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## Segregation, Education and Space - a Case Study of Malmö

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2008

[Link to publication](#)

*Citation for published version (APA):*

Persson, R. (2008). *Segregation, Education and Space - a Case Study of Malmö*. [Doctoral Thesis (monograph), Department of Architecture and Built Environment]. Lund University.

*Total number of authors:*

1

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Rickard Persson

# Segregation, Education and Space

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- A CASE STUDY OF MALMÖ

# Acknowledgements

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I began my Ph.D. studies in the fall of 2001. Various engagements, notably in the research project AGORA-Cities for people as well as teaching assistance in the education of architects, however, meant that my thesis work did not begin until the spring of 2006. I have had the benefit of being supervised since then by Finn Werne and Mattias Kärrholm and my thanks go first and foremost to both of you. Our meetings have been both frequent and productive.

I have had the privilege of having my dissertation funded by the Department of Architecture and Built Environment at Lund University through faculty resources and the department has been my work address during these years. At the department I have met and worked with several researchers who have influenced and helped both me and my research in subtle and less subtle ways. I'd like to thank Emma Nilsson, Tomas Wikström, Lina Olsson, Mikkel Schönning Sørensen and Eva Kristensson for the many helpful comments you have given me.

I thank the City of Malmö for providing the GIS maps. The copyrights to all the maps and orthographic photographs are held by Malmö Stadsbyggnadskontor and provided courtesy thereof, unless otherwise noted. The City of Malmö has been very helpful in providing assistance and material throughout the years.

I also wish to thank Eric Clark, who was the opponent at my final seminar and whose comments were very helpful.

For language comments I thank Linda Schenck, who corrected the English in the dissertation. Without your help it would have been very much more difficult to read.

For the graphic design I thank Johan Jardevall.

Finally I wish to thank my family and friends for all the support you have given me during these years. I especially thank you, Helena, for your outstanding support without which the writing of this dissertation would not have been possible.

This book is dedicated to my two children, Erik and Sofia, who have helped me take my mind off my work at crucial times during the writing of this dissertation.

*Segregation, Education and Space - a Case Study of Malmö*

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Academic dissertation presented at the Department of Architecture and Built Environment,  
Faculty of Engineering, Lund University, December 2008.

ISBN: 10: 91-7740-092-5

ISBN: 13: 978-91-7740-092-9

EAN: 9789177400929

Series: Asplundbiblioteket, ISSN: 1404-1235

Printed at Media-Tryck, Lund 2008

Graphic design by Johan Jardevall

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# Introduction

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## CHAPTER ONE

### Introduction

One of our most pressing political issues today is the increased social distance between and social polarization of groups in society. Social segregation is present at workplaces, in the school system and in residential areas, and in discussions of the effects of segregation the subjects overlap in all these areas. This dissertation discusses residential segregation only. My choice to limit the dissertation to residential segregation had to do with my subject being the spatiality of segregation. As research in the discipline of architecture, this focus is in line with a discussion of the meaning and influence of space in social research. Questions including how and where residential segregation is in effect are central to this thesis.

### Structure

This dissertation consists of six chapters. Chapter two discusses the concepts and research questions of the dissertation and provides a preliminary analysis of the data. It was originally intended as a self-contained paper and was later converted into a chapter. Chapters three, four and five constitute the main empirical parts of the dissertation and include a case study of the city of Malmö broken down as social, spatial and morphological data. Chapter three deals with social data, chapter four with spatial data and chapter five with residential morphology. Chapter six contains the discussion and conclusions.

### Two basic questions

In chapter two, I formulate and initially discuss my two basic questions, before dissecting the bulk of the data in chapters three, four and five. Here, I begin by outlining the two basic research questions:

Which social variables best describe segregation? Is examining segregation in terms of education a fruitful tool for analyzing segregation in general? How does educational segregation relate to segregation by income, ethnicity and age?

If, how, and in what ways does segregation relate to spatiality? Is segregation better described using spatial variables such as building age or ownership structure than through typo-morphological classification? How can segregation research enhance architectural research and vice versa?

### Case study

I have studied the entire city of Malmö as one case, by means of descriptive statistics (public municipality statistics) and geographical data (by means of GIS). The decision to use the entire city of Malmö as my case rather than a few selected areas was based on the idea that segregation can only be understood within a system of differences, where more resource-intensive areas are systematically related to less resource-intensive areas. A study of the regional residential market could also have been discussed, but was beyond the scope of the dissertation. There may be different lessons to be learned from different scales of study. In my opinion, the scale of the city offered interesting lessons on the dynamics of segregation because such lessons could also be keyed to physical morphologies. A regional study would not be able to pinpoint specific districts, subareas (delområden), in the city of Malmö and would have had to lose sight of the typo-morphological element so central to this research. Even in my research, using the scale of the subarea, I have difficulties in tying the data directly to block morphology. Similarly, if I had used a scale even closer to the building block, I would have risked losing sight of the city-wide features. Therefore I decided to use the subarea scale.

## Bourdieu

The work of Bourdieu served as a major source of inspiration for the dissertation. In chapters two and three I explain how I made use of Bourdieu's work, but I would like initially to point out a few ways I have used Bourdieu. I have seen Bourdieu's work as a model for producing tools with which to produce research. In doing so I have primarily relied on Bourdieu's own work *Distinction* (1984) and Donald Broady's study of Bourdieu's work *Sociologi och epistemologi* (1990).

## Data sorting

My data is divided into social variables, i.e. variables that ultimately refer to individual statistics (education, income, ethnicity, mobility, age, employment, political inclination, etc.), spatial variables, i. e. variables that ultimately refer to residential statistics (property area, room units, location (centrality), building age, ownership structure, etc.) and morphological classification (18 "morphs", 6 "supermorphs"). The division of social and spatial variables should not be seen as an attempt to define "social" or "spatial" but as tools for understanding how descriptive statistics can be divided for analysis.

## Correlations

I have used linear regression analysis to point out relations between variables throughout the dissertation. Basic correlation is the more correct term, since I do not separate between dependent and independent variables. In regression analysis a random variable is set against a mathematical variable. In my case I have used two random variables, such as number of people with university education and number of people with compulsory school only and set the variables against each other. Linear regression analysis is a common statistical method used in the social sciences. It is not so common, however, in architectural research and I have mainly taken my inspiration from space syntax research, where linear regression is used to find correlations against integration values (Space Syntax Limited 2004). For a deeper study I recommend Eggeby & Söderberg 1999 or Blom 1969: ch. 12,13 on basic quantitative methods, regression and correlation. The correlations I have used are approximations and do not indicate any determinism, mathematical or otherwise. What we have is a number of variable pairs ( $x_i$ ,  $y_i$ ) and if variable  $x$  is large at the same time as variable  $y$  is large, the values "follow each other". Correlations can also be negative, that is if variable  $x$  is large then variable  $y$  is small. The  $r^2$  value is then the correlation coefficient squared (Blom 1969: ch 12) and is between +1 and -1 for positive or negative correlations. Blom warns against using correlation analysis uncritically, since the values in small samples may be very high in spite of there being no correlation. It is very difficult mathematically to demonstrate that the correlation coefficient  $r$  is reasonable. I have used the basic method of analyzing correlations in the SPSS software, with the  $r^2$  value calculated therein. I found it useful in a number of cases to see whether there were any correlations between the large numbers of variables I used in the study. I used the approximative nature of correlation analysis as a way of detecting guiding indicators, not as a way of excluding other paths or inquiry and ways of assessing segregation. I have tried to use statistics in order to enhance my architectural research, not to limit it.

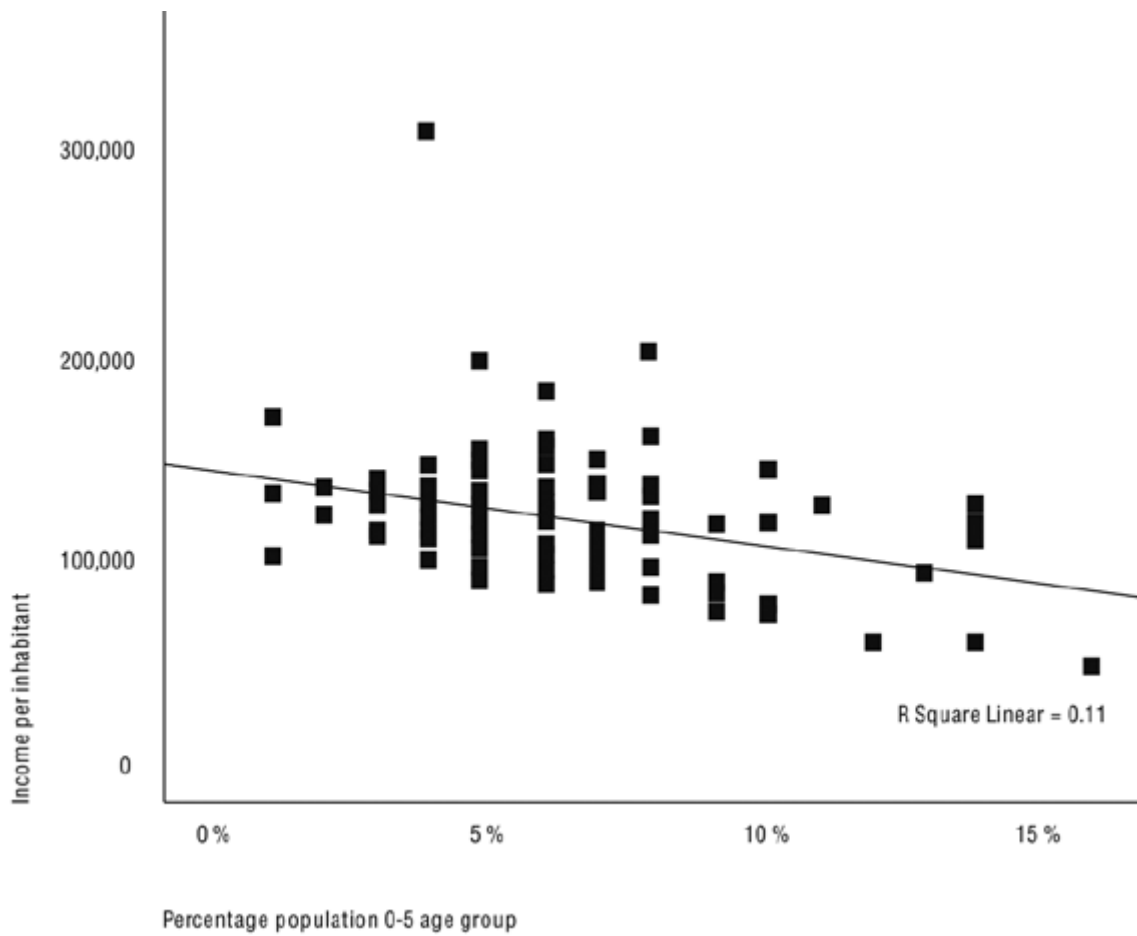


Figure 1:1 Example of a correlation analysis. The percentage of the population between 0-5 years old is set against income per inhabitant over the 103 subareas in Malmö. The result is a weak negative correlation (0.11), which I have consistently written as -0.11.

## Data management

I use the data both in its original shape and in a ranked version. It is also organized both as originally by subareas and in “social types” where the subareas have been arranged into 17 groups, denoted from A to Q.

## Orientation maps



Figure 1:2 Map of central Malmö with subarea name labels.

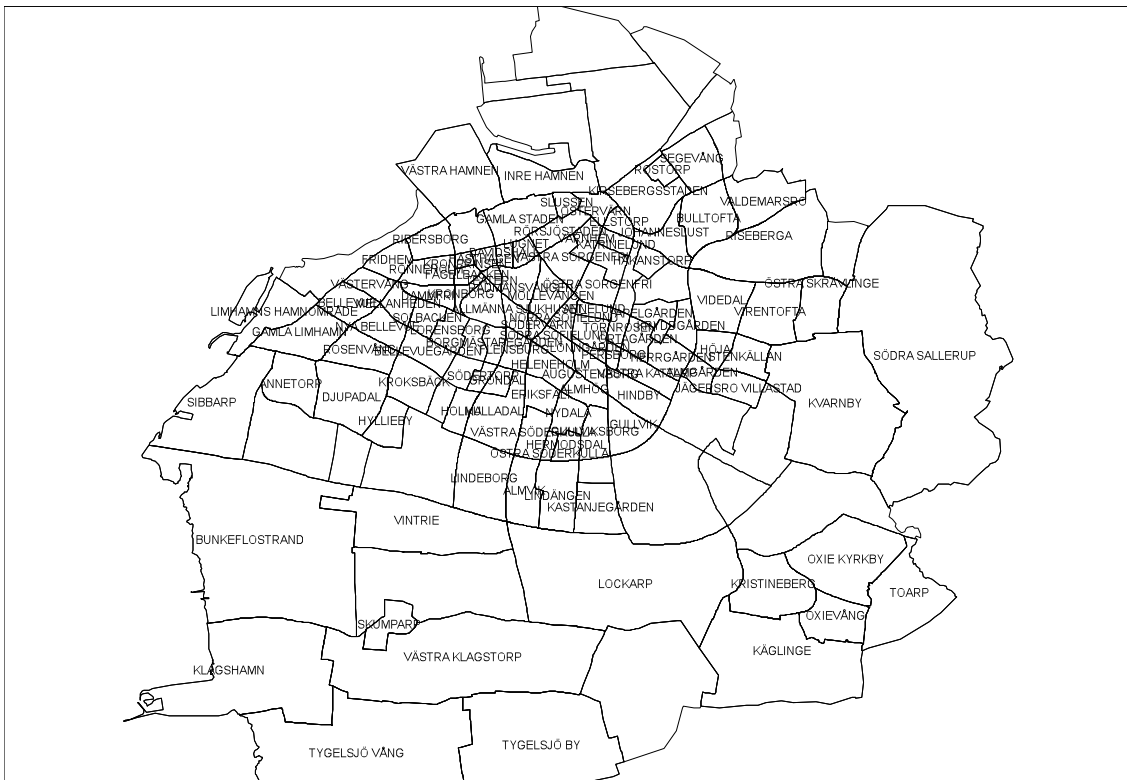


Figure 1:3 Map of peripheral Malmö with subarea name labels.

