		33,3	25,7	25,0	16,0	17,1
		27,7	20,2	13,2	10,9	
		5,7	4,4	4,3	2,7	
4		26	15	10	11	62
Partly disagree		41,9	24,2	16,1	17,7	7,4
		15,0	8,2	3,7	5,2	
		3,1	1,8	1,2	1,3	
5		24	13	8	4	49
Strongly disagree		49,0	26,5	16,3	8,2	5,8
		13,9	7,1	2,9	1,9	
		2,9	1,5	1,0	,5	
Column		173	183	273	211	840
Total		20,6	21,8	32,5	25,1	100,0

Chi-Square	Value	DF	Significance
Pearson	100,17449	12	,00000
Likelihood Ratio	97,82705	12	,00000
Mantel-Haenszel test for linear association	82,93945	1	,00000

Minimum Expected Frequency - 10,092

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,34533			,00000 *1
Cramer's V	,19938			,00000 *1

*1 Pearson chi-square probability

Number of Missing Observations: 64

Table D4:

@9OSTV.2 Stavanger on Eur. map by GENERASJ GENERATION

Page 1 of 1

		GENERASJ				
Count	Row Pct	Born - 1	Born 194	Born 195	Born 196	Row Total
Col Pct	Col Pct	945	6-55	6-65	6-	
Tot Pct	Tot Pct	1,00	2,00	3,00	4,00	
@9OSTV.2						
1		136	126	157	138	557
Strongly agree		24,4	22,6	28,2	24,8	66,3
		77,7	68,9	57,5	66,0	
		16,2	15,0	18,7	16,4	
2		32	48	89	53	222
Partly agree		14,4	21,6	40,1	23,9	26,4
		18,3	26,2	32,6	25,4	
		3,8	5,7	10,6	6,3	
3		4	8	17	12	41
Neither nor		9,8	19,5	41,5	29,3	4,9
		2,3	4,4	6,2	5,7	
		,5	1,0	2,0	1,4	
4		3	1	8	4	16
Partly disagree		18,8	6,3	50,0	25,0	1,9
		1,7	,5	2,9	1,9	
		,4	,1	1,0	,5	
5				2	2	4
Strongly disagree				50,0	50,0	,5
				,7	1,0	
				,2	,2	
Column		175	183	273	209	840
Total		20,8	21,8	32,5	24,9	100,0

Chi-Square	Value	DF	Significance
Pearson	25,47374	12	,01273
Likelihood Ratio	28,11398	12	,00532
Mantel-Haenszel test for linear association	10,96092	1	,00093

Minimum Expected Frequency - ,833
Cells with Expected Frequency < 5 - 7 OF 20 (35,0%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,17414			,01273 *1
Cramer's V	,10054			,01273 *1

*1 Pearson chi-square probability

Number of Missing Observations: 64

Table D5:

@9PENEM2 Care too much money/material abjects by GENERASJ GENERATION

Page 1 of 1

	Count Row Pct Col Pct Tot Pct	GENERASJ				Row Total
		Born - 1 945	Born 194 6-55	Born 195 6-65	Born 196 6-	
		1,00	2,00	3,00	4,00	
1 Strongly agree	57 32,4 32,6 7,0	46 26,1 26,0 5,7	41 23,3 15,4 5,1	32 18,2 16,7 3,9	176 21,7	
2 Partly agree	66 21,0 37,7 8,1	72 22,9 40,7 8,9	110 34,9 41,2 13,6	67 21,3 34,9 8,3	315 38,8	
3 Neither nor	35 18,2 20,0 4,3	35 18,2 19,8 4,3	62 32,3 23,2 7,6	60 31,3 31,3 7,4	192 23,7	
4 Partly disagree	11 13,3 6,3 1,4	12 14,5 6,8 1,5	38 45,8 14,2 4,7	22 26,5 11,5 2,7	83 10,2	
5 Strongly disagree	6 13,3 3,4 ,7	12 26,7 6,8 1,5	16 35,6 6,0 2,0	11 24,4 5,7 1,4	45 5,5	
Column Total	175 21,6	177 21,8	267 32,9	192 23,7	811 100,0	

Chi-Square	Value	DF	Significance
Pearson	37,58740	12	,00018
Likelihood Ratio	37,12888	12	,00021
Mantel-Haenszel test for linear association	20,21294	1	,00001

Minimum Expected Frequency - 9,710

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,21528			,00018 *1
Cramer's V	,12429			,00018 *1

*1 Pearson chi-square probability

Number of Missing Observations: 93

Table D6:

@9OLJOV2 New upper class of oil people by GENERASJ GENERATION

Page 1 of 1

	Count Row Pct Col Pct Tot Pct	GENERASJ				Row Total
		Born - 1 945	Born 194 6-55	Born 195 6-65	Born 196 6-	
		1,00	2,00	3,00	4,00	
1 Strongly agree	46 28,6 26,3 5,8	36 22,4 20,7 4,5	45 28,0 17,1 5,6	34 21,1 18,3 4,3	161 20,2	
2 Partly agree	67 22,0 38,3 8,4	70 23,0 40,2 8,8	101 33,1 38,4 12,7	67 22,0 36,0 8,4	305 38,2	
3 Neither nor	33 19,9 18,9 4,1	34 20,5 19,5 4,3	57 34,3 21,7 7,1	42 25,3 22,6 5,3	166 20,8	
4 Partly disagree	20 16,5 11,4 2,5	23 19,0 13,2 2,9	46 38,0 17,5 5,8	32 26,4 17,2 4,0	121 15,2	
5 Strongly disagree	9 20,0 5,1 1,1	11 24,4 6,3 1,4	14 31,1 5,3 1,8	11 24,4 5,9 1,4	45 5,6	
Column Total	175 21,9	174 21,8	263 33,0	186 23,3	798 100,0	

Chi-Square	Value	DF	Significance
Pearson	9,85511	12	,62867
Likelihood Ratio	9,75602	12	,63736
Mantel-Haenszel test for linear association	5,63001	1	,01766

Minimum Expected Frequency - 9,812

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,11113			,62867 *1
Cramer's V	,06416			,62867 *1

*1 Pearson chi-square probability

Number of Missing Observations: 106

Table D7:

@9_AVST2 Increased distance govern/governed by GENERASJ GENERATION

Page 1 of 1

Count	GENERASJ				Row Total
	Born - 1945	Born 1946-55	Born 1956-65	Born 1966-	
Row Pct	1,00	2,00	3,00	4,00	
Col Pct					
Tot Pct					
@9_AVST2					
1 Strongly agree	35 43,2 21,2 4,9	20 24,7 12,4 2,8	14 17,3 5,9 2,0	12 14,8 7,8 1,7	81 11,3
2 Partly agree	56 23,3 33,9 7,8	58 24,2 36,0 8,1	79 32,9 33,3 11,0	47 19,6 30,7 6,6	240 33,5
3 Neither nor	48 19,2 29,1 6,7	48 19,2 29,8 6,7	89 35,6 37,6 12,4	65 26,0 42,5 9,1	250 34,9
4 Partly disagree	18 16,1 10,9 2,5	30 26,8 18,6 4,2	41 36,6 17,3 5,7	23 20,5 15,0 3,2	112 15,6
5 Strongly disagree	8 24,2 4,8 1,1	5 15,2 3,1 ,7	14 42,4 5,9 2,0	6 18,2 3,9 ,8	33 4,6
Column Total	165 23,0	161 22,5	237 33,1	153 21,4	716 100,0

Chi-Square	Value	DF	Significance
Pearson	34,24401	12	,00062
Likelihood Ratio	33,03180	12	,00096
Mantel-Haenszel test for linear association	11,95818	1	,00054

Minimum Expected Frequency - 7,052

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,21869			,00062 *1
Cramer's V	,12626			,00062 *1

*1 Pearson chi-square probability

Number of Missing Observations: 188

SIDDIS ONLY

Table E1:

@9STOLM2 Reason to be proud by GENERASJ GENERATION

Page 1 of 1

	Count Row Pct Col Pct Tot Pct	GENERASJ				Row Total
		Born - 1 945	Born 194 6-55	Born 195 6-65	Born 196 6-	
@9STOLM2		1,00	2,00	3,00	4,00	
1 Strongly agree	66 32,0 47,8 14,0	39 18,9 35,5 8,3	49 23,8 39,8 10,4	52 25,2 52,5 11,1	206 43,8	
2 Partly agree	53 29,8 38,4 11,3	49 27,5 44,5 10,4	47 26,4 38,2 10,0	29 16,3 29,3 6,2	178 37,9	
3 Neither nor	15 20,0 10,9 3,2	21 28,0 19,1 4,5	23 30,7 18,7 4,9	16 21,3 16,2 3,4	75 16,0	
4 Partly disagree	2 33,3 1,4 ,4	1 16,7 ,9 ,2	2 33,3 1,6 ,4	1 16,7 1,0 ,2	6 1,3	
5 Strongly disagree	2 40,0 1,4 ,4		2 40,0 1,6 ,4	1 20,0 1,0 ,2	5 1,1	
Column Total	138 29,4	110 23,4	123 26,2	99 21,1	470 100,0	

Chi-Square	Value	DF	Significance
Pearson	13,19988	12	,35468
Likelihood Ratio	14,63503	12	,26200
Mantel-Haenszel test for linear association	,02989	1	,86275

Minimum Expected Frequency - 1,053
Cells with Expected Frequency < 5 - 8 OF 20 (40,0%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,16759			,35468 *1
Cramer's V	,09676			,35468 *1

*1 Pearson chi-square probability

Number of Missing Observations: 44

Table E2:

@9BEV2 Managed to preserve the best things by GENERASJ GENERATION

Page 1 of 1

	Count Row Pct Col Pct Tot Pct	GENERASJ				Row Total
		Born - 1 945	Born 194 6-55	Born 195 6-65	Born 196 6-	
@9BEV2		1,00	2,00	3,00	4,00	
1 Strongly agree	38 32,2 27,7 8,4	28 23,7 26,7 6,2	26 22,0 22,0 5,8	26 22,0 28,3 5,8	118 26,1	
2 Partly agree	40 25,0 29,2 8,8	39 24,4 37,1 8,6	48 30,0 40,7 10,6	33 20,6 35,9 7,3	160 35,4	
3 Neither nor	39 34,8 28,5 8,6	20 17,9 19,0 4,4	30 26,8 25,4 6,6	23 20,5 25,0 5,1	112 24,8	
4 Partly disagree	14 29,8 10,2 3,1	15 31,9 14,3 3,3	9 19,1 7,6 2,0	9 19,1 9,8 2,0	47 10,4	
5 Strongly disagree	6 40,0 4,4 1,3	3 20,0 2,9 ,7	5 33,3 4,2 1,1	1 6,7 1,1 ,2	15 3,3	
Column Total	137 30,3	105 23,2	118 26,1	92 20,4	452 100,0	

Chi-Square	Value	DF	Significance
Pearson	10,39270	12	,58155
Likelihood Ratio	10,92429	12	,53542
Mantel-Haenszel test for linear association	,79310	1	,37317

Minimum Expected Frequency - 3,053
Cells with Expected Frequency < 5 - 4 OF 20 (20,0%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,15163			,58155 *1
Cramer's V	,08755			,58155 *1

*1 Pearson chi-square probability

Number of Missing Observations: 62

Table E3:

@9UTSID2 Pubs and restaurants positive by GENERASJ GENERATION

Page 1 of 1

		GENERASJ				
Count		Born - 1	Born 194	Born 195	Born 196	
Row Pct	Col Pct	945	6-55	6-65	6-	4,00
Tot Pct		1,00	2,00	3,00	4,00	Row Total
@9UTSID2	1	29	44	61	58	192
	Strongly agree	15,1	22,9	31,8	30,2	40,7
		21,3	40,0	48,8	57,4	
		6,1	9,3	12,9	12,3	
2	30	30	41	27	128	
Partly agree	23,4	23,4	32,0	21,1	27,1	
	22,1	27,3	32,8	26,7		
	6,4	6,4	8,7	5,7		
3	42	24	14	10	90	
Neither nor	46,7	26,7	15,6	11,1	19,1	
	30,9	21,8	11,2	9,9		
	8,9	5,1	3,0	2,1		
4	19	6	7	4	36	
Partly disagree	52,8	16,7	19,4	11,1	7,6	
	14,0	5,5	5,6	4,0		
	4,0	1,3	1,5	,8		
5	16	6	2	2	26	
Strongly disagree	61,5	23,1	7,7	7,7	5,5	
	11,8	5,5	1,6	2,0		
	3,4	1,3	,4	,4		
Column		136	110	125	101	472
Total		28,8	23,3	26,5	21,4	100,0

Chi-Square	Value	DF	Significance
Pearson	68,93002	12	,00000
Likelihood Ratio	69,53927	12	,00000
Mantel-Haenszel test for linear association	55,72159	1	,00000
Minimum Expected Frequency -	5,564		

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,38215			,00000 *1
Cramer's V	,22063			,00000 *1

*1 Pearson chi-square probability

Number of Missing Observations: 42

Table E4:

@9OSTV.2 Stavanger on Eur. map by GENERASJ GENERATION

Page 1 of 1

		GENERASJ				
Count		Born - 1	Born 194	Born 195	Born 196	
Row Pct	Col Pct	945	6-55	6-65	6-	4,00
Tot Pct		1,00	2,00	3,00	4,00	Row Total
@9OSTV.2	1	109	74	77	72	332
	Strongly agree	32,8	22,3	23,2	21,7	70,6
		79,0	67,3	62,1	73,5	
		23,2	15,7	16,4	15,3	
2	24	30	37	20	111	
Partly agree	21,6	27,0	33,3	18,0	23,6	
	17,4	27,3	29,8	20,4		
	5,1	6,4	7,9	4,3		
3	3	5	5	3	16	
Neither nor	18,8	31,3	31,3	18,8	3,4	
	2,2	4,5	4,0	3,1		
	,6	1,1	1,1	,6		
4	2	1	5	1	9	
Partly disagree	22,2	11,1	55,6	11,1	1,9	
	1,4	,9	4,0	1,0		
	,4	,2	1,1	,2		
5				2	2	
Strongly disagree				100,0	,4	
				2,0		
				,4		
Column		138	110	124	98	470
Total		29,4	23,4	26,4	20,9	100,0

Chi-Square	Value	DF	Significance
Pearson	21,13026	12	,04851
Likelihood Ratio	19,45552	12	,07811
Mantel-Haenszel test for linear association	3,51789	1	,06071

Minimum Expected Frequency - ,417
 Cells with Expected Frequency < 5 - 12 OF 20 (60,0%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,21203			,04851 *1
Cramer's V	,12242			,04851 *1

*1 Pearson chi-square probability

Number of Missing Observations: 44

Table E5:

@9PENGM2 Care too much money/material objects by GENERASJ GENERATION

Page 1 of 1

Count	GENERASJ				Row Total
	Born - 1	Born 194	Born 195	Born 196	
	945	6-55	6-65	6-	
Row Pct	Col Pct	Col Pct	Col Pct	Col Pct	Row Pct
Tot Pct	1,00	2,00	3,00	4,00	Total
1	47	29	15	19	110
Strongly agree	42,7	26,4	13,6	17,3	23,8
	33,8	26,9	12,4	20,0	
	10,2	6,3	3,2	4,1	
2	53	43	48	33	177
Partly agree	29,9	24,3	27,1	18,6	38,2
	38,1	39,8	39,7	34,7	
	11,4	9,3	10,4	7,1	
3	27	22	28	29	106
Neither nor	25,5	20,8	26,4	27,4	22,9
	19,4	20,4	23,1	30,5	
	5,8	4,8	6,0	6,3	
4	7	7	19	12	45
Partly disagree	15,6	15,6	42,2	26,7	9,7
	5,0	6,5	15,7	12,6	
	1,5	1,5	4,1	2,6	
5	5	7	11	2	25
Strongly disagree	20,0	28,0	44,0	8,0	5,4
	3,6	6,5	9,1	2,1	
	1,1	1,5	2,4	,4	
Column	139	108	121	95	463
Total	30,0	23,3	26,1	20,5	100,0

Chi-Square	Value	DF	Significance
Pearson	33,00161	12	,00097
Likelihood Ratio	33,76721	12	,00073
Mantel-Haenszel test for linear association	12,86070	1	,00034

Minimum Expected Frequency - 5,130

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,26698			,00097 *1
Cramer's V	,15414			,00097 *1

*1 Pearson chi-square probability

Number of Missing Observations: 51

Table E6:

@9OLJOV2 New upper class of oil people by GENERASJ GENERATION

Page 1 of 1

Count	GENERASJ				Row Total
	Born - 1	Born 194	Born 195	Born 196	
	945	6-55	6-65	6-	
Row Pct	Col Pct	Col Pct	Col Pct	Col Pct	Row Pct
Tot Pct	1,00	2,00	3,00	4,00	Total
1	37	24	20	18	99
Strongly agree	37,4	24,2	20,2	18,2	21,8
	26,6	22,9	16,8	19,8	
	8,1	5,3	4,4	4,0	
2	55	40	39	27	161
Partly agree	34,2	24,8	24,2	16,8	35,5
	39,6	38,1	32,8	29,7	
	12,1	8,8	8,6	5,9	
3	24	19	26	21	90
Neither nor	26,7	21,1	28,9	23,3	19,8
	17,3	18,1	21,8	23,1	
	5,3	4,2	5,7	4,6	
4	15	14	25	18	72
Partly disagree	20,8	19,4	34,7	25,0	15,9
	10,8	13,3	21,0	19,8	
	3,3	3,1	5,5	4,0	
5	8	8	9	7	32
Strongly disagree	25,0	25,0	28,1	21,9	7,0
	5,8	7,6	7,6	7,7	
	1,8	1,8	2,0	1,5	
Column	139	105	119	91	454
Total	30,6	23,1	26,2	20,0	100,0