# Segregation, education and space

## CHAPTER TWO

### Introduction, background and purpose

Over the last 15 years Sweden has been transformed, socially and economically. Why and how this has happened is a matter of debate. Researchers point out aspects of the fall of the welfare state as well as the rise of the global city. According to the global city thesis (in line with Sassen 1991), cities are eager to compete on the world market of control, exchange and management and this competition results in profound changes in cities, an economic restructuring that increase social polarization (cf. Albertsen & Diken 2004, Madanipour 2005, Hansen, Andersen & Clark 2001). An alternative thesis, (such as Hamnett 1996) says that increased social polarization in European cities is an effect of changes in the systems of distributions in the welfare state.

Social polarization is not necessarily equivalent to spatial segregation, as pointed out by Hamnett (1996:1408-1409). Still, several researchers have found segregation research to be a useful tool for describing increased social polarization in Swedish cities. Musterd and Andersson, for example, critically examine notions of interdependent social and housing mixes. Such mixes are crucial assumptions in Swedish housing policies. Their conclusion is that there is no clear relationship between social mix and housing mix (2005:16, 19). However, the indicator of housing mix used by Andersson & Musterd is ownership, not house type. The question remains whether a different conclusion could be drawn from a study which focus on the relations between social mix and housing types.

When the Swedish state introduced the “national metropolitan policy” (storstadsutredningen) (concerning Göteborg, Malmö and Stockholm) in 1998 one of the two major goals was to stop social, ethnic and discriminatory segregation – not to stop income polarization (SOU 2005:29, p. 21). There is thus a certain ambiguity in discussions of what is meant by stopping segregation and which problems the policy is meant to address. There is also a consensus today among evaluators and researchers that the goal (to stop segregation) itself is overly ambitious and unrealistic in relation to the instruments created (SOU 2005:29, p.27). The question of the relationship between spatial segregation and social polarization can however, be examined in more ways than one. One conceptual assumption underlying the works of Sassen, Hamnett, Andersson and the national metropolitan policy is that income polarization is the proper indicator for social stratification, although Andersson also concludes that educational level is a key issue to understanding segregation at neighborhood levels (2005:26).

The effects of the restructuring of the economy on cities (the global city thesis) has led at least one other researcher to hypothesize that people with university education are clustering in central locations and that this process, known as educational segregation, is a stronger trend in segregation than segregation by ethnicity or economy (Domina 2006). If this is true also in Sweden is one of my research questions.

The process of segregation in inner cities is sometimes also referred to as gentrification, as it is intimately associated with the influx of a highly educated workforce into central areas of the city. Gentrification theory, however, is double-sided in that it discusses both the issue of the exploitation of so-called ‘rent gaps’ by economic actors on the housing market (producers) and the cultural issue of middle class gentrifiers (consumers) (cf. Clark (1988, 1987). Here, I am concerned mainly with the issue of consumer gentrification as educational segregation.

Segregation in the national metropolitan policy of Sweden (e.g. SOU 1997:118 or SOU 1998:25, 2006 National Metropolitan Policy Annual Report) is seen as a problem caused by economic deprivation and the solutions focus on area-based interventions (in 24 areas in the three largest cities of Sweden) to improve the living conditions in specific, segregated, poor areas. In this chapter I test the hypothesis that economic capital (as evidenced by the income indicator) could be complemented by educational capital (as understood

through instrumentally developing the theoretical and empirical tools of Pierre Bourdieu) in describing social stratification. I also compare such social data to spatial data in hopes of shedding new light on the relations between social polarization and spatial segregation. I gain some preliminary insights into this relation by examining the definitions of segregation and the evaluations of society entailed in such definitions. I thereby reconfigure and remap segregation based on a different conceptual understanding of the problem than one relating only to economic variables. Whether this reconfiguration will also lead to different measures of political interventions will depend on whether institutional actors benefit from this study of segregation to make more informed choices.

## Residence as a form of symbolic capital

The definition of segregation used in the national metropolitan policy, as outlined above, together with the solution initiated, led me to test two assumptions, based on my two main research questions.

My first assumption, leading into a question, is that the educational variable, as understood by Bourdieu and his followers, and its relation to the economic variable, may have been underestimated in descriptions of segregation.<sup>1</sup> I further elaborate on Bourdieu's concepts in chapter three. I have been working on the basis of the assumption that possession of a residence is a form of symbolic capital, most easily recognized (and wielded!) through the answers to the questions: Where do you live? (examined through a location variable in chapter four) and What kind of housing do you live in? (examined through typo-morphology including type of house, ownership and building age in chapters four and five). Cultural capital refers to the historical genesis of building types and areas and the social groups that have claimed them. For instance, the patronage class has inhabited the subarea Fridhem, in Malmö, since its inception. Another example is the succession of classes (the orderly working class, the immigrants, the children of the immigrants, and the refugees) that have inhabited the "million program" (miljonprogram) areas. At first, during the 1960s the "million program" areas were inhabited by working class populations who were moved or evicted out of centrally located areas, which were being demolished. Large parts of the orderly working class population then moved, primarily to owner-occupied areas (småhusområden) and the "million program" areas were inhabited by immigrant workers who came to Sweden during the late 1960s. As these workers became increasingly well-to-do, and moved on the areas were then inhabited by refugees during the 1980s and beyond. This process is called filtering as areas become inhabited by people with less and less resources. This is related to the types of symbolic capital that can be invoked at any given time. (Cf. Ristilammi's studies of how the symbolic capital invoked by modernism clashes with the post-modern stigmatization of Rosengård, Ristilammi 1994). Cultural capital is in itself a more narrowly defined category than symbolic capital. The specific cultural capital that concerns me here – educational capital – is viewed through statistical indicators referring to the specific level of education of the individuals living in different areas (cf. Broady 1990:171-178). The question is whether educational segregation is more useful in segregation research than ethnic or economic segregation.

My second assumption, leading into a question, is that the spatial spectrum of segregation has been less discussed than it deserves to be. More spatial models than those currently used in segregation research could be useful in understanding the relations between social polarization and spatial segregation. The question is whether typo-morphology could be more discussed in relation to segregation research than it has been. In chapter five I discuss the typo-morphology of Malmö housing stock, while in this chapter I use a preliminary typology in order to discuss the question of housing types in relation to segregation.

The conspicuous absence of a discussion of housing types in the discussion of segregation in current official documents is disheartening (cf. 2006 National Metropolitan Policy Annual Report). I believe that examining such measures of spatiality could be a fruitful avenue of investigation. I also find it unfortunate that segregation issues have been simplified into focusing on the improvement of deprived areas. One starting point for my discussion is that segregation needs to be addressed over a broad spectrum of all societal classes and districts, not confined to a few select underprivileged ones. This is not to say that policies

should necessarily focus on measures directed to improve the living conditions of middle class or upper class environments through directing resources to the improvement of such areas. However, in order to address the full complexity of segregation, measures and research should take into account more aspects of people's positions in society.

I address the complexity of segregation later in this chapter. Other researchers have noted the same overemphasis on area-based interventions in Sweden. Andersson, BråmÅ & Hogdal (2007), for example, have enumerated strategies used internationally as examples of other options. Such options are: to develop social housing (i.e. housing especially built for the accommodation of poor people) to a large extent (as in Amsterdam), to mix social groups by varying the ownership structure, to mix social groups by allocating ethnic quotas, and to mix social groups by relocating people (as in Chicago), but they, too, conclude that the most popular strategy at the moment both in the U.S. and in Europe is the area-based intervention. The main difference between Sweden and many other countries, according to Andersson, BråmÅ & Hogdal is that in Sweden the physical quality of the housing has not come into question for policy makers or researchers, while in other countries social problems are being addressed with direct physical measures. Andersson, BråmÅ & Hogdal say that physical quality is not a problem in the Swedish "deprived areas" and support the view that no major physical interventions should be attempted in Sweden (Andersson, BråmÅ & Hogdal 2007:65-66). However, they seem to think that the only way to enter house type into the equation is by measuring "quality of housing" and thus they do not address the question of residence as a form of symbolic capital.

## Segregation, education, typo-morphology, statistics

I discuss four subjects below:

- 1) a conceptual discussion of segregation and the absence of educational variables in the national policy
- 2) an introduction to means of assessing segregation, reintroducing the educational variable through statistical area coding (this is elaborated over several social variables in chapter three and over spatial variables in chapter four)
- 3) a brief discussion of some typo-morphological possibilities to complement descriptions of the spatial variable (this is further expanded in chapter five)
- 4) a presentation of a statistical model to describe segregation through three dimensions: economy, education and typo-morphology, thus adding a methodological development of the concept of segregation to the discourse

Throughout the chapter and indeed the entire dissertation, the discussion is based on a case study of Malmö, which is one of the three cities in Sweden that are an integral part of the national metropolitan policy. Several of the deprived areas pinpointed in the national policy are located in Malmö, including those defined as the most deprived.



## Segregation

I have refrained from providing an independent historical exposé of segregation and have settled for mentioning a few select works where segregation is mentioned in recent literature, trying to highlight the discrepancies between policy documents and research literature, especially regarding educational segregation. This is not to say that such a history of the concept of segregation would not be useful. Such a history is well presented in Molina's work *The Racialization of the City (Stadens rasifiering)* (1997:37-46).

Molina follows the typology invented by Göran Lindberg in saying that segregation research is often done according to one of three lines of examination: ecological, sociocultural or structuralist. Ecological schools of research, based on the Chicago model, are rooted in economic factors and view the battle for resources as the cause of segregation. The sociocultural view, based on factor analysis, more resembles my analysis in that it focuses on a large number of variables and tries to find the causes of segregation in an intricate pattern among them. The view of the city as a mosaic of possible worlds belongs to this school of thought. Structuralist theories, finally, uses complex indices to rank areas and relate segregation to the capitalist economy. Residential segregation reproduces social relations in capitalist society; i.e. a working class child grows up in a working class environment (Molina 1997:37-46).

The definition of segregation varies slightly between policy documents. The national metropolitan policy (e. g. SOU 1995:142, SOU 1997:118, p. 42, SOU 1998:25, p.12) defines segregation as meaning that social and geographical differences coincide. However, the policy does not discuss the geographical component very much, instead focusing on the connections between economic, social, ethnic and demographic dimensions of segregation (e.g. Socialdepartementet 1997:65). Researchers have not found this satisfactory. Stigendal has expounded upon this geographical definition, stating that it aims to dispel two misconceptions. One, that segregation equals poverty. Two, that segregation is located to specific areas. He rightly points out that what is interesting about segregation is the relationship between areas, not any intrinsic quality in one specific area (Stigendal 1999:28). Many researchers follow this line of reasoning, e. g. Magnusson (2001:14). Hise states that:

Social segregation – the parsing of individuals and groups in space along lines defined by race/ethnicity; by income, status and class; by gender – whether elective or imposed. Formal or informal, legal or extralegal is a signature aspect of the modern city under industrial capitalism (Hise 2004:549).

This definition of segregation implies spatiality as well as sociality. There are of course different levels of imposition of segregation upon a population. This ranges from the massive resettlement of large portions of a population as in Algeria during the war of liberation (as described by Bourdieu and Sayad 2004) to discriminatory landlords solving problems by assigning different groups to different residences, to self-imposed segregation by choosing to reside in the neighborhood where one's friends or relatives live. The effects of segregation are also different.

Segregation is sometimes discussed in three dimensions: demographic, socioeconomic and ethnic. Demographic segregation includes age segregation, household segregation and gender segregation. Socioeconomic segregation includes income, professional or class segregation. Ethnic segregation includes segregation by nationality, religion and culture (Boverket 2007:13). Educational segregation, as I see it, is an alternative way of defining socioeconomic segregation without regard to income. It is however, dependent on demographic segregation, as educational opportunity varies between different historical periods. Young people (ages 19-44) tend to be more educated, but have less income than older people (ages 45-64).

Segregation should also be distinguished from a related concept – segmentation. Segmentation means that different ownership relations are geographically separated; i.e. that owner-occupancy, tenant-owned associations (bostadsrättsförening) and rental housing are not mixed. In chapter four I highlight how segmentation affects different areas in Malmö.



## Why is segregation a problem in Malmö today?

Segregation is often discussed in relation to the concept of integration. Integration exists when everyone has the same rights, obligations and opportunities regardless of ethnic or cultural background (Boverket 2007:11). This is problematic since having a different ethnic or cultural background is often associated with being from a different social class. Having the same rights and opportunities as people from more affluent socioeconomic backgrounds invites the question of whether the state should actively try to equalize opportunities between the children of the rich and the poor. How can this be done in the context of residential segregation? It is important to note that segregation is not seen as the opposite of integration. The opposite of segregation is when a mix of people live close to each other, but integration can exist in situations of residential segregation. (Boverket 2007:11-14)

Franzén (2001:25) qualifies the concept of segregation by pointing out that we are dealing with a coincidence of hierarchical social differences and hierarchical geographical differences. This has the benefit of helping us spell out a problem definition wherein segregation is not a problem unless it is hierarchical segregation. The question, according to Franzén, is why segregation is a problem in itself. He outlines two possible answers: the view of danger and the view of injustice.

Segregation is a problem based on the view of danger because it creates dangers for society as a whole: segregated members of society do not contribute fully and in some cases actually detract from the sum total of societal good. In the view of injustice every member of society who isn't seen as an equal in every way suffers from an injustice (Franzén 2001:25-27). Both of these views seem fruitful in helping us understand why segregation should be viewed as a problem.

Franzén's perspective is criticized by Kamali (2006:10) in that by separating society as a whole from segregated members of it Franzén risks reproducing an "us-and-them" way of thinking that itself contributes to disintegration. One example of such a view of the majority focusing on immigrants' lack of participation is found in Bohm and Khakee (1996), where three perspectives on immigrants' marginalization are listed: economic, political and cultural/social.

Andersson, Bråmås & Hogdal specify that what makes the causes of segregation interesting is that its effects have social meaning through neighborhood effects. They go on to list several such effects. Chief among them are that the unemployed have a harder time getting reemployed if they live in a neighborhood with high unemployment. Andersson, Bråmås & Hogdal state that it is legitimate from a welfare perspective to strive to compensate such neighborhoods (2007:9). The actions taken to combat such problems could be improvements of the neighborhood's collective socialization, social control, social capital, limited occupational opportunity and institutional factors, to follow a line of reasoning from Ainsworth (2006:129).

The focus on residential segregation in itself is examined critically by Molina (2001:51 ff.), who points out that much research has taken the statistical indicator of a problem (residential segregation) to be the problem itself. As she says, segregation cannot in itself be the definition of the problem. Instead, Molina redefines the problem through a more relevant underlying cause – i.e. race and racification. She believes that examining racial segregation is a promising avenue of investigation for segregation research.

Kaplan and Holloway also examine race in the context of segregation in *Segregation in Cities* from 1998. They begin by pointing out the difficulties in pinpointing ethnicity and race as a concept, and enumerate several competing definitions. Race, according to Kaplan and Holloway, has been variously used to describe national groups, religious groups and physiognomy. Ethnic classification is even more problematic, since ethnic factors change over time. Being a first generation immigrant is very different from being a second generation immigrant (Kaplan & Holloway 1998:3-5). Even so, I believe that segregation in Malmö should be described along ethnic rather than racial lines since that is how the statistical data is organized.

To return to Molina's point. If segregation in itself is not the problem, but an effect of an underlying cause, what then are the causes of segregation? Kaplan & Holloway help us by noting that the cause of social segregation is the dominant group's asymmetrical need to maintain social distance by creating spatial distance from the non-dominant group (Kaplan & Holloway 1998:6-7).

But what is the cause of social distance? The present study differs from Molina and Kaplan & Holloway by examining the classifications of degrees obtainable through the educational system as a possibly more important cause of social distance than ethnicity. The national metropolitan policy advocates a third choice by defining the most economically deprived areas as the problem, thus saying that economic difference and the social polarization it produces is the cause; i.e. that economic differences are the cause of social distance and, in the continuation, of spatial segregation. However, large scale redistribution of wealth does not seem an option for the current regime in Sweden. At least not in the direction from the rich to the poor. One must bear in mind that policy has consistently pinpointed "problematic areas" while research has pointed out the structural problem of segregation (cf. Andersson, Bråmås & Hogdal 2007:16). The discrepancy is known among policy makers (cf. Boverket 2007:11-14), but there seems to be no consensus on how to deal with it.

The problem underlying segregation is, in my opinion, class injustice; i.e. unequal opportunities for people coming from different classes of society. Policy seems to acknowledge this by pointing out that integration is achieved when everyone has equal opportunities. However, policy does not say how this is to be achieved. Segregation risks being a veil for the real problem if mixing people in residential areas is seen as a cure for the underlying problem, social injustice by unequal distribution of wealth.

The situation is even worse when segregation by choice – congregation – is impeded by a conscious choice by officials or landlords to prevent people from the same cultural background from living in the same buildings. Such social engineering might do more harm than good, as people are then prevented from congregating and building communities. The degree of choice involved in questions of segregation and congregation should not be underestimated, and needs to be more critically examined.

## Testing segregation indices for Malmö

I decided to test the dissimilarity, interaction and isolation indices as described by Kaplan and Holloway (1998:10-17). The results follow below.

The two most important aspects of segregation data are evenness and exposure.

Evenness "...compares the actual distribution of a population sub-group across subareas with an even distribution of the same sub-group across subareas... [i.e.]... a distribution is even when a sub-group's proportion of each subarea's population is the same as the sub-group's proportion of the city's population as a whole" (Kaplan & Holloway 1998:10)

According to Kaplan & Holloway the most common way of measuring evenness is the dissimilarity index  $D = \frac{1}{2} \sum_{i=1}^I |x_i/X - y_i/Y|$  "...where  $x_i$  and  $y_i$  are the populations of group X and group Y in subarea I, and X and Y are the populations of group X and Y in the city as a whole... If the two distributions are similar, the index will have a small value – if they are dissimilar, the index will have a large value." (Kaplan & Holloway 1998:11). The dissimilarity index was originally developed by Duncan & Duncan 1955 (Domina 2006:390).

Table 2:1 Comparing the dissimilarity index for measuring evenness of segregation over several different variables in Malmö (cf Kaplan & Holloway 1998:10-14) (the higher the value, the more segregated).

“Swedishness”/Other	0.39
University education/Compulsory school only	0.35
“Swedishness”/“Polishness”	0.31
Age group 80+/Other	0.27
University education/Other	0.26
Compulsory school only/Other	0.23
University education/Upper secondary school only	0.23
Age group 25-44/Age group 45-64	0.20
Age group 25-44/Other	0.18
“Polishness”/Other	0.18
Age group 0-5/Other	0.16
Employed/Unemployed	0.16
Upper secondary school only/Compulsory school only	0.15
Upper secondary school only/Other	0.13
Age group 45-64/Other	0.11

Exposure “...attempts to measure the chance of encountering a person of another group within one’s residential subarea.  $x P^*y = \sum_{i=1}^I (x_i/X) * (y_i/t_i)$ , where  $x_i$  and  $y_i$  represent the number of group X and group Y members in subarea  $i$ ,  $X$  is the city-wide population of group X, and  $t_i$  is the total population of subarea  $i$ . If most group X individuals live in areas that have few group Y members, there will be a very low probability that they will encounter a group Y member in their residential subarea...In other words, for the average member of group X, what is the proportion of group Y in her residential subarea? If the subareas where group X members disproportionately live are characterized by large proportions of group Y members the index will have a large value, whereas if they are characterized by large proportions of their own group, the index will have a small value.” (Kaplan & Holloway 1998:15). The isolation index was introduced by Lieberman 1980 (Domina 2006:391).

Table 2:2 Comparing the interaction (exposure) index for measuring segregation over several different variables in Malmö [cf. Kaplan & Holloway 1998:14-17] (the lower the value, the more segregated; this relation is asymmetrical and the table should read the chance of interaction for a in relation to b).

“Swedishness”/”Polishness”	0.02
Other/Age group 80+	0.06
University education/Compulsory school only	0.14
Upper secondary school only/Compulsory school only	0.18
Age group 25-44/Age group 45-64	0.22
“Swedishness”/Other	0.26
Age group 45-64/Age group 25-44	0.29
Compulsory school only/University education	0.30
Upper secondary school only/University education	0.34
Unemployed/Employed	0.38
University education/Upper secondary school only	0.41
Compulsory school only/Upper secondary school only	0.45
Upper secondary school only/Other	0.52
Other/”Swedishness”	0.53
University education/Other	0.55
Employed/Unemployed	0.57
“Polishness”/”Swedishness”	0.60
Compulsory school only/Other	0.74
Age group 80+/Other	0.91

”A closely related variant of this index is the isolation index,  $xP^*_x = \sum_{i=1}^I (x_i/X) * (x_i/t_i)$ , which represents the probability that a randomly drawn member of group X will share a subarea with another member of group X – i.e. the exposure of group X members to their own group.” (Kaplan & Holloway 1998:15)<sup>2</sup>

Table 2:3 Comparing the isolation index for measuring segregation over several different variables in Malmö [cf. Kaplan & Holloway 1998:14-17] (the higher the value, the more segregated).

“Swedishness”	0.74
Unemployed	0.61
Upper secondary school only	0.44
Employed	0.43
University education	0.42
Age group 25-44	0.34
Age group 45-64	0.24
Compulsory school only	0.20
Age group 80+	0.09
Polishness	0.03

Some researchers have particularly debated the use of the dissimilarity index over several variables and noted that it is most simple and efficient to use when dealing with a polar relationship between whites and blacks for example, i.e. the approach I used to calculate the dissimilarity index D for all possible combinations of groups (cf. Wong 1996:100). My argument, to the contrary, is that it was the most common index and that the loss in efficiency was countered by the simplicity of displaying the results in a meaningful way.

These tables are further elucidated by the observation of Andersson, BråmÅ & Hogdal (2007:9) that segregation indices are higher for the high income groups than for the low income groups. The same is apparently true for education. Highly educated people (university education) are more segregated than people with poor educational backgrounds (people with compulsory school only).

However, as can be seen in the tables above, there is no claim that education can replace all other relevant

segregation variables (economy, age, or ethnicity). The approach is still multivariate, that is, I consider all variables simultaneously, although I focus my attention on education. From the tables one might conclude that “Swedishness” is the overall most important segregational variable. However, to state that it is therefore the only important variable would be a mistake.

In Sweden, formal education has changed from being a matter for a small elite in the 1950s to being mass education today. Thus educational capital can be seen as re-distributed across the social classes, and as the analysis below shows, educational capital has increased over the entire field as well. Thus, by re-distributing educational capital, a welfare regime could argue that it is re-distributing resources over the population. Whether this also has the effect of addressing economic segregation is another matter, not to mention what happens in conjunction with the widespread introduction of semi-private “free” schools as shown by Broady and Börjesson (2005). The new variety of semi-private “free” schools on all levels in the system introduced several problems, chief among them being the possibilities of higher grades in these schools for the same level of competence.

Below I statistically examine the indicators for hierarchical housing segregation in an attempt to spell out what I believe is one of the underlying problems that results in hierarchical social and geographical differences: education and its positioning of people in a field based on cultural capital. This examination will be based on the work of Pierre Bourdieu.

## Distinction through education

What I examine here is whether Bourdieu's concept of distinction is useful in the context of defining segregation: "Distinction – ... - is the difference written into the very structure of the social space when it is perceived in accordance with the categories adapted to that structure..." (1991:238)

I read that statement to mean in this context that the structure of hierarchical housing segregation will be defined by the distribution of economic and cultural capital among the members of the dominant class: [in] "each class fraction being characterized by a certain configuration of this distribution to which there corresponds a certain lifestyle..." (1984:261)

I begin by examining the statistical indicators for such differences in economic and cultural capital in the city of Malmö in the hope of finding out whether the theories of Bourdieu can be empirically sustained through a material of descriptive statistics (secondary data). In figures 2:1 through 2:6 below Malmö was mapped in terms of the categories of economic and cultural capital. The area classification used was the key code classification (NYKO) of Statistics Sweden (SCB). Areas with low if any levels of residential population were excluded. Economic capital was measured as mean income (disponibel medelinkomst), which includes income from wages as well as from capital and benefits. Cultural/educational capital was measured by the percentage of people with a university or college degree. The data used in the mapping was originally produced by Statistics Sweden and was used courtesy of and with the permission of Malmö City Planning Office (SBK). The combination level of total capital was an invention of the author's (based on Bourdieu – see below) in order to be able to describe the relative distributions of economic and educational capital using the same unit. In principle I used a value for educational capital which levels the two dominant principles of society (economic and educational capital), i.e. makes them equally strong. The reason for this is that in order to discover distributional differences between areas, one principle cannot be much stronger than the other or the differences produced by the second principle would be obscured by the first, much stronger one. I then had to postulate that Bourdieu's principle of two dominant types of capital (see below) was true. Another simplification is that I was not able to distinguish between different types of educational capital, e. g. between medical doctors and engineers.

I have only been able to examine the amount of (high level) capital. There are thus a number of interesting observations which cannot yet be made, but which I hope to be able to make in future research. In chapter three I use tools that are somewhat sharper. I believe, however, that even at this rough level of data, some interesting observations can be made (cf. Broady, Börjesson and Palme 2002 or Broady and Börjesson 2005). Another limitation in this material is that it does not account for a number of possible interpretations of cultural capital relating to Sweden, but basically imports some of Bourdieu's tools in order to test them without further elaboration. It is a common criticism of Bourdieu that studies with his perspective are too "French" to be used anywhere else. Broady has suggested some possible inculcations of the theory in order to prevent such criticism (Broady 1990:302-307). However it is not clear to me how the field of political careers, the reproduction of the elite, and other specifically Swedish fields influence the cultural capital. Therefore, rather than not using Bourdieu at all, I used a somewhat simplified translation of Bourdieu in the hope of elaborating on it further in the future.

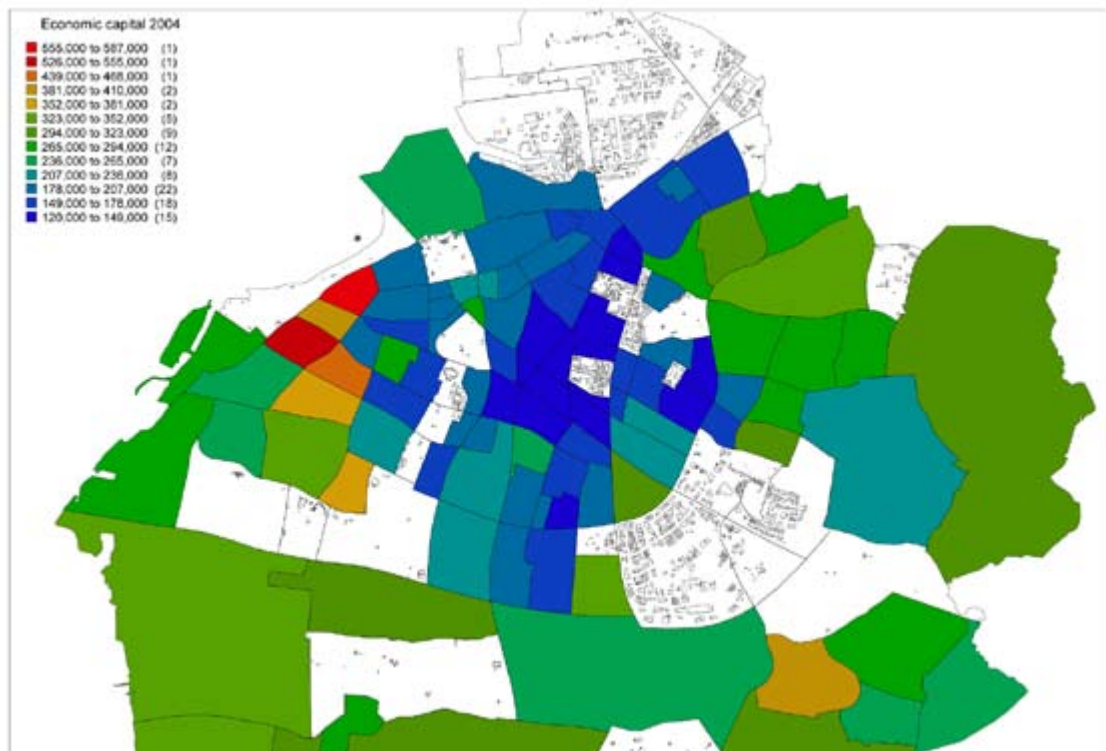


Figure 2:1 Economic capital by income.