Chi-Square	Value	DF	Significance
Pearson	12,40489	12	,41373
Likelihood Ratio	12,53093	12	,40404
Mantel-Haenszel test for linear association	7,85203	1	,00508

Minimum Expected Frequency - 6,414

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,16530			,41373 *1
Cramer's V	,09544			,41373 *1

*1 Pearson chi-square probability

Number of Missing Observations: 60

Table E7:

@9_AVST2 Increased distance govern/governed by GENERASJ GENERATION

GENERASJ Page 1 of 1

Count	Row Pct	GENERASJ				Row Total
		Born - 1945	Born 1946-55	Born 1956-65	Born 1966-	
Col Pct		1,00	2,00	3,00	4,00	
Tot Pct						
1		28	12	5	10	55
Strongly agree		50,9	21,8	9,1	18,2	12,8
		21,5	11,9	4,5	11,6	
		6,5	2,8	1,2	2,3	
2		49	34	38	28	149
Partly agree		32,9	22,8	25,5	18,8	34,7
		37,7	33,7	33,9	32,6	
		11,4	7,9	8,9	6,5	
3		35	31	41	32	139
Neither nor		25,2	22,3	29,5	23,0	32,4
		26,9	30,7	36,6	37,2	
		8,2	7,2	9,6	7,5	
4		13	21	21	13	68
Partly disagree		19,1	30,9	30,9	19,1	15,9
		10,0	20,8	18,8	15,1	
		3,0	4,9	4,9	3,0	
5		5	3	7	3	18
Strongly disagree		27,8	16,7	38,9	16,7	4,2
		3,8	3,0	6,3	3,5	
		1,2	,7	1,6	,7	
Column		130	101	112	86	429
Total		30,3	23,5	26,1	20,0	100,0

Chi-Square	Value	DF	Significance
Pearson	23,60563	12	,02300
Likelihood Ratio	24,52992	12	,01721
Mantel-Haenszel test for linear association	7,90619	1	,00493

Minimum Expected Frequency - 3,608
 Cells with Expected Frequency < 5 - 3 OF 20 (15,0%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,23457			,02300 *1
Cramer's V	,13543			,02300 *1

*1 Pearson chi-square probability

Number of Missing Observations: 85

CROSTABLES TO TABLE 9.6

SAMPLE OF SHORTTERM STAVANGER RESIDENTS/NEWCOMERS

Table F1:

@9STOLT2 Reason to be proud by GENERASJ GENERATION

		GENERASJ				Page 1 of 1
Count	Row Pct	Born - 1	Born 194	Born 195	Born 196	Row
Col Pct	Tot Pct	945	6-55	6-65	6-	Total
		1,00	2,00	3,00	4,00	
@9STOLT2						
1		14	22	40	40	116
Strongly agree		12,1	19,0	34,5	34,5	32,1
		38,9	31,4	27,4	36,7	
		3,9	6,1	11,1	11,1	
2		10	31	55	44	140
Partly agree		7,1	22,1	39,3	31,4	38,8
		27,8	44,3	37,7	40,4	
		2,8	8,6	15,2	12,2	
3		8	14	44	19	85
Neither nor		9,4	16,5	51,8	22,4	23,5
		22,2	20,0	30,1	17,4	
		2,2	3,9	12,2	5,3	
4		3	3	4	4	14
Partly disagree		21,4	21,4	28,6	28,6	3,9
		8,3	4,3	2,7	3,7	
		,8	,8	1,1	1,1	
5		1		3	2	6
Strongly disagree		16,7		50,0	33,3	1,7
		2,8		2,1	1,8	
		,3		,8	,6	
Column		36	70	146	109	361
Total		10,0	19,4	40,4	30,2	100,0

Chi-Square	Value	DF	Significance
Pearson	12,82171	12	,38213
Likelihood Ratio	13,58677	12	,32787
Mantel-Haenszel test for linear association	,33607	1	,56211

Minimum Expected Frequency - ,598
 Cells with Expected Frequency < 5 - 7 OF 20 (35,0%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,18846			,38213 *1
Cramer's V	,10881			,38213 *1

*1 Pearson chi-square probability

Number of Missing Observations: 26

Table F2:

@9BEV2 Managed to preserve the best things by GENERASJ GENERATION

		GENERASJ				Page 1 of 1
Count	Row Pct	Born - 1	Born 194	Born 195	Born 196	Row
Col Pct	Tot Pct	945	6-55	6-65	6-	Total
		1,00	2,00	3,00	4,00	
@9BEV2						
1		5	12	19	15	51
Strongly agree		9,8	23,5	37,3	29,4	16,5
		14,7	18,5	14,3	19,2	
		1,6	3,9	6,1	4,8	
2		11	22	48	36	117
Partly agree		9,4	18,8	41,0	30,8	37,7
		32,4	33,8	36,1	46,2	
		3,5	7,1	15,5	11,6	
3		12	21	44	17	94
Neither nor		12,8	22,3	46,8	18,1	30,3
		35,3	32,3	33,1	21,8	
		3,9	6,8	14,2	5,5	
4		3	8	17	9	37
Partly disagree		8,1	21,6	45,9	24,3	11,9
		8,8	12,3	12,8	11,5	
		1,0	2,6	5,5	2,9	
5		3	2	5	1	11
Strongly disagree		27,3	18,2	45,5	9,1	3,5
		8,8	3,1	3,8	1,3	
		1,0	,6	1,6	,3	
Column		34	65	133	78	310
Total		11,0	21,0	42,9	25,2	100,0

Chi-Square	Value	DF	Significance
Pearson	9,84233	12	,62979
Likelihood Ratio	9,55343	12	,65507
Mantel-Haenszel test for linear association	2,31569	1	,12807

Minimum Expected Frequency - 1,206
 Cells with Expected Frequency < 5 - 5 OF 20 (25,0%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,17818			,62979 *1
Cramer's V	,10287			,62979 *1

*1 Pearson chi-square probability

Number of Missing Observations: 77

Table F3:

@9UTSTD2 Pubs and restaurants positive by GENERASJ GENERATION

Page 1 of 1

	Count	GENERASJ				Row Total
		Born - 1 945	Born 194 6-55	Born 195 6-65	Born 196 6-	
Row Pct	Col Pct	1,00	2,00	3,00	4,00	
@9UTSTD2						
1 Strongly agree	8	25	67	53	153	41,9
	5,2	16,3	43,8	34,6		
	22,2	34,7	45,3	48,6		
	2,2	6,8	18,4	14,5		
2 Partly agree	8	19	50	34	111	30,4
	7,2	17,1	45,0	30,6		
	22,2	26,4	33,8	31,2		
	2,2	5,2	13,7	9,3		
3 Neither nor	5	12	22	13	52	14,2
	9,6	23,1	42,3	25,0		
	13,9	16,7	14,9	11,9		
	1,4	3,3	6,0	3,6		
4 Partly disagree	7	9	3	7	26	7,1
	26,9	34,6	11,5	26,9		
	19,4	12,5	2,0	6,4		
	1,9	2,5	,8	1,9		
5 Strongly disagree	8	7	6	2	23	6,3
	34,8	30,4	26,1	8,7		
	22,2	9,7	4,1	1,8		
	2,2	1,9	1,6	,5		
Column Total	36	72	148	109	365	
Row Total	9,9	19,7	40,5	29,9	100,0	

Chi-Square	Value	DF	Significance
Pearson	44,81107	12	,00001
Likelihood Ratio	40,26087	12	,00007
Mantel-Haenszel test for linear association	28,60458	1	,00000

Minimum Expected Frequency - 2,268
 Cells with Expected Frequency < 5 - 3 OF 20 (15,0%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,35039			,00001 *1
Cramer's V	,20230			,00001 *1

*1 Pearson chi-square probability

Number of Missing Observations: 22

Table F4:

@9OSTV.2 Stavanger on Eur. map by GENERASJ GENERATION

Page 1 of 1

	Count	GENERASJ				Row Total
		Born - 1 945	Born 194 6-55	Born 195 6-65	Born 196 6-	
Row Pct	Col Pct	1,00	2,00	3,00	4,00	
@9OSTV.2						
1 Strongly agree	26	51	80	65	222	60,5
	11,7	23,0	36,0	29,3		
	72,2	70,8	53,7	59,1		
	7,1	13,9	21,8	17,7		
2 Partly agree	8	18	52	33	111	30,2
	7,2	16,2	46,8	29,7		
	22,2	25,0	34,9	30,0		
	2,2	4,9	14,2	9,0		
3 Neither nor	1	3	12	9	25	6,8
	4,0	12,0	48,0	36,0		
	2,8	4,2	8,1	8,2		
	,3	,8	3,3	2,5		
4 Partly disagree	1		3	3	7	1,9
	14,3		42,9	42,9		
	2,8		2,0	2,7		
	,3		,8	,8		
5 Strongly disagree			2		2	,5
			100,0			
			1,3			
			,5			
Column Total	36	72	149	110	367	
Row Total	9,8	19,6	40,6	30,0	100,0	