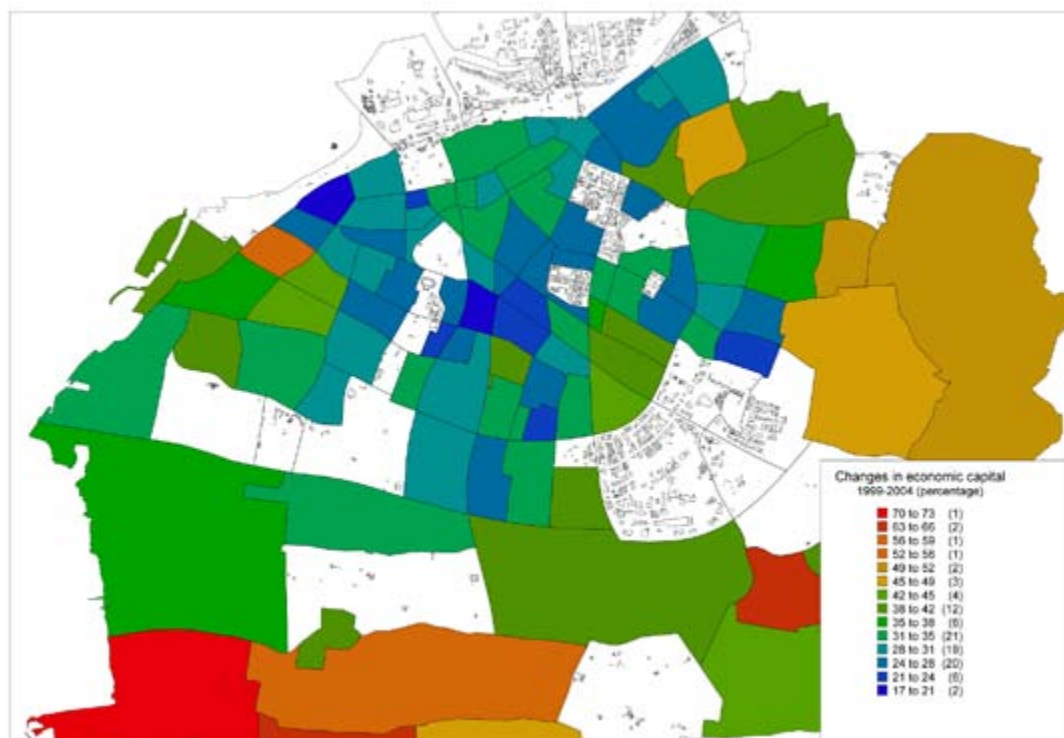


Figure 2:2 Changes in economic capital 1999-2004.



Table 2:4 Distribution of income and population in the subareas.

Areas	Share of inhabitants	Share of Income earners	Share of income
Herrgården, Örtagården	3.65%	2.09%	1.69%
Törnrosen, Kryddgården, Hermodsdal, Holma, Persborg, Södra Sofielund, Heleneholm	7.38%	6.69%	4.94%
Gullviksberg, Augustenborg, Flensburg, Lindängen, Nydala, Norra Sofielund	8.11%	8.06%	6.48%
Valdemarsro, Apelgården, Möllevången, Almhög, Oxievång, Södervärn, Kroksbäck	9.95%	9.92%	8.36%
Värnhem, Katrinelund, Almgården, Bellevuegården, Kirsebergsstaden, Västra Kattarp, Almvik, Segevång, Östervärn, Hindby, Toarp	10.27%	10.93%	9.36%
Östra Sorgenfri, Annelund, Bulltofta, Lorensborg, Rostorp, Johanneslust, Östra Skrävlinge, Lindeborg, Skumparp, Västra Söderkulla, Lönngården, Käglinge, Eriksfält, Gröndal	11.60%	12.15%	11.43%
Östra Söderkulla, Västra Klagstorp, Höja, Kvarnby, Västra Sorgenfri, Lockarp, Håkanstorp, Allmänna Sjukhuset, Gullvik, Rådmanvången, Kulladal, Ellstorp	9.39%	10.39%	9.78%
Oxie Kyrkby, Södra Sallerup, Mellanheden, Slussen, Stenkällan, Kronprinsen, Vintrie, Virentofta, Videdal, Dammfri, Tygelsjö by, Klagshamn, Södertorp	9.91%	9.20%	10.85%
Riseberga, Annetorp, Bunkeflostrand, Lugnet, Gamla Limhamn, Borgmästaregården, Rönneholm	10.63%	10.65%	12.40%
Kastanjegården, Gamla Staden, Fågelbacken, Jägersro villastad, Djupadal, Rörsjöstaden, Kronborg, Rosenvång, Tygelsjö vång	8.89%	9.36%	10.66%
Ribersborg, Kristineberg, Sibbarp, Hästhagen, Solbacken, Inre Hamnen, Hyllieby, Davidshall, Limhamns hamnområde	7.50%	8.15%	9.70%
Nya Bellevue, Teatern, Västervång, Västra Hamnen, Bellevue, Fridhem	2.19%	1.74%	4.10%

## Figures 2:1 and 2:2

From figure 2:1 and 2:2 above (and corresponding tables) the following observations could be made:

The approximately 265,000 inhabitants of the city of Malmö have a total of approximately 30.5 billion SEK in annual income. (2002 tax registry). About 4% of that income is represented by the top 2% of the income earners who live along the waterfront at Ribersborg beach. The next 7.5% of the population account for 9.7% of the income and live in the dark blue areas on the economic map. Overall, the top 30% of the inhabitants account for 37% of the income. The next 30% account for 32% of the income, while the lowest 40% account for only 31% of the total income. The stability of the city is represented by mapping the change of the numbers from 1999. These numbers were not indexed for inflation, etc., so the overall view of increased wealth may be misleading. Economically, segregation seems to work incrementally with only small adjustments area by area, but overall the maps paint a very clear picture of where the wealth is concentrated. Only if we look more closely at the top of the pyramid of income earners do we discover a more widespread pattern. Whether these differences also account for differences of economic distinction remains to be seen, but the numbers certainly indicate that it should be possible to distinguish clearly economically between areas 1 and 2, but impossible to distinguish economically between areas 57 and 58.



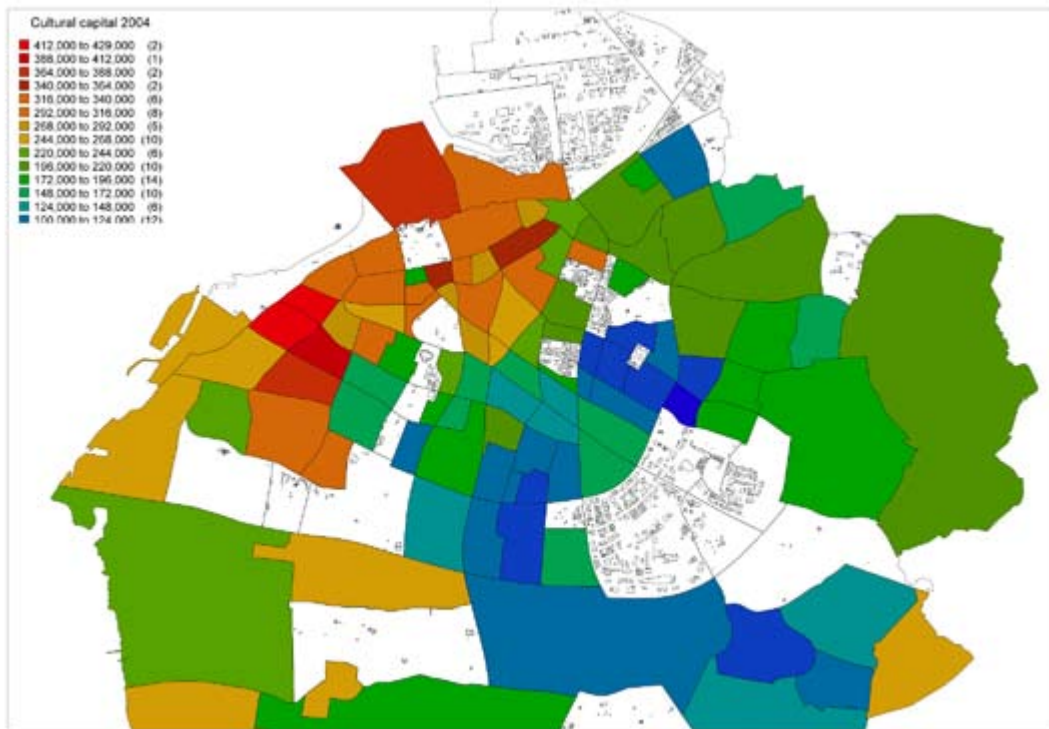


Figure 2:3 Cultural capital 2004.

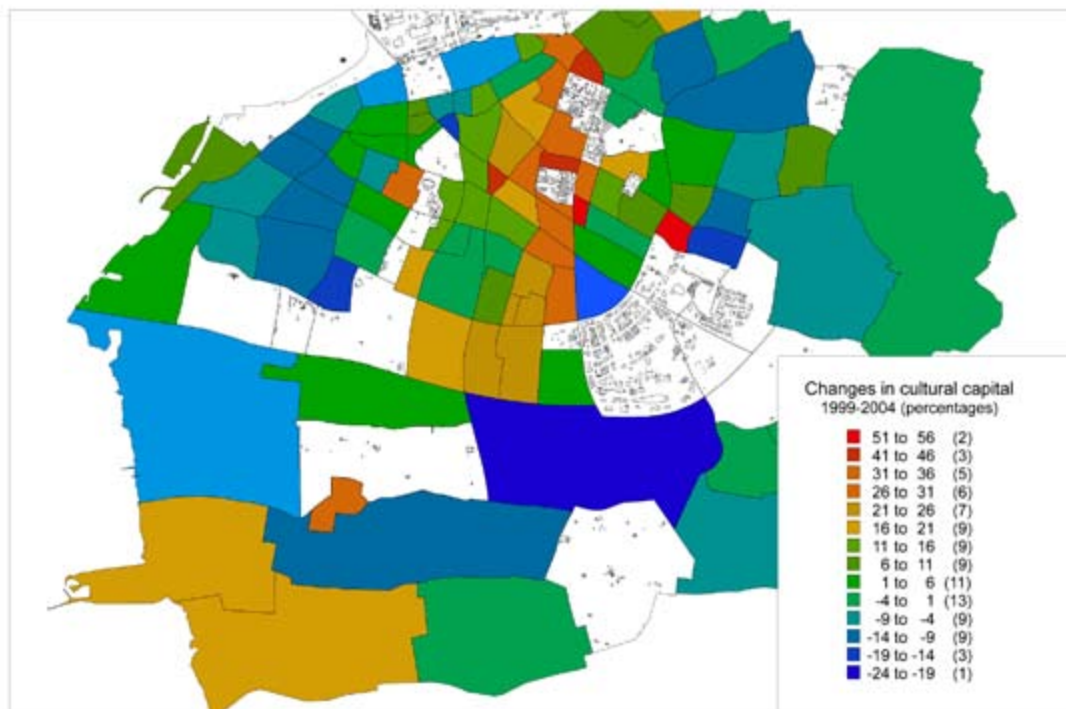


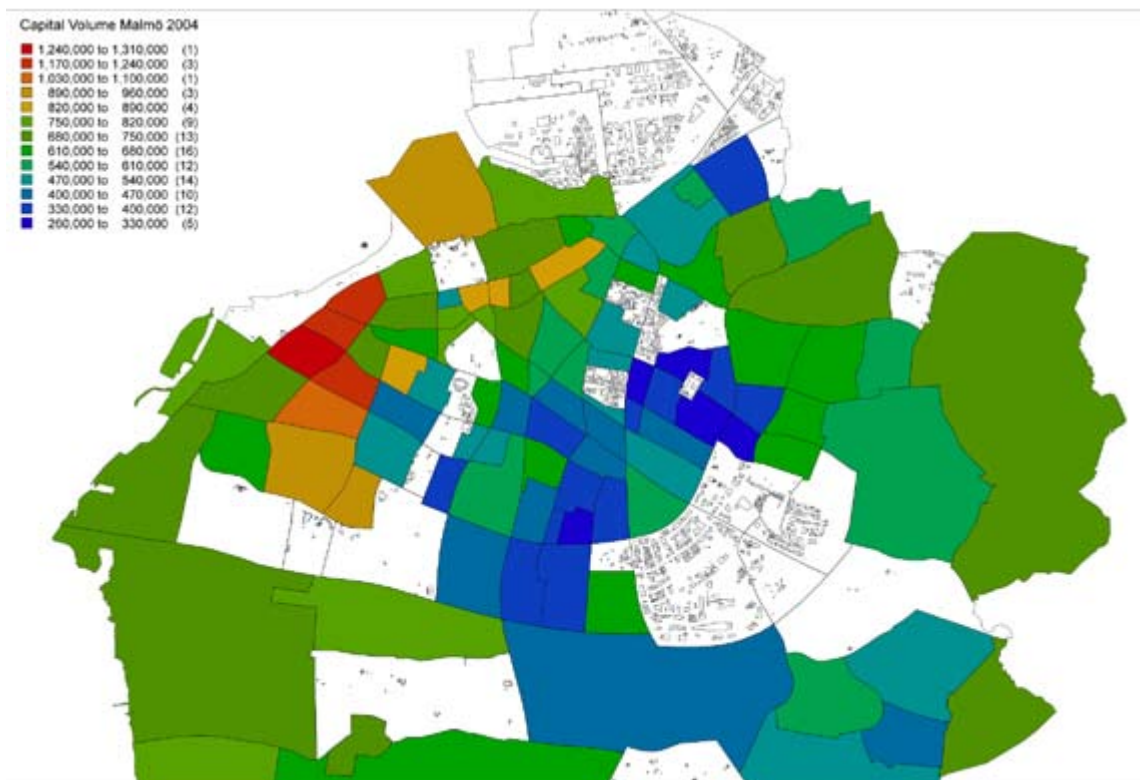
Figure 2:4 Changes in cultural capital 1999-2004.

## Figures 2:3 and 2:4

Like Bourdieu, I do not distinguish economic capital as the only defining factor of the structure of the dominant class. Instead, we temper the realization that economic capital is important in defining the dominant class by saying that cultural capital is also important, saying that the structure of the dominant class is constituted by the distribution of economic and cultural capital among its members (Bourdieu 1984:260) and the divisions and distinctions of social space: "...are really and symbolically expressed in physical space thus constituting the basis for a social topology" (Bourdieu 2000:134).

The statistical indicator I have used to measure the cultural capital of the inhabitants of the city of Malmö is the percentage of higher education present among the inhabitants of an area. This differs from Bourdieu's work in *Distinction* where age, father's occupations, qualifications and income were used as indicators of class (1984:261). However, at least in one other place (1984:120), Bourdieu clearly talks about the struggle between the two ways in which capital works as a principle of hierarchies referring to cultural and economic capital. On the equivalence of cultural and educational capital, I do not contest Bourdieu's judgment that there is a very close relationship linking cultural practices to educational capital (1984:13). Studying the illustration of the distribution of cultural capital, the results are surprising only in relation to any pre-conceived notion that economic capital and educational capital would be very closely related. Suddenly the economically deprived inner urban city (part of which is actually listed among the national 24 most deprived areas) is now revealed as a powerhouse of educational capital. One of the deprived areas of Malmö – Södra Innerstaden – would surely not be defined as deprived by the large number of cultural producers who make it their home.

The change in cultural capital is also clearly different from the change in economic capital. The areas that have increased their economic means the most (the suburbs) are different from the areas that have increased their cultural means the most (the inner urban city). The eliminated Katrinelund is an area where extensive student housing has increased the educational capital to unforeseen ranges.



Figur2:5 Total capital volume in Malmö 2004.



Figure 2:6 Changes in total capital volume in Malmö 1999-2004.

## Figures 2:5 and 2:6

Looking at the possibility of combining different forms of capital into the three-dimensional space described by Bourdieu as a: "...space whose three fundamental dimensions are defined by volume of capital, composition of capital, and change in these two properties over time..." (1984:120)

Defining volume of capital as the combined capital of economic and educational capital, the composition of capital would be their relative weight. Not having an immediate solution to the problem of the exchange rate between the two forms of capital – which are always struggling – Bourdieu uses the rate of intergenerational movement between the fractions as an indicator (1984:120). I tested the proposition that there was an equilibrium in 1999 between the two main forms of capital by saying that an area where 55% of the inhabitants have university educations equals having a mean income in the area of 586,800 SEK. (the maximum value for an area and the educational level as measured for that area). Any area would then have a cultural capital (an educational capital) equivalent to its percentage of people with university educations in relation to 55% of 586,800 SEK. This means that if an area had 55% people with university educations, it would have a cultural capital equivalent to 586,800 SEK. An area with 45% people with university educations would have an educational capital of  $45/55 * 586,800$ . This gives us a figure representing total capital. Note that the absence of both types of capital is beginning to appear in certain areas, but the exclusive presence of either type points to two types of middle class areas, plus areas where the very rich live, because they possess both types of capital and live along the waterfront.

The change in total capital obscures the composition of the change, but is shown here for completeness. The data thus accounts for the volumes and composition of capital in Malmö in 2004, and proves my first point – that economic segregation does not in itself describe segregation in general but needs to be complemented by the cultural variable, which tells a different and sometimes contradictory story. Let us now look more closely at the distribution of capital according to the two principal divisions of dominant capital (by education and by economy) in relation to the typologies of the areas in question, to get an idea of why we need to discuss typo-morphology in relation to segregation.

## Spatial segregation and typo-morphology

The spatial variable of socially defined housing areas seems to be somewhat neglected if not forgotten in the national metropolitan policy (cf. Socialdepartementet 1997:24, Socialdepartementet 1998:12, Justitiedepartementet 2005:33). This is unfortunate since segregation is spatial by definition (see above). Social researchers mentioned in the same documents, e.g. Stigendal, are more aware of the issue. Inspired by Franzén, Stigendal uses blocks, neighborhoods, million program areas and detached housing as the four defining categories for a typology of Malmö (Stigendal 1999:80-82). Unfortunately in the national metropolitan policy only the neighborhood unit is recognized as a spatial unit (Socialdepartementet 1997:24). Looking further into the research field of spatial typo-morphology reveals a multitude of possible typologies and morphologies. Among architectural researchers alone, spatial units and classifications range from classics such as the geometries of Steadman (1983) through the sightlines and convex spaces of Hillier and Hanson (e.g. 1984, 1996), through a system using street grids (e.g. Jacobs 1993), to building and area classifications of Swedish cities (Friberg & Rådberg 1996). Interestingly on the local level a major inventory of Malmö has been carried out initiated by the national metropolitan policy (Malmö Kulturmiljö 2002). Architectural research has shown an interest in types in several ways. Werne discusses the differences between vernacular building types, where the type is integral to a way of life; types as serial types, where the type refers to an industrially produced building unit and authoritarian types, where the type carries distinct social intentions, for example of, control or power (Werne 1987:89-95). What I was looking for in this study was a descriptive typo-morphology that took the historical genesis of areas into account without exaggerating the problems of such a description and that could be keyed to the social variables with a reasonable amount of effort in relation to synchronic descriptions of Malmö. The diachronic aspects, both of types changing properties over time and of people who live in them changing properties over time, as well as the mobility of people are left out of the picture. I chose early on to focus on Hillier's space syntax model, which seemed promising for comparing data to socioeconomic data. Its claim of being a social logic of space was, of course, tempting. Initially, I tried ambitiously to examine the integration values of Hillier in relation to the axial map of Malmö, to find correlations, since I believed that the topological position of an area could have a great impact on its social status and segregation. However, the data was inconclusive. For reference, I refer to the axial map of Malmö I drew and the discussion in *Space Syntax Limited* (2004) and *Lunds Universitet/Malmö Stad* (2005). Finding correlations between housing segregation and spatial integration in space syntax terms remains a challenge for the entire space syntax community. Hillier states the problem as finding a way of deciding between the implausible tenets of architectural determinism (that the physical environment makes all the difference) and the even more implausible tenets of architectural nihilism (that the physical environment makes no difference at all), and concludes that the problem has been set out in the wrong way. He then seems to move into tenets of environmental psychology by asking how architecture goes into people's heads and comes out as individual behavior. (Hillier 1996:183-185) Having an interest in relating social data to typo-morphology rather than psychological data, I became interested in the typo-morphological work of Friberg & Rådberg as relating to the sociological model shown above. The definition of centrality used below, however, has some debt to the work carried out on the space syntax maps in the above mentioned project, which also warrants inclusion. The space syntax map, however, only teaches us that the topological center of Malmö is located south of the the commercial center of Malmö (cf. Kärrholm 2008). When using the term centrality below, I have used an expert's bird's eye view, saying that what is close to the two centers (topological and commercial) is central and what is farther away is peripheral. The work of Friberg and Rådberg in relation to types is summarized below:

- 1) A synchronically described type is seen as a building frozen in time at roughly the moment of its conception, i.e. an artifact formed out of economic, social, institutional and cultural circumstances (1996:21).
- 2) Moments in time can be traced to historically important changes in legislation which regulates building; specifically in Sweden in 1874, 1907, 1931, 1945, 1975 (1996:22).



- 3) The most important parameters for these changes are a) number of storeys and b) percentage of land built on in relation to percentage of land not built on and c) building density (1996:29, 32)
- 4) These parameters govern the descriptive power of the types, which number more than 20 (1996:21-43).
- 5) These more than 20 types can be reduced to eight classes through a clustering of certain variables and reflection on their historical conception (1996: 147-153).

Certain typo-morphological elements are taken for granted by Rådberg, following typo-morphological tradition, as developed by for example Conzen, i.e. the street network, the property subdivision and the buildings related to open space (Rådberg 1996:14). A further elaboration and commentary as well as a full fledged morphology for this study is developed in chapter five.

These eight classes, then can be related to the social data as it is constructed by Statistics Sweden. In order to make the data fit the same scale I used in analyzing economic and cultural capital, I had to refrain from using the more developed typo-morphological measures in "Svensk Stadstyp" and restrict myself to using the eight main groups defined for a lower scale. (Rådberg & Friberg 1996:149-162) (Figure 2:7). This however, turned out to be quite sufficient in most cases in this chapter. In some cases I have used assessments of mixed areas which might be seen as unfair. This was necessary in order to get an overall view of the entire city. The scale can, of course, be discussed. Andersson, Bråmås & Hogdal discuss the problem of scale as one of being dependent on which societal problem one thinks segregation is related to. They conclude that using some measure of neighborhoods best solves the problem of scale. In their study they use a dual approach where on the one hand regional variances are focused and on the other a deprived area (Herrgården) is illuminated. The regional focus is very interesting and well expounded upon (2007:24-29). My decision to use the city scale instead is of course debatable. What I lose by using such a rough scale as opposed to a higher scale is a perspective of the differences between areas – what I gain is an overview on a city level. If I were to go to the regional level I would see the relationships between the satellite municipalities surrounding Malmö and Malmö itself, but again I would lose detail. I reasoned that with the data available, a city scale would be best to discover the relations between subareas. Subareas are not neighborhoods, but they are closer to the neighborhood scale than to the regional scale.

What is a neighborhood? I am not referring to the use of the concept "neighborhood units" such as described by Tägil & Werne (2007:25-29), but to a more general meaning of every possible identification with an area for a group of people. This makes the concept hard to define and fuzzy to directly relate to areas. Even if one uses SAMS (Small Area Market Statistics) where Malmö is divided into 363 areas, there is the problem that these areas do not directly correspond to "neighborhoods" in any self-explanatory way (cf Andersson, Bråmås & Hogdal 2007:31).



Figure 2:7 The city of Malmö divided by typomorphology. Six distinct types of areas (and one mixed type) are visible on this scale. 1) The low, densely built peripheral areas built mostly after 1975. 2) The remaining historical core areas still retaining some semblance of pre-industrial building 3) The low, sparsely built central areas developed as areas either for the upper or middle classes during the late 19th century and the early 20th century 4) The high, openly built areas, mostly from the million program 1965-1975. 5) The medium, densely built open areas, mostly post-WWII with a street grid system 6) The 19th century Berlin type block grid dominating the core of Malmö. The two types of areas identified by Rådberg that are absent in Malmö are a) the pre-industrial city (there are remnants of this type, but not areas large enough to be identified on this scale) and b) low and very sparsely built areas. These types of areas exist as well but on this scale they are included in the low and sparsely built areas.

I, in the figure below (figure 2:8) combine the economic (grading poor/average/rich), the cultural (grading low/medium/high) and the typomorphological.

## Correspondence diagram

I developed a type of diagram (again along the lines of Bourdieu) at the Department of Architecture, LTH, as early as 2001 (Persson 2001:34, 99-100). I updated it with the 2004 data to show the distributions of the field in the same way Bourdieu shows the distributions of the field in *Distinction* (Bourdieu 1984:128-129, 1994:290-291). It is a simplified version of a correspondence analysis, where the horizontal axis represents a percentage of the distribution of capital (economic/educational) while the vertical axis represents the total volume of capital. The connected dots represent typo-morphological unity. This figure makes it clear how segregation on a typo-morphological city level works for the city of Malmö. Basically we are dealing with ten types of areas in Malmö.