Chi-Square	Value	DF	Significance
Pearson	12,83605	12	,38107
Likelihood Ratio	15,15759	12	,23293
Mantel-Haenszel test for linear association	4,15974	1	,04140

Minimum Expected Frequency - ,196
 Cells with Expected Frequency < 5 - 10 OF 20 (50,0%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,18702			,38107 *1
Cramer's V	,10797			,38107 *1

*1 Pearson chi-square probability

Number of Missing Observations: 20

Table F5:

@9PENGM2 Care too much money/material objects by GENERASJ GENERATION

Page 1 of 1

Count	GENERASJ				Row Total
	Born - 1945	Born 1946-55	Born 1956-65	Born 1966-	
	1,00	2,00	3,00	4,00	
1	9	17	26	13	65
Strongly agree	13,8	26,2	40,0	20,0	18,8
	25,7	24,6	17,8	13,5	
	2,6	4,9	7,5	3,8	
2	13	29	62	33	137
Partly agree	9,5	21,2	45,3	24,1	39,6
	37,1	42,0	42,5	34,4	
	3,8	8,4	17,9	9,5	
3	8	13	34	31	86
Neither nor	9,3	15,1	39,5	36,0	24,9
	22,9	18,8	23,3	32,3	
	2,3	3,8	9,8	9,0	
4	4	5	19	10	38
Partly disagree	10,5	13,2	50,0	26,3	11,0
	11,4	7,2	13,0	10,4	
	1,2	1,4	5,5	2,9	
5	1	5	5	9	20
Strongly disagree	5,0	25,0	25,0	45,0	5,8
	2,9	7,2	3,4	9,4	
	,3	1,4	1,4	2,6	
Column Total	35	69	146	96	346
	10,1	19,9	42,2	27,7	100,0

Chi-Square	Value	DF	Significance
Pearson	13,87472	12	,30878
Likelihood Ratio	13,84628	12	,31063
Mantel-Haenszel test for linear association	5,29372	1	,02140
Minimum Expected Frequency -	2,023		
Cells with Expected Frequency < 5 -	3 OF	20 (15,0%)	

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,20025			,30878 *1
Cramer's V	,11561			,30878 *1

*1 Pearson chi-square probability

Number of Missing Observations: 41

Table F6:

@9OLJOV2 New upper class of oil people by GENERASJ GENERATION

Page 1 of 1

Count	GENERASJ				Row Total
	Born - 1945	Born 1946-55	Born 1956-65	Born 1966-	
	1,00	2,00	3,00	4,00	
1	9	12	25	16	62
Strongly agree	14,5	19,4	40,3	25,8	18,1
	25,7	17,4	17,4	17,0	
	2,6	3,5	7,3	4,7	
2	11	30	62	39	142
Partly agree	7,7	21,1	43,7	27,5	41,5
	31,4	43,5	43,1	41,5	
	3,2	8,8	18,1	11,4	
3	9	15	31	21	76
Neither nor	11,8	19,7	40,8	27,6	22,2
	25,7	21,7	21,5	22,3	
	2,6	4,4	9,1	6,1	
4	5	9	21	14	49
Partly disagree	10,2	18,4	42,9	28,6	14,3
	14,3	13,0	14,6	14,9	
	1,5	2,6	6,1	4,1	
5	1	3	5	4	13
Strongly disagree	7,7	23,1	38,5	30,8	3,8
	2,9	4,3	3,5	4,3	
	,3	,9	1,5	1,2	
Column Total	35	69	144	94	342
	10,2	20,2	42,1	27,5	100,0

Chi-Square	Value	DF	Significance
Pearson	2,81247	12	,99673
Likelihood Ratio	2,76126	12	,99701
Mantel-Haenszel test for linear association	,23489	1	,62792
Minimum Expected Frequency -	1,330		
Cells with Expected Frequency < 5 -	3 OF	20 (15,0%)	

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,09068			,99673 *1
Cramer's V	,05236			,99673 *1

*1 Pearson chi-square probability

Number of Missing Observations: 45

Table F7:

@9_AVST2 Increased distance govern/governed by GENERASJ GENERATION

Page 1 of 1

		GENERASJ				
Count		Born - 1	Born 194	Born 195	Born 196	
Row Pct	Col Pct	945	6-55	6-65	6-	Row
Col Pct	Tot Pct	1,00	2,00	3,00	4,00	Total
@9_AVST2						
1	Strongly agree	6	8	9	2	25
		24,0	32,0	36,0	8,0	8,8
		17,6	13,3	7,2	3,0	
		2,1	2,8	3,2	,7	
2	Partly agree	7	24	41	19	91
		7,7	26,4	45,1	20,9	31,9
		20,6	40,0	32,8	28,8	
		2,5	8,4	14,4	6,7	
3	Neither nor	13	17	48	33	111
		11,7	15,3	43,2	29,7	38,9
		38,2	28,3	38,4	50,0	
		4,6	6,0	16,8	11,6	
4	Partly disagree	5	9	20	9	43
		11,6	20,9	46,5	20,9	15,1
		14,7	15,0	16,0	13,6	
		1,8	3,2	7,0	3,2	
5	Strongly disagree	3	2	7	3	15
		20,0	13,3	46,7	20,0	5,3
		8,8	3,3	5,6	4,5	
		1,1	,7	2,5	1,1	
Column		34	60	125	66	285
Total		11,9	21,1	43,9	23,2	100,0

Chi-Square	Value	DF	Significance
Pearson	15,45532	12	,21748
Likelihood Ratio	15,48236	12	,21611
Mantel-Haenszel test for linear association	1,67989	1	,19494

Minimum Expected Frequency - 1,789
 Cells with Expected Frequency < 5 - 4 OF 20 (20,0%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,23287			,21748 *1
Cramer's V	,13445			,21748 *1

*1 Pearson chi-square probability

Number of Missing Observations: 102

Table G1:

S44_2 Reason to be proud by BYGENER Generation

	Count	BYGENER				Row Total
		Born - 1 945	Born 194 6-55	Born 195 6-65	Born 196 6-	
		Row Pct	Col Pct	Col Pct	Col Pct	
		Tot Pct	Tot Pct	Tot Pct	Tot Pct	
S44_2						
Totally agree	1,00	27 15,4 57,4 7,9	39 22,3 67,2 11,5	47 26,9 54,7 13,8	62 35,4 41,6 18,2	175 51,5
Partly agree	2,00	14 13,7 29,8 4,1	14 13,7 24,1 4,1	24 23,5 27,9 7,1	50 49,0 33,6 14,7	102 30,0
Neither nor	3,00	4 9,5 8,5 1,2	4 9,5 6,9 1,2	7 16,7 8,1 2,1	27 64,3 18,1 7,9	42 12,4
Partly disagree	4,00	1 33,3 2,1 ,3		1 33,3 1,2 ,3	1 33,3 ,7 ,3	3 ,9
Totally disagree	5,00		1 25,0 1,7 ,3	2 50,0 2,3 ,6	1 25,0 ,7 ,3	4 1,2
Don't know	6,00	1 7,1 2,1 ,3		5 35,7 5,8 1,5	8 57,1 5,4 2,4	14 4,1
Column Total		47 13,8	58 17,1	86 25,3	149 43,8	340 100,0

Chi-Square	Value	DF	Significance
Pearson	22,22675	15	,10199
Likelihood Ratio	25,20890	15	,04721
Mantel-Haenszel test for linear association	8,16309	1	,00428

Minimum Expected Frequency = ,415
Cells with Expected Frequency < 5 = 11 OF 24 (45,8%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,25568			,10199 *1
Cramer's V	,14762			,10199 *1

*1 Pearson chi-square probability

Number of Missing Observations: 64

Table G2:

S44_3 Managed to preserve the best things by BYGENER Generation

	Count	BYGENER				Row Total
		Born - 1 945	Born 194 6-55	Born 195 6-65	Born 196 6-	
		Row Pct	Col Pct	Col Pct	Col Pct	
		Tot Pct	Tot Pct	Tot Pct	Tot Pct	
S44_3						
Totally agree	1,00	15 22,7 31,9 4,4	11 16,7 19,0 3,2	19 28,8 22,1 5,6	21 31,8 14,2 6,2	66 19,5
Partly agree	2,00	16 11,8 34,0 4,7	29 21,3 50,0 8,6	36 26,5 41,9 10,6	55 40,4 37,2 16,2	136 40,1
Neither nor	3,00	7 12,5 14,9 2,1	5 8,9 8,6 1,5	17 30,4 19,8 5,0	27 48,2 18,2 8,0	56 16,5
Partly disagree	4,00	4 11,1 8,5 1,2	6 16,7 10,3 1,8	4 11,1 4,7 1,2	22 61,1 14,9 6,5	36 10,6
Totally disagree	5,00	2 12,5 4,3 ,6	4 25,0 6,9 1,2	6 37,5 7,0 1,8	4 25,0 2,7 1,2	16 4,7
Don't know	6,00	3 10,3 6,4 ,9	3 10,3 5,2 ,9	4 13,8 4,7 1,2	19 65,5 12,8 5,6	29 8,6
Column Total		47 13,9	58 17,1	86 25,4	148 43,7	339 100,0