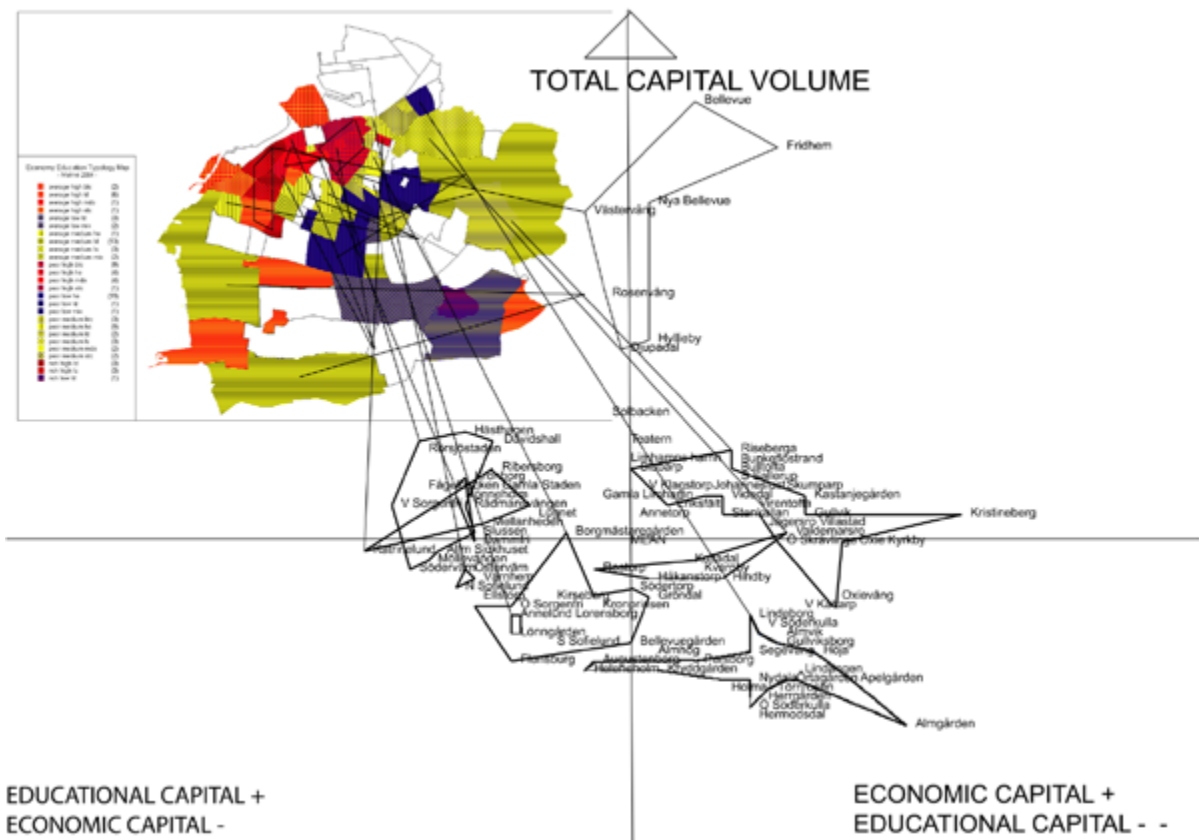


Figure 2:8: Typo-morphological unity as inscribed on a two-dimensional diagram of volume and distribution of capital in Malmö 2004.

The diagram indicates that the ten basic types of urban socio-geographical environments found in Malmö in 2004 were:

1. *Centrally located areas inhabited by the wealthy.* These people are wealthy and well educated. The areas have low height buildings, sometimes dense and sometimes sparse. Central location (Bellevue, Fridhem, etc.). These are the most affluent areas in Malmö. Situated on the waterfront, historically centrally located between the city centers of Malmö and Limhamn. Highly syno-morphological (this has been the most affluent part in Malmö since it was built during the 19th century). Approximately 12,000 inhabitants.
2. *Centrally located areas inhabited by the well-educated I.* The people are of less means and well educated. The areas are built in an urban closed grid system. Central location (Hästhagen, Davidshall, Rörjöstaden, Möllvången, etc.). Most of the centrally located well-educated residents live in the 19th century grid. Approximately 34,000 inhabitants



3. *Centrally located areas inhabited by the well-educated II.* The people are of less means and well educated. The areas are built in a medium dense grid system. Central location (Fågelbacken, Kronborg, Rönneholm, Dammfri). Some of the centrally located well-educated residents live in apartments with an open block structure. Approximately 15,000 inhabitants.
4. *Centrally located areas inhabited by the well-educated III.* The people are of less means and well educated. The areas have highrise buildings. Central location (Ribersborg, Katrinelund, Lugnet, Mellanheden). Some of the centrally located well-educated residents live in highrise buildings. Approximately 14,000 inhabitants.
5. *Peripherally located areas inhabited by the wealthy.* The people have average wealth and medium numbers of people with university educations. The areas have one-family housing and are located at commuting distance from workplaces. Peripheral locations (Riseberga, Bunkeflostrand, Jägersro Villastad, etc.). Approximately 29,000 inhabitants.
6. *Centrally/peripherally located areas inhabited by the less well-to-do.* The people are of less means and have medium numbers of people with university educations. The areas have low, dense or low, sparse buildings. Peripheral location (Kvarnby, Hindby, Rostorp, Valdemarsro, Håkanstorp). These areas mostly consist of one-family housing located closer to the center than the wealthier periperal areas. Concentrated in the northeast (egnahemsområden). A smaller group of approximately 6,000 inhabitants.
7. *More central highrise areas inhabited by medium numbers of people with university educations.* The people are of less means and have medium numbers of people with university educations (Ellstorp, Kronprinsen, Lorensborg, etc.). Approximately 22,000 inhabitants.
8. *Open block highrise subset of the more central areas inhabited by medium numbers of people with university educations.* The people are of less means and have medium numbers of people with university educations. (Annelund, Lönngården). Approximately 3,000 inhabitants.
9. *Centrally located areas inhabited medium numbers of people with university educations.* The people are of less means and have medium numbers of people with university educations. The areas are built in a large town closed grid system (19th century grid). (Värnhem, Östervärn, Norra Sofielund). Approximately 8,000 inhabitants
10. *Peripheral areas inhabited by people of less means and low numbers of people with university educations.* The people are of less means and have low numbers of people with university educations. Buildings are highrise. Peripheral locations ( Törnrosen, Örtagården, Herrgård, Persborg, Heleneholm, Hermodsdal, Almgården, etc.). Approximately 63,000 inhabitants

A diagram may be useful for understanding the relations between different city environments in the terms given above:

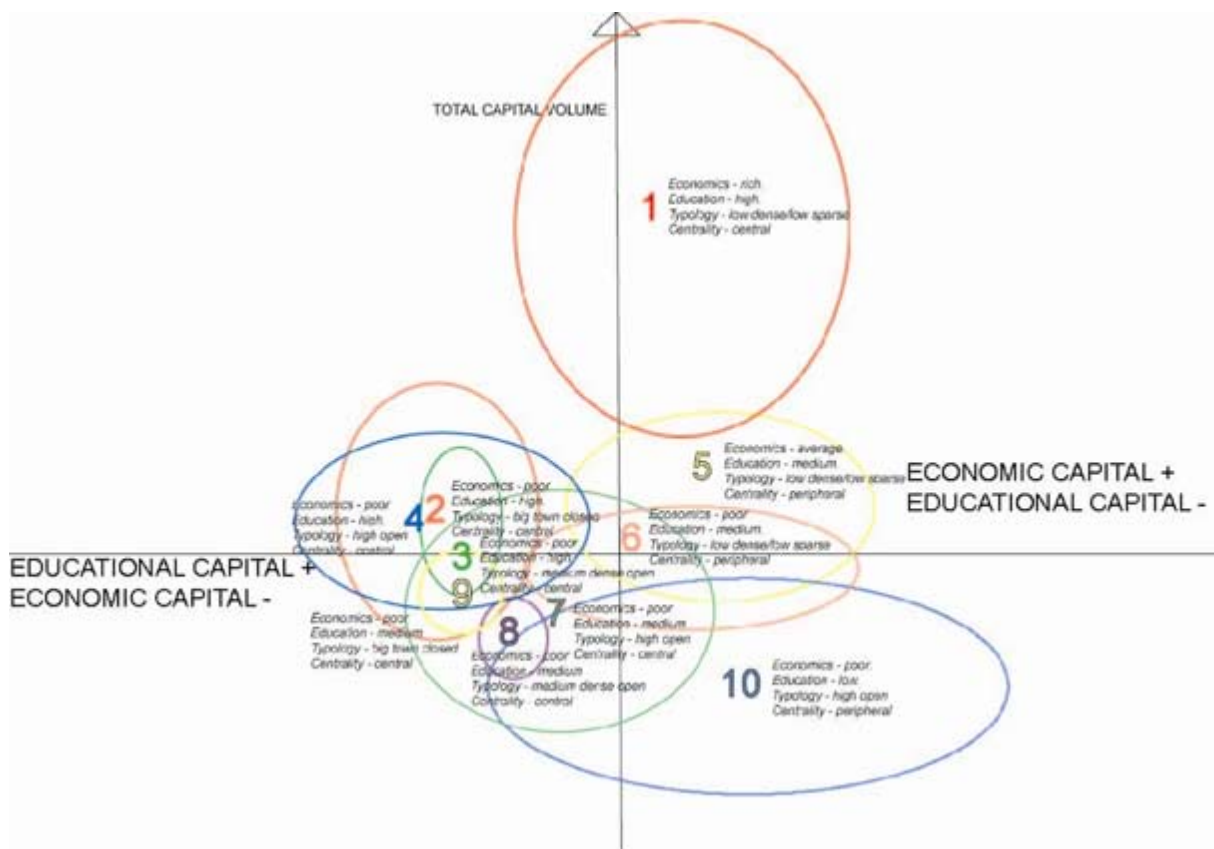


Figure 2:9: The field of urban area types as defined in terms of four variables: economics, education, typology and centrality.

This diagram gives an idea of the proximity of different positions in a socially and geographically segregated housing field. The diagram illuminates the following relationships:

- a) The wealthy residents living in centrally located areas are the most segregated group in Malmö (1 above). Areas situated in or near the intersection of groups 1 and 5 can be considered the only links between the wealthy residents and another group – the wealthy people who live peripherally. (Solbacken, Teatern). The seven areas (Fridhem, Bellevue, etc.) classified in this group are all areas situated in close proximity to each other and with a similar pattern of area building. This is urban one-family housing, mostly built before WWII and on large properties. Also featured are post-modern image areas that are more densely built, such as Potatiså kern (by American architect Charles Moore) and high modern image areas such as Friluftsstaden (by Swedish developer Eric Sigfrid Persson). These areas flagrantly sport symbolic capital, as areas built with the express purpose of ushering in new eras of building. This category is characterized by the residents having both high levels of income and high levels of education. If all areas were like these, there would be no need to reexamine the cultural variable, since economic and educational segregation would indeed coincide.
- b) However, the rest of the diagram tells another story. In my interpretation the second and third areas confirm the Bourdieu model very well. On the one (left) hand we have people with low incomes but who are well-educated living in the inner city in apartments and in 19th century blocks. On the other (right) hand we have the well-to-do peripheral class of urban area types where the people have relatively little education (in relation to their income), who live in suburban one-family dwellings. Some further

elaboration of one of these groups may be useful. The educated people in central locations is consist of four groups, the smaller groups (3), (4) and (9) being subgroups of the larger one (2), but occupying distinct positions within the field of the urban well-educated population:

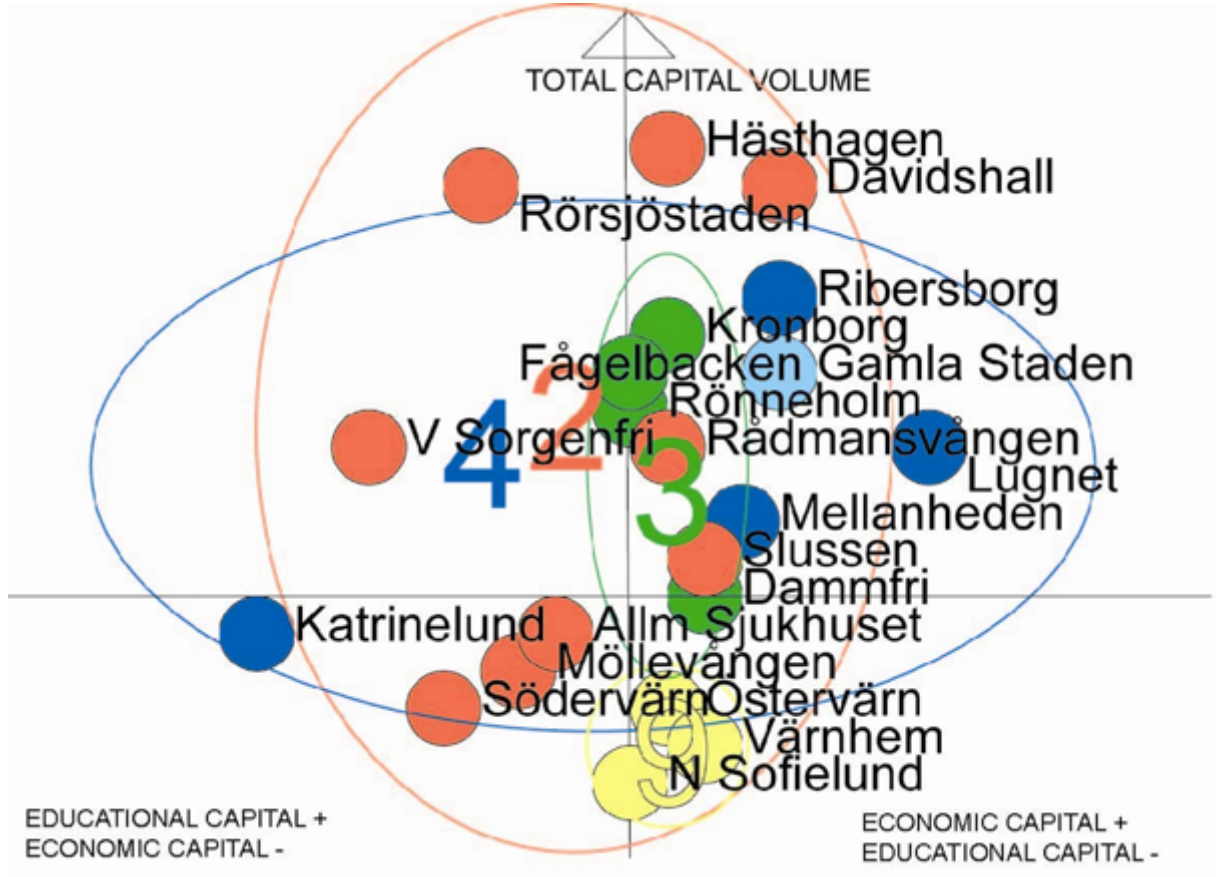


Figure 2:10 The subfield of area types of the centrally located well-educated residents.