Chi-Square	Value	DF	Significance
Pearson	25,62880	15	,04211
Likelihood Ratio	26,17083	15	,03627
Mantel-Haenszel test for linear association	6,61283	1	,01012

Minimum Expected Frequency = 2,218
Cells with Expected Frequency < 5 = 6 OF 24 (25,0%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,27496			,04211 *1
Cramer's V	,15875			,04211 *1

*1 Pearson chi-square probability

Number of Missing Observations: 65

Table G3:

S44_4 Pubs and restaurants positive by BYGENER Generation

Page 1 of 1

Count Row Pct Col Pct Tot Pct	BYGENER				Row Total
	Born - 1 945	Born 194 6-55	Born 195 6-65	Born 196 6-	
	1,00	2,00	3,00	4,00	
S44_4					
1,00	12	18	36	81	147
Totally agree	8,2	12,2	24,5	55,1	43,2
	25,5	31,0	41,9	54,4	
	3,5	5,3	10,6	23,8	
2,00	13	20	25	46	104
Partly agree	12,5	19,2	24,0	44,2	30,6
	27,7	34,5	29,1	30,9	
	3,8	5,9	7,4	13,5	
3,00	9	6	15	9	39
Neither nor	23,1	15,4	38,5	23,1	11,5
	19,1	10,3	17,4	6,0	
	2,6	1,8	4,4	2,6	
4,00	6	9	6	4	25
Partly disagree	24,0	36,0	24,0	16,0	7,4
	12,8	15,5	7,0	2,7	
	1,8	2,6	1,8	1,2	
5,00	6	4	2	3	15
Totally disagree	40,0	26,7	13,3	20,0	4,4
	12,8	6,9	2,3	2,0	
	1,8	1,2	,6	,9	
6,00	1	1	2	6	10
Don't know	10,0	10,0	20,0	60,0	2,9
	2,1	1,7	2,3	4,0	
	,3	,3	,6	1,8	
Column	47	58	86	149	340
Total	13,8	17,1	25,3	43,8	100,0

Chi-Square	Value	DF	Significance
Pearson	42,88746	15	,00016
Likelihood Ratio	41,23553	15	,00029
Mantel-Haenszel test for linear association	19,52791	1	,00001

Minimum Expected Frequency - 1,382
 Cells with Expected Frequency < 5 - 9 OF 24 (37,5%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,35516			,00016 *1
Cramer's V	,20505			,00016 *1

*1 Pearson chi-square probability

Number of Missing Observations: 64

Table G4:

S44_6 Stavanger on Eur. map by BYGENER Generation

Page 1 of 1

Count Row Pct Col Pct Tot Pct	BYGENER				Row Total
	Born - 1 945	Born 194 6-55	Born 195 6-65	Born 196 6-	
	1,00	2,00	3,00	4,00	
S44_6					
1,00	32	41	48	80	201
Totally agree	15,9	20,4	23,9	39,8	59,1
	68,1	70,7	55,8	53,7	
	9,4	12,1	14,1	23,5	
2,00	11	12	36	53	112
Partly agree	9,8	10,7	32,1	47,3	32,9
	23,4	20,7	41,9	35,6	
	3,2	3,5	10,6	15,6	
3,00	1	3	1	10	15
Neither nor	6,7	20,0	6,7	66,7	4,4
	2,1	5,2	1,2	6,7	
	,3	,9	,3	2,9	
4,00		1		1	2
Partly disagree		50,0		50,0	,6
		1,7		,7	
		,3		,3	
5,00				1	1
Totally disagree				100,0	,3
				,7	
				,3	
6,00	3	1	1	4	9
Don't know	33,3	11,1	11,1	44,4	2,6
	6,4	1,7	1,2	2,7	
	,9	,3	,3	1,2	
Column	47	58	86	149	340
Total	13,8	17,1	25,3	43,8	100,0

Chi-Square	Value	DF	Significance
Pearson	20,39498	15	,15730
Likelihood Ratio	21,65830	15	,11708
Mantel-Haenszel test for linear association	1,05533	1	,30428

Minimum Expected Frequency - ,138
 Cells with Expected Frequency < 5 - 15 OF 24 (62,5%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,24492			,15730 *1
Cramer's V	,14140			,15730 *1

*1 Pearson chi-square probability

Number of Missing Observations: 64

Table G5:

S44_7 Care too much money/material objects by BYGENER Generation

Page 1 of 1

Count Row Pct Col Pct Tot Pct	BYGENER				Row Total
	Born - 1 945	Born 194 6-55	Born 195 6-65	Born 196 6-	
	1,00	2,00	3,00	4,00	
S44_7					
Totally agree	29 24,4 61,7 8,6	33 27,7 56,9 9,7	23 19,3 26,7 6,8	34 28,6 23,0 10,0	119 35,1
Partly agree	15 10,9 31,9 4,4	19 13,8 32,8 5,6	42 30,4 48,8 12,4	62 44,9 41,9 18,3	138 40,7
Neither nor	1 2,2 2,1 ,3	2 4,4 3,4 ,6	11 24,4 12,8 3,2	31 68,9 20,9 9,1	45 13,3
Partly disagree		3 16,7 5,2 ,9	6 33,3 7,0 1,8	9 50,0 6,1 2,7	18 5,3
Totally disagree	2 22,2 4,3 ,6		3 33,3 3,5 ,9	4 44,4 2,7 1,2	9 2,7
Don't know		1 10,0 1,7 ,3	1 10,0 1,2 ,3	8 80,0 5,4 2,4	10 2,9
Column	47	58	86	148	339
Total	13,9	17,1	25,4	43,7	100,0

Chi-Square	Value	DF	Significance
Pearson	54,64204	15	,00000
Likelihood Ratio	60,93109	15	,00000
Mantel-Haenszel test for linear association	27,95476	1	,00000

Minimum Expected Frequency - 1,248
Cells with Expected Frequency < 5 - 11 OF 24 (45,8%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,40148			,00000 *1
Cramer's V	,23179			,00000 *1

*1 Pearson chi-square probability

Number of Missing Observations: 65

Table G6:

S44_8 New upper class of oil people by BYGENER Generation

Page 1 of 1

Count Row Pct Col Pct Tot Pct	BYGENER				Row Total
	Born - 1 945	Born 194 6-55	Born 195 6-65	Born 196 6-	
	1,00	2,00	3,00	4,00	
S44_8					
Totally agree	23 20,2 50,0 6,8	28 24,6 48,3 8,3	24 21,1 27,9 7,1	39 34,2 26,2 11,5	114 33,6
Partly agree	13 11,9 28,3 3,8	17 15,6 29,3 5,0	32 29,4 37,2 9,4	47 43,1 31,5 13,9	109 32,2
Neither nor	5 7,8 10,9 1,5	6 9,4 10,3 1,8	19 29,7 22,1 5,6	34 53,1 22,8 10,0	64 18,9
Partly disagree	3 11,5 6,5 ,9	3 11,5 5,2 ,9	7 26,9 8,1 2,1	13 50,0 8,7 3,8	26 7,7
Totally disagree	1 9,1 2,2 ,3	3 27,3 5,2 ,9	2 18,2 2,3 ,6	5 45,5 3,4 1,5	11 3,2
Don't know	1 6,7 2,2 ,3	1 6,7 1,7 ,3	2 13,3 2,3 ,6	11 73,3 7,4 3,2	15 4,4
Column	46	58	86	149	339
Total	13,6	17,1	25,4	44,0	100,0

Chi-Square	Value	DF	Significance
Pearson	24,35858	15	,05925
Likelihood Ratio	24,39348	15	,05871
Mantel-Haenszel test for linear association	12,65494	1	,00037

Minimum Expected Frequency - 1,493
Cells with Expected Frequency < 5 - 9 OF 24 (37,5%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,26806			,05925 *1
Cramer's V	,15476			,05925 *1

*1 Pearson chi-square probability

Number of Missing Observations: 65

Table G7:

S44_11 Increased distance govern/governed by BYGENER Generation

		BYGENER				Page 1 of 1
Count		Born - 1	Born 194	Born 195	Born 196	
Row Pct	Col Pct	945	6-55	6-65	6-	Row
Tot Pct		1,00	2,00	3,00	4,00	Total
S44_11						
	1,00	24	36	37	44	141
Totally agree		17,0	25,5	26,2	31,2	41,6
		52,2	62,1	43,0	29,5	
		7,1	10,6	10,9	13,0	
	2,00	14	12	20	52	98
Partly disagree		14,3	12,2	20,4	53,1	28,9
		30,4	20,7	23,3	34,9	
		4,1	3,5	5,9	15,3	
	3,00	3	8	16	28	55
Neither nor		5,5	14,5	29,1	50,9	16,2
		6,5	13,8	18,6	18,8	
		,9	2,4	4,7	8,3	
	4,00	1	1	8	10	20
Partly disagree		5,0	5,0	40,0	50,0	5,9
		2,2	1,7	9,3	6,7	
		,3	,3	2,4	2,9	
	5,00			2	3	5
Totally disagree				40,0	60,0	1,5
				2,3	2,0	
				,6	,9	
	6,00	4	1	3	12	20
Don't know		20,0	5,0	15,0	60,0	5,9
		8,7	1,7	3,5	8,1	
		1,2	,3	,9	3,5	
Column		46	58	86	149	339
Total		13,6	17,1	25,4	44,0	100,0

Chi-Square	Value	DF	Significance
Pearson	31,56091	15	,00738
Likelihood Ratio	34,95683	15	,00249
Mantel-Haenszel test for linear association	10,83678	1	,00100

Minimum Expected Frequency - ,678
 Cells with Expected Frequency < 5 - 8 OF 24 (33,3%)

Statistic	Value	ASE1	Val/ASE0	Approximate Significance
Phi	,30512			,00738 *1
Cramer's V	,17616			,00738 *1

*1 Pearson chi-square probability

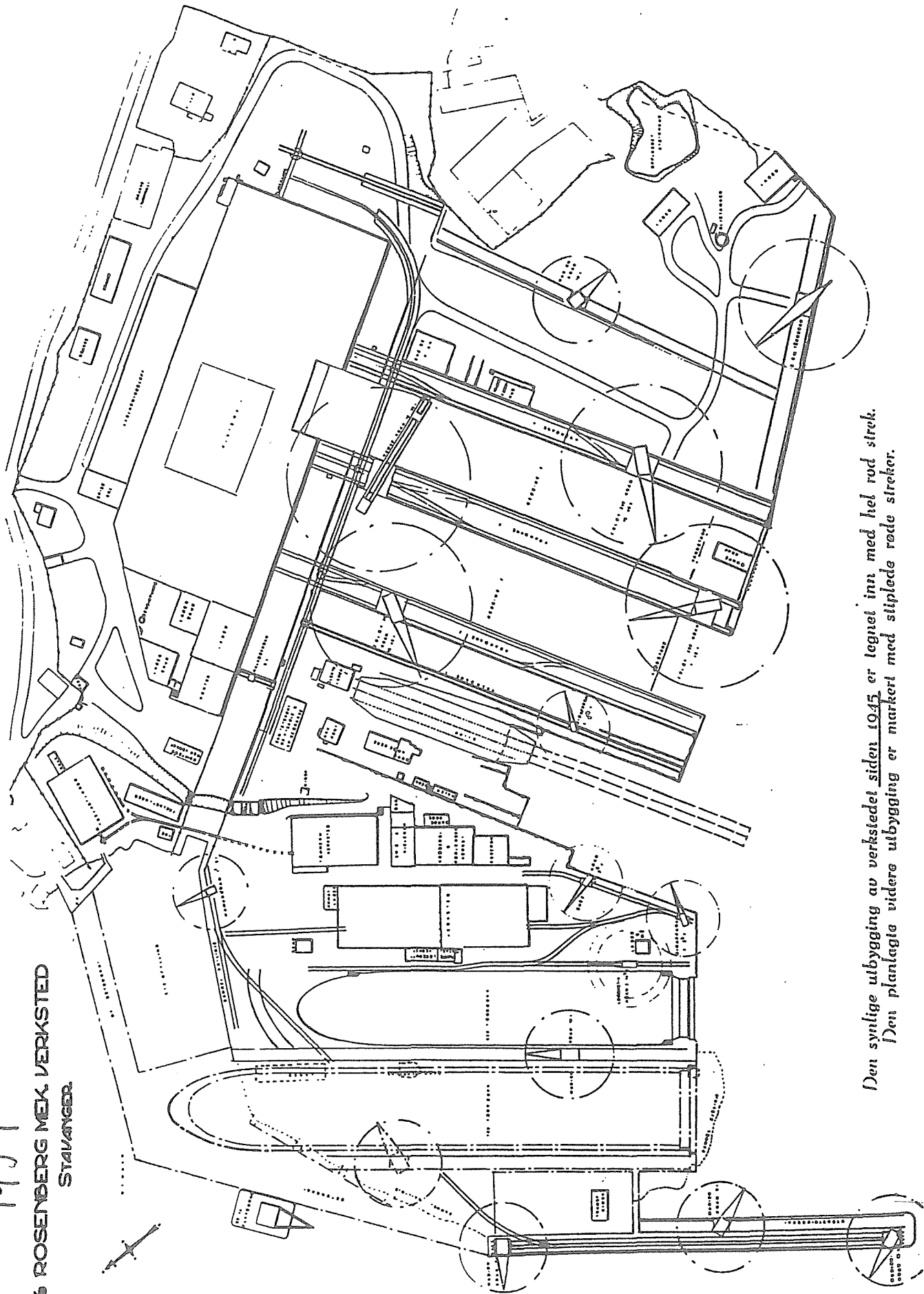
Number of Missing Observations: 65

7.0. Maps of the yard area

(found in Internal Archives and in Jøssang 1998)

1954

1/6 ROSENBERG MEK. VERKSTED
STAVANGER

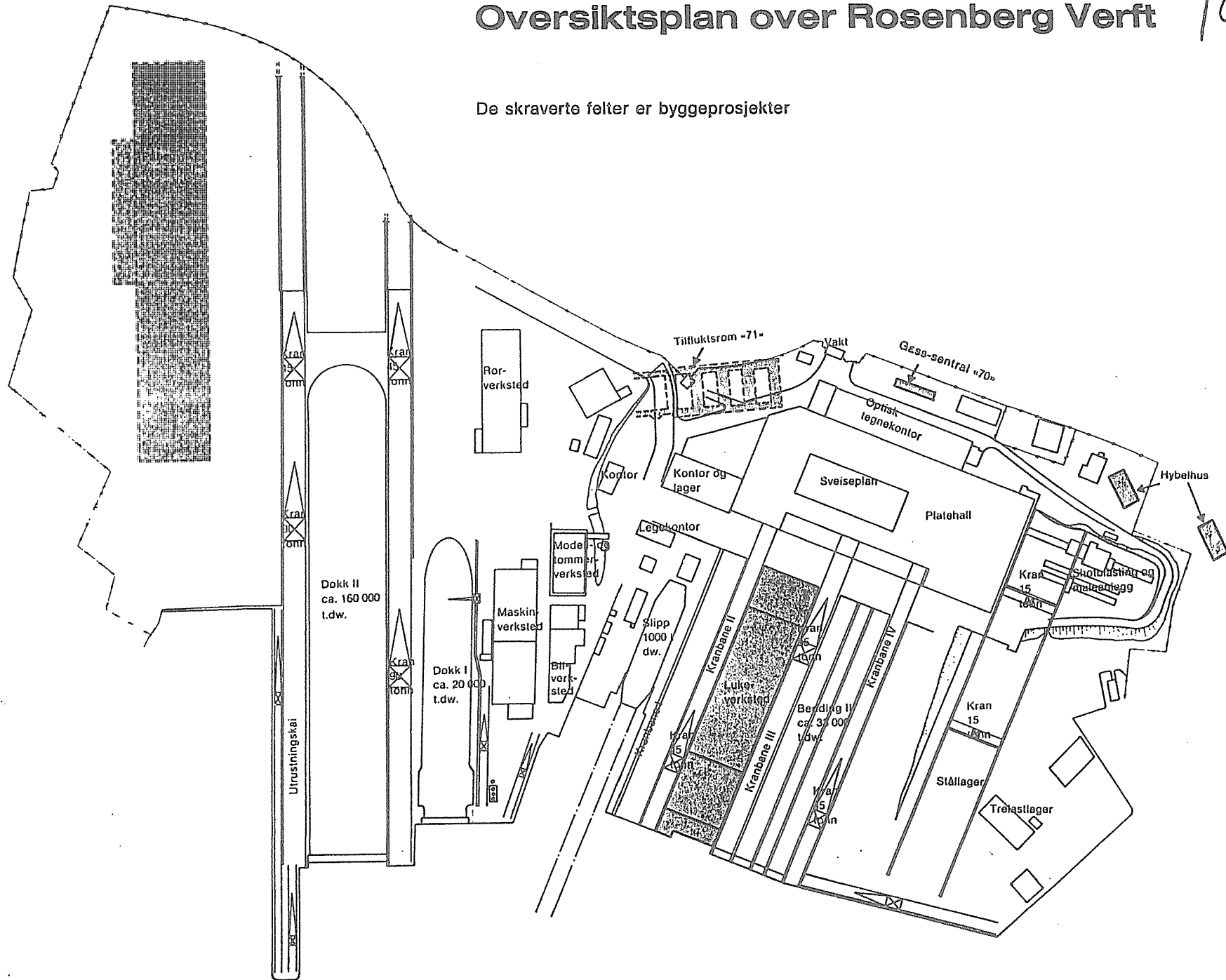


Den sydlige utbygging av verkstedet siden 1945 er tegnet inn med hel rødt strek.
Den planlagte vidare utbygging er markert med stiplede røde streker.