- c) Residents with low incomes and poor educational backgrounds also occupy a segregated position at the lower end of the diagram, although there are several intersections with groups (6), (7), and (8):

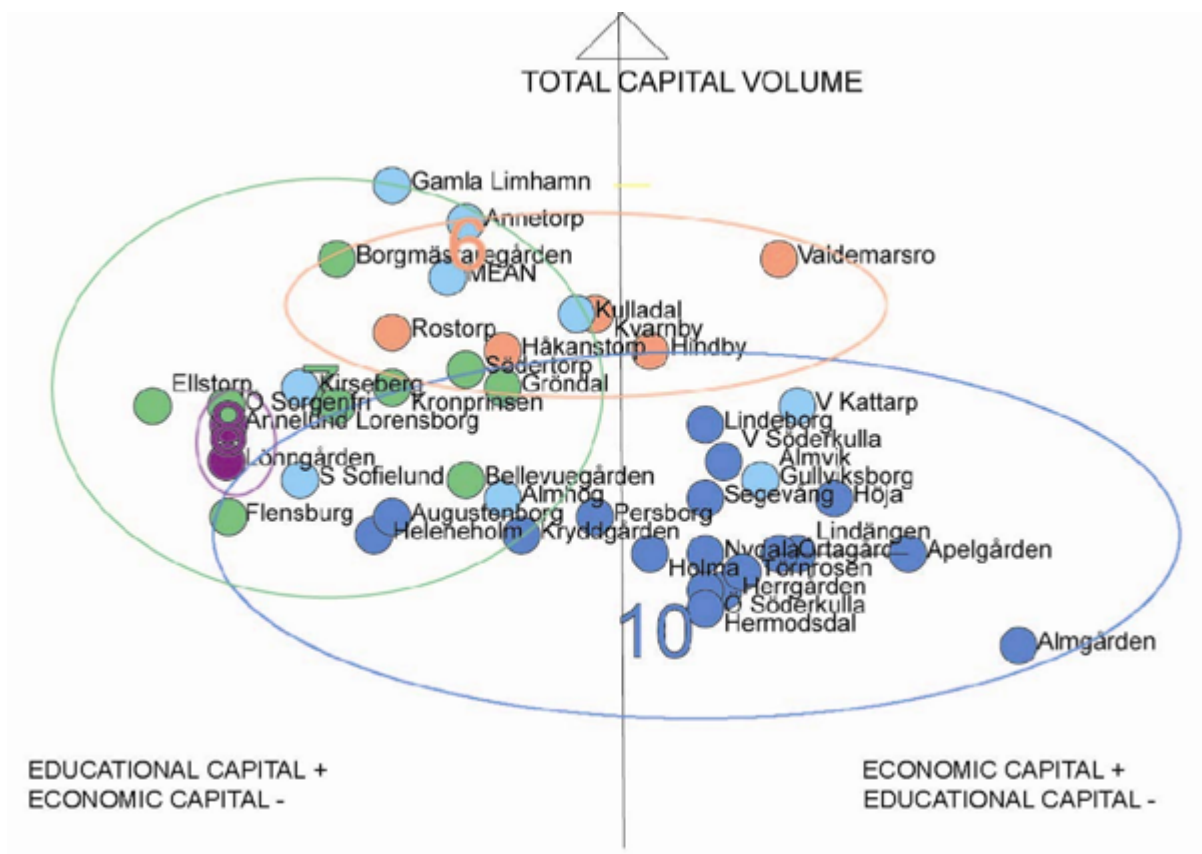


Figure 2:11 The subfield of area types of the residents with low incomes with poor educational backgrounds.

This group tends to be structured in terms of economics, but if we look at the shift in position from 1999 (again looking at all Malmö areas):

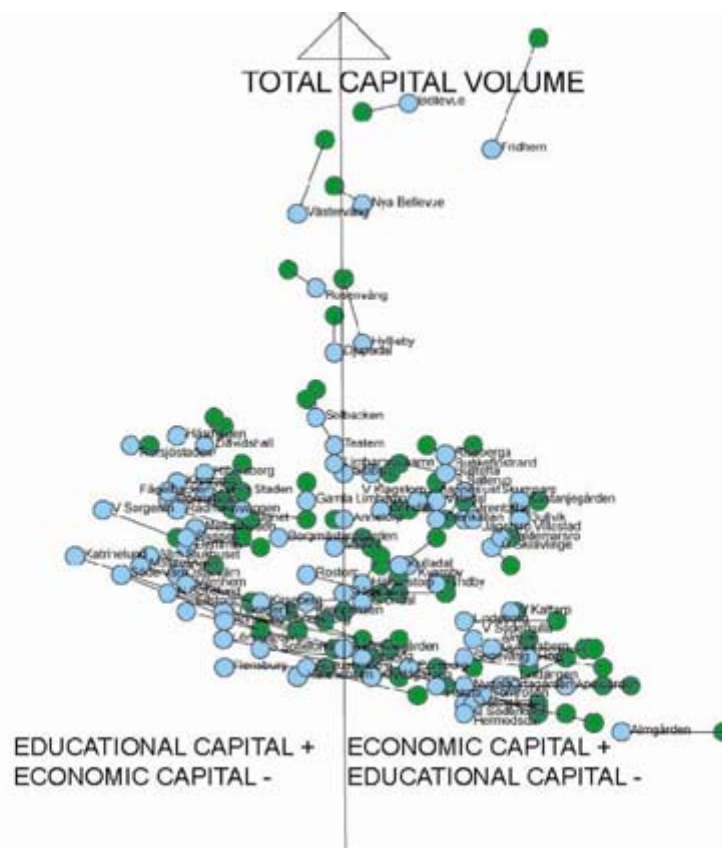


Figure 2:12 The changes in distribution of capital between 1999 and 2004 in the city of Malmö. The capital volumes have become normalized so that only a relative change remains in the figure. Lighter blue dots represent the position in 2004. Darker green dots represent the position in 1999.

We see a move towards a more culturally constructed position for all areas and especially for areas at the lower end of the volume scale. Typo-morphologically these areas are highrise buildings built during the “million program” era. Looking through a few instances of areas represented in the material, there are several nuances to be attentive to. For example, in the subset near the top of total capital, the distribution of capital in these subareas point to two categories: Subareas structured in terms of economic capital (Teatern, Bunkeflostrand, Riseberga and Bulltofta) and subareas structured in terms of cultural capital (Vintrie, Rörsjöstaden, Limhamns hamn, Skumparp and Toarp). There are, however, exceptions, including Vintrie, Skumparp and Toarp. These all are small, exclusive, one-family housing areas with small amounts of total capital. Rörsjöstaden and Teatern are centrally located urban areas, while Bunkeflostrand, Riseberga, Limhamns hamn and Bulltofta are suburban one-family housing areas. These exceptions might lead us to speculate that cultural capital points either towards seclusion/exclusion in remote village-type housing or towards high status urban core housing, while economic capital points towards suburban one-family housing.

In any case, cultural differences seem to be instrumental to typo-morphological hierarchical segregation as seen in the city of Malmö. Finally, before leaving the discussion of these diagrams, I would like to make it clear that we are talking about ranks and ranking here, not absolute measures of wealth, poverty and educational background. In this system, some areas have more of certain resources, other areas have less of the same resources. The ranking of these resources gives the classifications. In contrast to the national metropolitan policy, I have used a different approach in classification. Where the policy cuts off the lowest end of the scale and defines it as poor I have generously included about one third of the lower end areas in such a classification, considering the next third average and the last third rich. Correspondingly for

education. How well does this fit into current ideas of segregation in relation to urban area types? Rådberg is a typo-morphological researcher who has tried to tackle this in a systematic way, and using the concept of attractiveness, he tries to combine the typo-morphological measures with social data (Rådberg 2000). In this report Rådberg uses the economic indicator of status (2000:9) in line with the national policy. He finds attractiveness highest in one-family housing (villor, radhus) and lowest among certain types of highrise buildings: gallery buildings (loftgångshus). Rådbergs indices are: 1) One-family housing (180) 2) Mixed garden city, etc. (153) 3) 19th century gridblock (103) 4) Lamellar buildings and similar (78) and 5) Open highrise buildings (75) (Rådberg 2000:39). His moderating factors are centrality and ownership relation. If we used a measure of total capital this would probably not change. In the diagram above (figure 2:9), the top and the bottom of economic and total capital are very similar to Rådberg's indices. It is in the middle the differences arise. Where Rådberg's index of attractiveness for mixed suburban housing (blandad trädgårdsstad) is higher than that for older, inner urban core closed grid blocks (äldre sluten kvartersstad) this would not be the finding using my model. I think that further research combining Rådberg's & Friberg's typo-morphological model with other notions of capital than the strictly economic one could be very useful and result in interesting new findings. This is my point – if typo-morphological research enhanced through studies using the cultural variable can indicate certain patterns of segregation on a wide urban area scale, then it should receive more attention.

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1. This is, of course, even more true of the cultural variable as a whole, denoted by Bourdieu as cultural capital. I have only addressed this through an indicator, based on formal education alone. A full investigation of cultural capital or other cultural variables is beyond the scope of this dissertation.
  2. For a critique of the D index and other global measures see, for instance, Brown & Chung 2006.



# Social variables and social types

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## CHAPTER THREE

In chapter two, I gave a perspective on segregation and how it was connected to education, space and typomorphology in the city of Malmö. In this chapter, I challenge that view by performing a closer study of the social variables and using education as a more detailed descriptor of segregation. I classify the subareas of Malmö into a number of social types defined by: first, the numbers of people with certain educational levels, then a number of other factors. This provides a classification of social types that capture the complexity of social indicators for subareas of Malmö in a way that is useful in relation to my next question, approached in chapter four: How do spatial factors come into play? I start by listing the source data as it was made available to me. Then I go on to show how I analyzed and adapted the data in my work.

### The source data

I had access to a number of sources of data for this dissertation. I first divided the data into social and spatial indicators. I then chose which variables to keep and which to exclude. Lastly, I adapted the data to fit the dissertation.

The primary data sources were:

- 1) “Area Facts 2004” (*Områdesfakta 2004*), published by the Malmö City Strategy Office.
- 2) GIS cartographic data, geo-coded to fit the Malmö local geographical system and made available to me by the Malmö City Land Surveying Department (*Malmö Stadsmätning*).
- 3) General election data from the 2006 general elections, publicly available through the website hosted by the Election Authority ([valmyndigheten.se](http://valmyndigheten.se)).

### Area Facts 2004

“Area Facts 2004” contains social and spatial data concerning the city of Malmö. The data is divided into 10 districts (*stadsdelar*) and further subdivided into 134 subareas (*delområden*). I did not use the district division at all, but focused on the subarea division.

From the 134 subareas, I eliminated 31 which did not include any significant residential data, because fewer than 100 people resided in each of those 31 areas. Thus, 103 subareas remained in the survey.

In “Area Facts 2004”, each subarea comes with 145 variables’ worth of data, such as geometric area, population prognosis, age, current population, change of residence, employment, education, household, predicted households, income, unemployment, social welfare, voting statistics, car ownership, etc.

The variables were originally produced either by the city of Malmö or more often by Statistics Sweden (*SCB*) and reproduced by the local authority.

In this chapter I am concerned with the survey data that pertains to social characteristics, and in chapter four, I describe how I worked with the spatial variables.

### Dividing social and spatial variables: excluding variables

Of the 145 variables, 3 were prognostic variables and were eliminated from the survey.

Eleven variables were based on the 1990 population census and I decided that 14-year-old data was too old to use, so they were eliminated.

Thirty-four variables were spatial as I define the term; they are treated in chapter four: the data for building age, area measurements and other related themes.

Four variables pertained to ‘day population’, i.e. people who work in the area by day, and were eliminated because I am working with residential social data, i.e. ‘night population’.

## Thematic groupings – exclusion/inclusion of variables

The remaining 97 variables were preliminarily divided into a number of thematic groups based on their original arrangement. These groups were: **population totals, age groups, income, gender, change of address, foreign background, employment, education, car ownership, and political inclination.**

**Population totals** were fairly straightforward. Population data was arranged into 8 variables showing the population totals for 1961, 1971, 1981, 1991, 2001, 2002, 2003, and 2004. I used the 2004 group for totals and kept the 2001-2003 groups for the change of address thematic.

One thematic group was eliminated immediately: **car ownership.** The main reason was that in my opinion it was not relevant to the questions of the dissertation: I did not find the relations between car ownership and spatial variables without knowing the type of car of interest to the study. The other groups needed to be reduced in number of variables before they would be workable in the context of the dissertation. This was mainly a matter of making number of variables manageable while still retaining as many thematic groups as possible. This would make it possible to compare the education indicator with other indicators of segregation.

The thematic **age group** consisted of 8 variables, the population arranged into age groups 0-5, 6-15, 16-18, 19-24, 25-44, 45-64, 65-79 and 80+, and the sum total, which was identical to the sum total for population. I combined the 6-15 and 16-18 group variables based on the assumption that the 16-18 group was interesting for the city of Malmö as it could be a basis for upper secondary school locations, but it was not interesting to me, as I was interested in residential data and both of these groups probably lived at the same place. I decided to keep the 0-5 group because the data seemed to support some statements on the differences between choices of residence by parents of small children and of older children. Seven variables for age then remained, not counting the population total.

For **gender** I examined the 9 age-related population data variables that were gender coded but found nothing interesting when comparing to the age data in general, and decided to eliminate that data from the survey. I reinserted gender only in the employment theme.