Oversiktsplan over Rosenberg Verft

1970

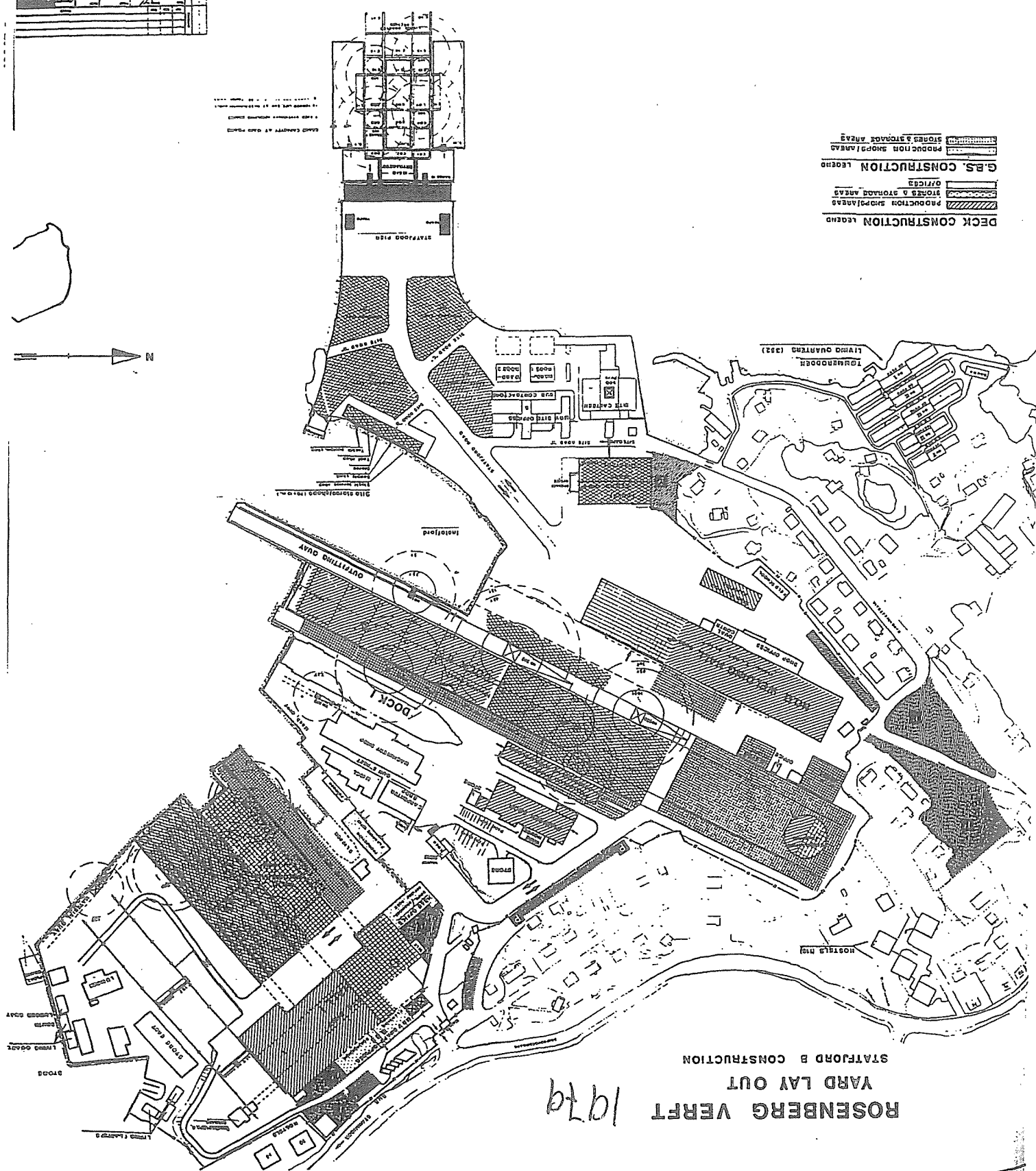
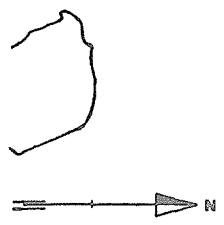
De skraverte felter er byggeprosjekter



PL. 1924	YARD LAY OUT
DATE	1979
SCALE	1" = 100'
PROJECT	ROSENBERG VERFT
CLIENT	VERFT
DESIGNER	VERFT
APPROVED	
DATE	

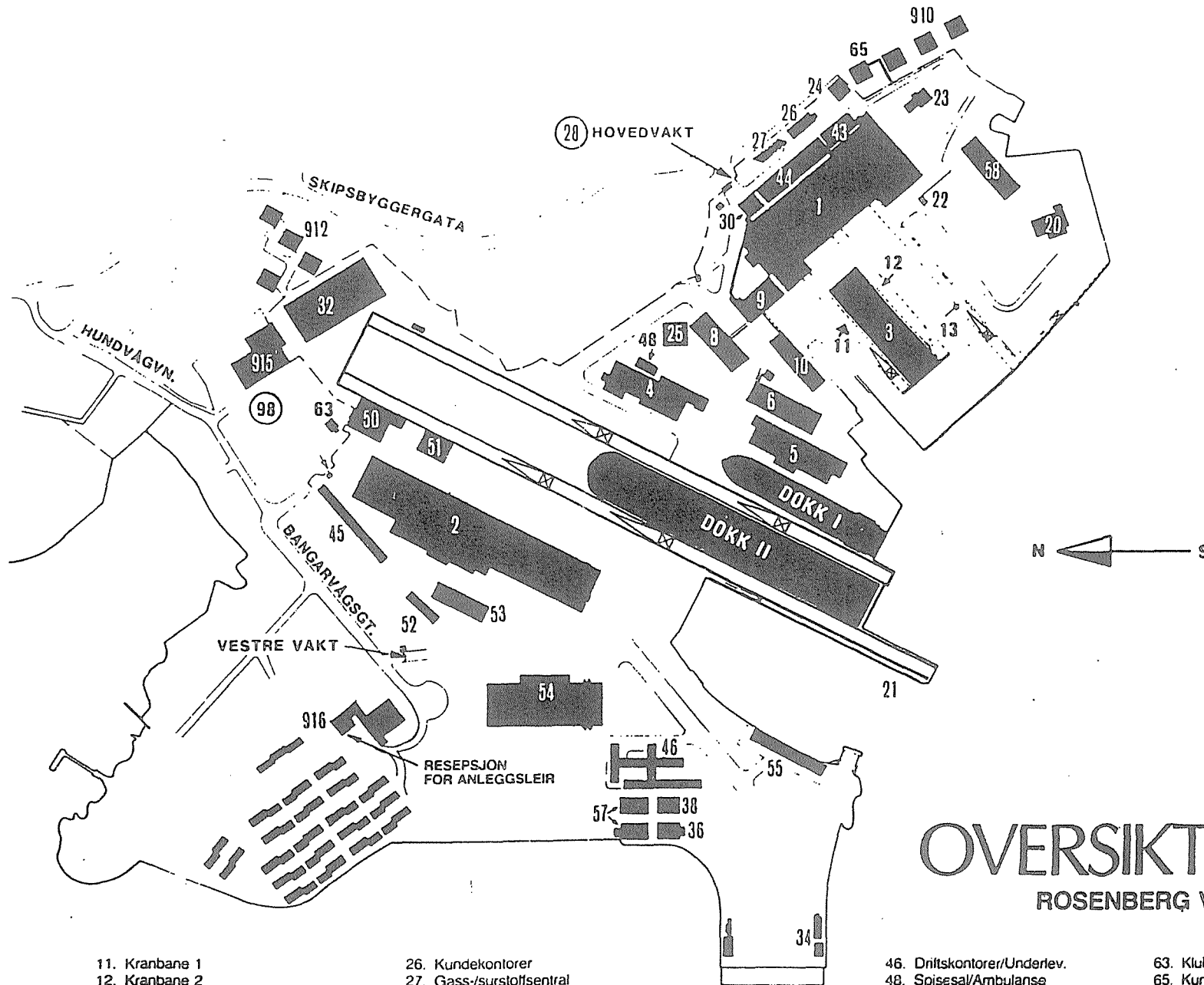
LAND CONVEY AT GARD PLACE
 CONVEYANCE RECORDS
 1979

[Hatched Pattern]	DECK CONSTRUCTION
[Hatched Pattern]	LEGEND
[Hatched Pattern]	PRODUCTION SHOPS/AREAS
[Hatched Pattern]	STORAGE & STORAGE AREAS
[Hatched Pattern]	OFFICES
[Hatched Pattern]	PRODUCTION SHOPS/AREAS
[Hatched Pattern]	STORAGE & STORAGE AREAS
[Hatched Pattern]	LEGEND
[Hatched Pattern]	G.S. CONSTRUCTION
[Hatched Pattern]	LEGEND
[Hatched Pattern]	PRODUCTION SHOPS/AREAS
[Hatched Pattern]	STORAGE & STORAGE AREAS



ROSENBERG VERFT
 YARD LAY OUT
 STATFORD B CONSTRUCTION

1979



OVERSIKTSPLAN

ROSENBERG VERFT

1985/86

- 1. Plateverksted
- 2. Sveisehall (Hall II)
- 3. Rørverksted (Hall III)
- 4. Vedlikeholdsverksted
- 5. Maskinverksted
- 6. Sveiseskoler
- 7. Garderobe/Spisesal
- 8. Ingeniørbygg/kjørekontor

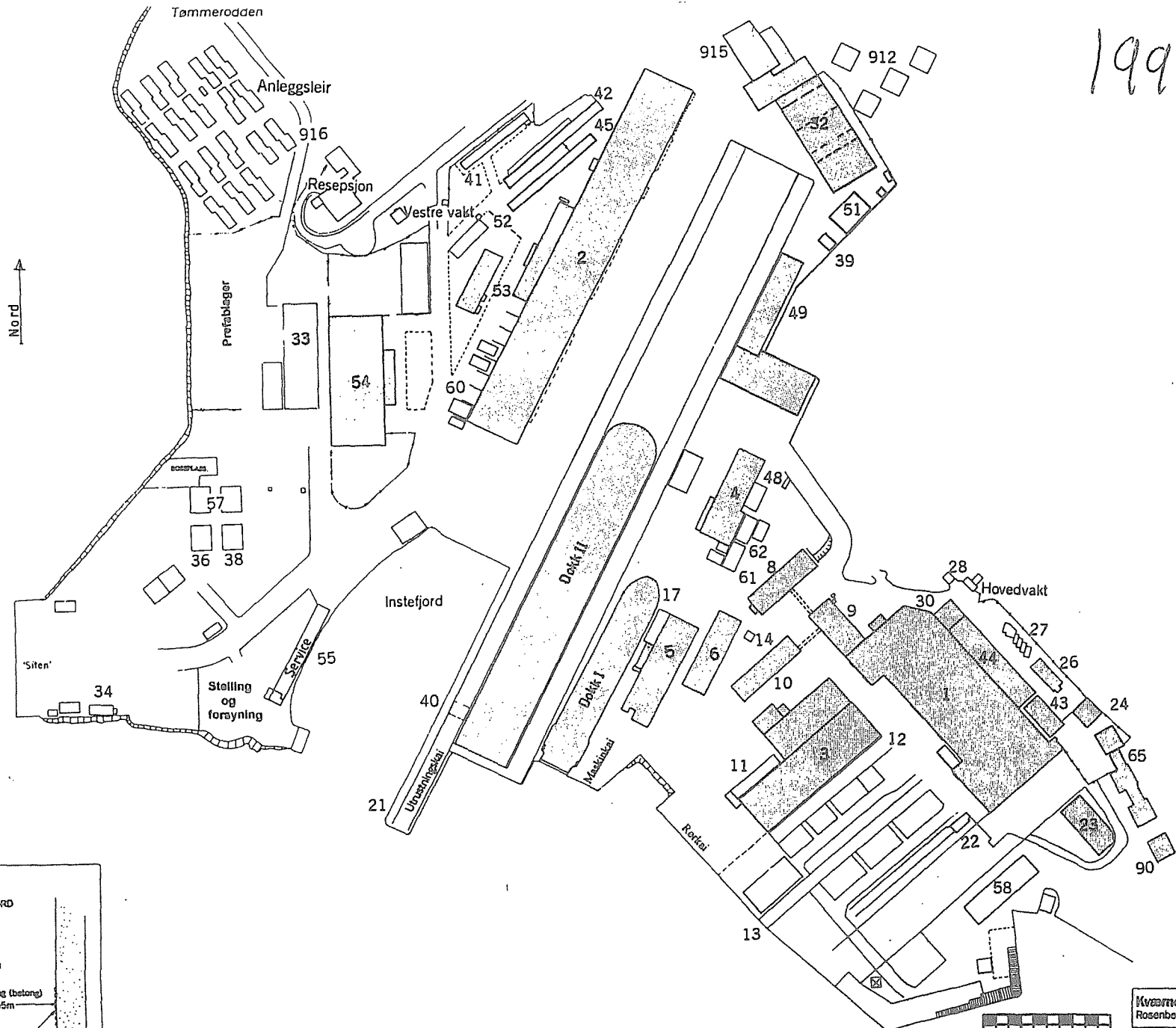
- 11. Kranbane 1
- 12. Kranbane 2
- 13. Kranbane 3
- 20. Lager
- 21. Utrustningskai
- 22. Stållager
- 23. Sandblåse-/maleranlegg
- 24. Kundekontorer

- 26. Kundekontorer
- 27. Gass-/surstoffsentral
- 28. Hovedvakt
- 30. Kafeteria
- 32. Sandblåse/Maleanlegg
- 34. Toaletter
- 36. Prosjektkontorer
- 38. Prosjektkontorer
- 39. Prosjektkontorer

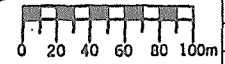
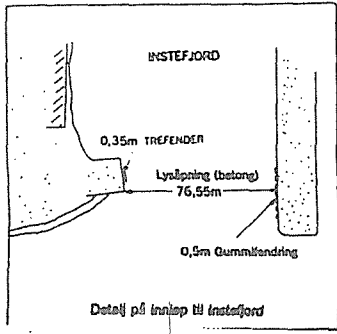
- 46. Drittskontorer/Underlev.
- 48. Spisesal/Ambulanse
- 50. Lagerhall
- 51. Lagerhall
- 52. Sveiseskole
- 53. Sandblåse-/Maleranlegg
- 54. Sentrallager
- 55. Lager/Serviceverksted

- 63. Klubbens andelslag
- 65. Kundekontor
- 910. Hybelhus - Skipsbyggergt.
- 912. Hybelhus - Kommandørvei.
- 915. Rosenberghallen (idrettshall)
- 916. Anleggsleir m/ resepsjon og vakterdhus (Tommerodden)

1995



- 3. Rørverktsted (Hall III)
- 4. Rørverktsted
- 5. Maskinverktsted
- 6. Rørverktsted/Garderobe/Spisesal
- 8. Ingeniørbygg/Kjørekontor
- 9. Administrasjonsbygg
- 10. Drifts-/Personalkontor/Legekontor
- 11. Kranbane 1
- 12. Kranbane 2
- 13. Kranbane 3
- 14. Kiosk
- 17. Prosjektkontor
- 21. Utrustningsleie
- 22. Stållager
- 23. Syngrensaneanlegg
- 24. Kontorer
- 26. Kontorer
- 27. Gass-/surstøfcentral
- 28. Hovedvakt
- 30. Kafeteria
- 32. Sandblåsa-/maleanlegg
- 33. MSF-hus/leier
- 34. Toaletter
- 36. Prosjektkontorer
- 38. Prosjektkontorer
- 39. Kontorer
- 40. Toalettanlegg
- 41. Kundekontor
- 42. Kunde-/prosjektkontorer
- 43. Kundekontor
- 44. Prosjektkontorer (Merkeloftet)
- 45. Kunde-/prosjektkontorer
- 48. Opplysningshall
- 49. Sandblåsa-/male-/brannbeskyttelsehall
- 51. Lagerhall
- 52. Vedlikeholdslager
- 53. Vedlikeholdsværktsted
- 54. Sentrallager
- 55. Lager/Serviceværktsted/Snøkkerværktsted
- 57. Garderobe
- 58. Lagerhall
- 60. Værktsted ved Hall II
- 61. Prosjektkontor
- 62. Prosjektkontor
- 65. Kværner installasjon
- 90. Rosenberg Kontorer
- 912. Hybelhus-Kommandørv.
- 915. Rosenberghallen (idrettshall)
- 916. Anleggsleir m/resepsjon og kantine



Kværner Rosenberg a.s Rosenberg Verft				OVERSIKTSSTEGNINGER RV																																																																																																								
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