For **change of address** there were 12 variables showing figures for people moving into and out of the subareas 2000, 2001, 2002 and 2003 as well as the net numbers for population increase and decrease, in addition to the 4 relevant population variables. I decided I was not interested in the net numbers for population increase and decrease but rather in how mobile or stabile the population was, and thus instead wanted to sum up the numbers for the various years of people moving into and out of the areas. Thus I kept the 8 variables pertaining to moving out of and into the areas, and renamed the theme **mobility.**<sup>1</sup>

For **foreign background,** I had 17 variables where 15 represented country of foreign origin related to whether the person was born in that country or a second-generation immigrant from that country. Two variables represented the total number of people born abroad or having parents born abroad. This also means that I did not have the population counts of all different ethnic groups for each subarea. I had only the data for the five largest groups and for the Swedish group. Since any given group could be among the five largest in one subarea and not in another, it was not possible to determine the extent of ethnic group segregation. I decided to keep the two variables that totaled the numbers and first renamed the theme **ethnicity** before I settled on “**Swedishness**”, as that was what the data could accurately portray.<sup>2</sup> In my opinion, the current classification used by Statistics Sweden that classifies someone as a second-generation immigrant is racist, since a second-generation immigrant is not an immigrant at all. I believe “Swedishness” should be based on citizenship not on cultural origin. Cultural origin is a term that does not accurately portray any useful distinction. It is a reflection part of my criticism of the current statistical model used by Statistics Sweden that I have named this “Swedishness”, as to pinpoint the problem with the definition. “Swedishness” is the negative logical consequence of separating immigrants based on place of birth and not on citizenship.

For **unemployment** I had 11 variables, 5 of which were directly related to employment and 6 to social welfare, which I decided to eliminate and instead to concentrate on the employment variables. This decision was based mainly on a desire to limit the number of variables.



For **employment** I had 4 variables. The total number of employed persons in the age category 16+, and the percentages of men and women, respectively, employed in the age category 20-64. I used these numbers both for employment and to indicate gender, and thus kept all 4 variables.

For **education** I kept all 5 variables, since the focus of my dissertation is the relationship between education and segregation, and I therefore wished to keep as much information as possible regarding education. The first four variables were the total number of people, the number of people with only compulsory education, the number of people with upper secondary school education and the number of people with university level education. The last variable was the number of people surveyed with no data. They were all surveyed on January 2004. The data originates from Statistics Sweden's education registry and contains no data concerning education in countries other than Sweden or concerning education at folk high schools (*folkhögskolor*) during the period 1990-2000. This also means that areas with higher levels of "Swedishness" are somewhat more likely to have university education.

For **income** I kept all 3 variables. Mean income is gross income minus taxes plus positive transfers and is based on both taxed couples, and individuals, which makes the data non-transparent at the individual level. Income per inhabitant is mean income divided by population. The third variable is the number of income earners.

For **political inclination** (*politisk benägenhet*), measuring voters mainly left of center versus voters mainly right of center, I had access to the municipal election from 2002 from "Area Facts" 2004 and the general elections from 2006. I decided to use the latter, taking my figures from the website of the Election Authority ([valmyndigheten.se](http://valmyndigheten.se)). This had the dual positive effect that I was able to use more recent statistics and national elections results rather than municipal ones which I deemed more appropriate to register political inclination to the right or the left, which was what I was interested in, rather than political inclination in relation to local politics. The colors represent whether voters voted blue, i.e. for the parties m (The Moderate Party), fp (The Liberal Party), c (The Centre Party) or kd (The Christian Democrats) or red, i.e. for the parties s (The Social Democratic Party), v (The Left Party) or mp (The Green Party). Dark blue and dark red represent higher percentages of voters who voted blue or red, respectively.

For **radicalness** where the labels REACTIONARY, reactionary, equal and radical, RADICAL represents a ratio between votes for the Sweden Democrats (right-wing extremists) versus the Feminist Initiative (left-wing extremists)<sup>3</sup>. I divided the votes between those two parties and then ranked all the figures in order to measure inclination towards either a radical position (represented by votes for the Feminist Initiative) or a reactionary position (represented by votes for the Sweden Democrats)

## Examining the thematic groups more closely – adapting the data to fit the survey

I was interested in seeing the data as rankings, so I divided the 103 subareas into five groups (highest ranking, high ranking, medium ranking, low ranking and lowest ranking), and ordered the areas with respect to the eight thematic groups: **population, education, income, mobility, ethnicity/"Swedishness", age groups, employment, and political inclination**. I thus obtained comparable rankings for each subarea with respect to each thematic grouping. I did not, at this phase of my work, choose education as the primary indicator, merely examined each of the thematic groupings in this preliminary way by mapping them.

Keeping my preconception of education as an important indicator, I started out by arranging the set of areas into subsets based on the distribution of **education** within the areas.

**Income** then became a powerful thematic group, and during the arrangement I discovered that **ethnic** origin (at least when that origin was Swedish), and **age** also constituted interesting indicators of groupings. Thus these four became my main variables: education, economy, "Swedishness" and age group. I came to regard the remaining social variables mobility, employment and political inclination as less important for the purpose of arranging the subareas into a grouping which I denoted social type. Political inclination had a specific difficulty: the subareas are not identical to the voting districts, meaning that not all data was able to be integrated into the subarea model.

## Mapping the variables



Figure 3:1 Distribution of education



Figures 3:2 and 3:3

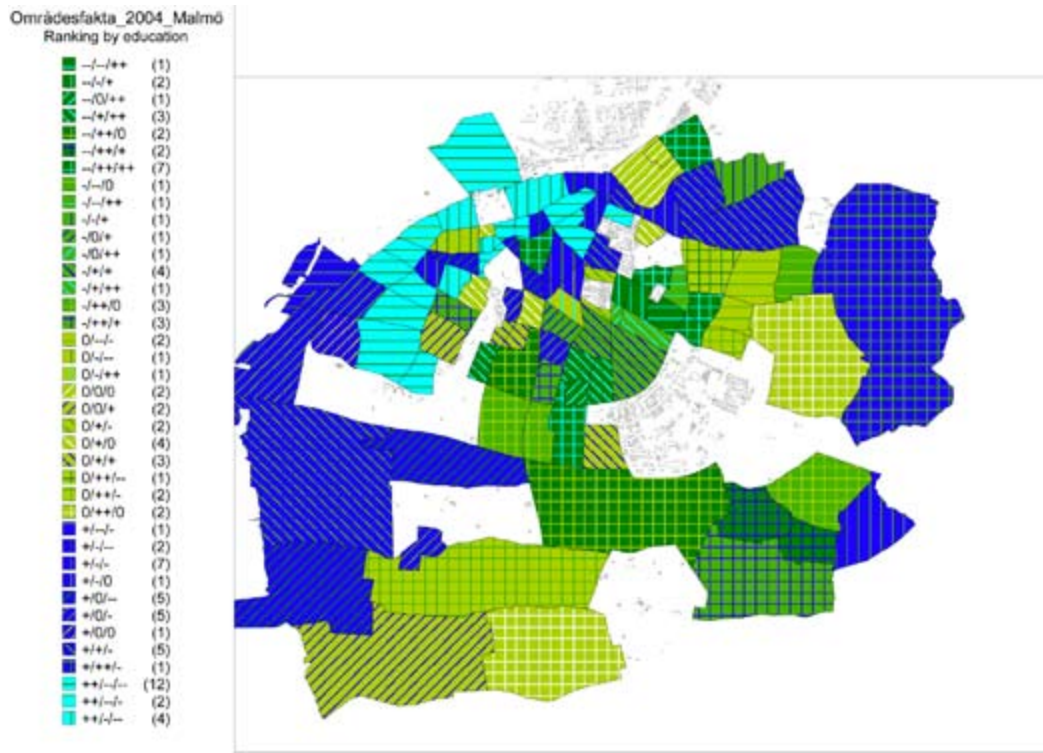


Figure 3:4 The combined map of education:

Using only the three education variables I produced the map above, where university level education was represented in terms of the background color while upper secondary school level education was represented in terms of the orientation of lines and finally compulsory school education in terms of the colors of the lines. This map served as the basis for the social types. The legend clarifies how I came to represent highest, high, medium, low and lowest as ++, +, 0, -, -- with the division university level/upper secondary school level/ compulsory school level indicated by slashes.

This basis for further adaptation consisted of 37 different groups for my data on 103 individual areas. Several of these groups consisted of only one subarea. What were my findings after this analysis?

I found that I needed to examine other variables in order to define the social types. In Chapter Two this was accomplished by combining a portion of the educational data; i.e. the distribution of people with university education with a portion of the economic data, i.e. the mean income levels of all areas, into a notion of a total capital level. In this chapter, having to take into account fifteen variables the idea of transforming each into a total capital variable was not feasible. Instead, I mapped each of the other variables in order to discern patterns in the data. These patterns I then used for the type definitions. In other words, I asked the question: Which variable co-varies with the educational variables in such a way as to permit a feasible grouping into a smaller number of groups (than 37)?

## Income levels

The first variables to examine were mean income and income per inhabitant.



Figure 3:5



Figure 3:6

Used alone the income criteria would arrange Malmö into 21 groups. I produced a map showing both aspects (mean income and income per inhabitant) simultaneously. Color represents mean income and line orientation represents income per inhabitant. The ranking system is the same as above, i.e. highest (++), high (+), medium (0), low (-), lowest (--). In the legend, mean income is given before the slash and income per inhabitant stands after the slash:

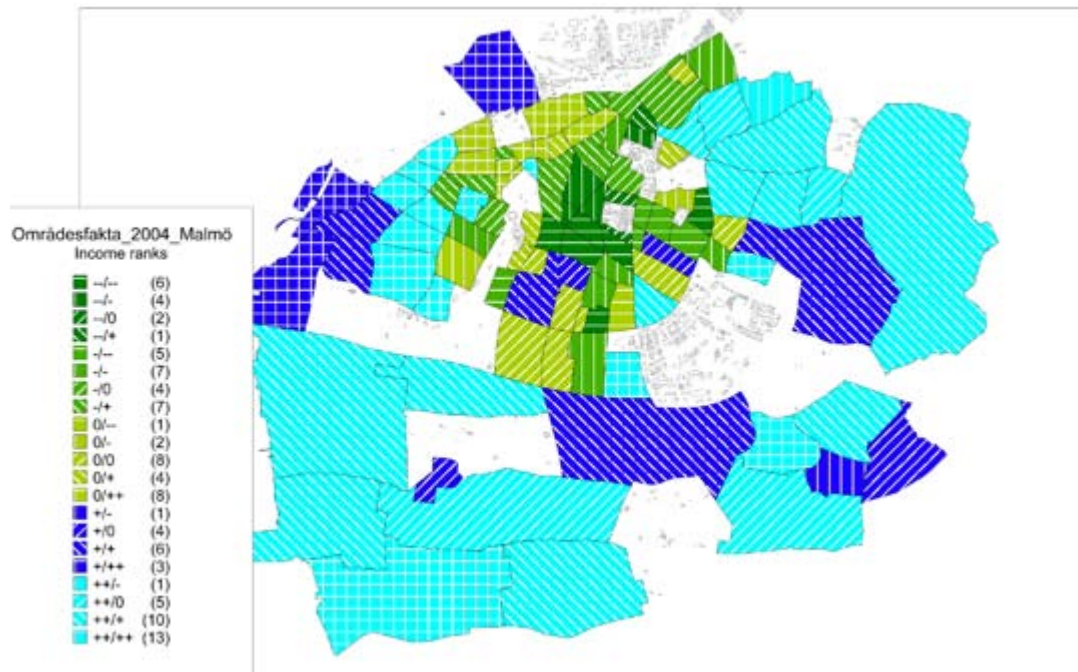


Figure 3:7 Mean income ranked.



## Age group distribution:

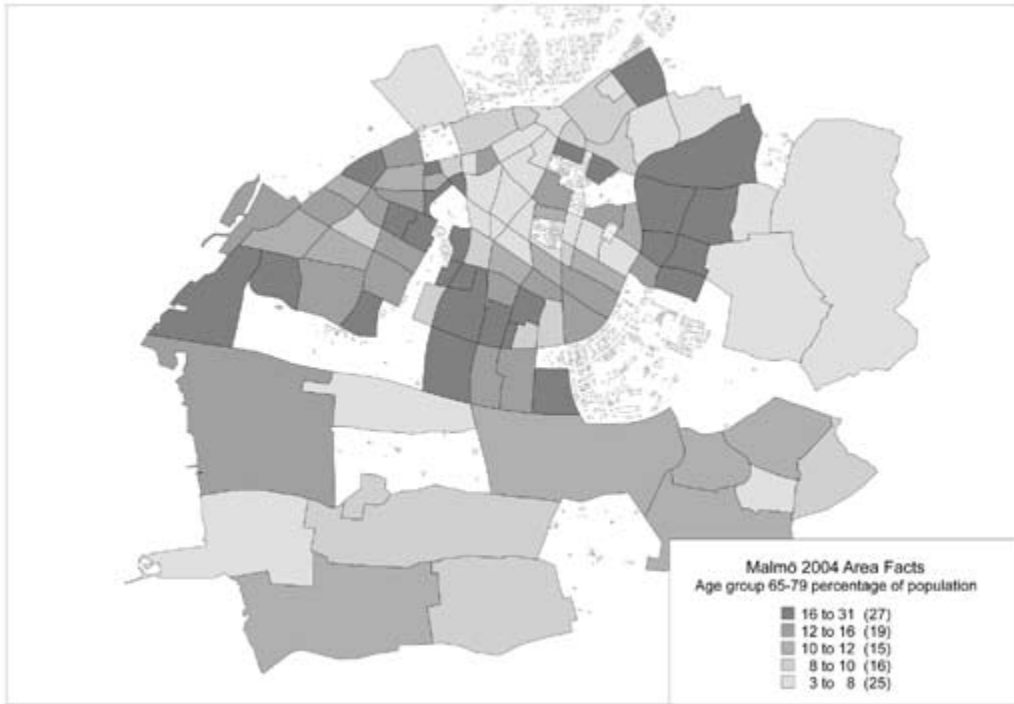
Each age group is unevenly distributed over the geographical area of Malmö.











Figures 3:8 through 3:15 Age group distribution in the city of Malmö.

I reasoned slightly differently with regard to the age groups than I did with the other data. I decided that I only needed to determine in which areas an age group was overrepresented and that I could see that by comparing the average distribution for Malmö for the age group figure multiplied by 1.25 to see whether the figure for the area was higher, thus creating a map that showed the overrepresentation of all age groups simultaneously. The result was another map that sorted Malmö into 20 groups. I then divided the age categories into 4 supercategories (0-18, 19-44, 45-64 and 65+) and produced this map:

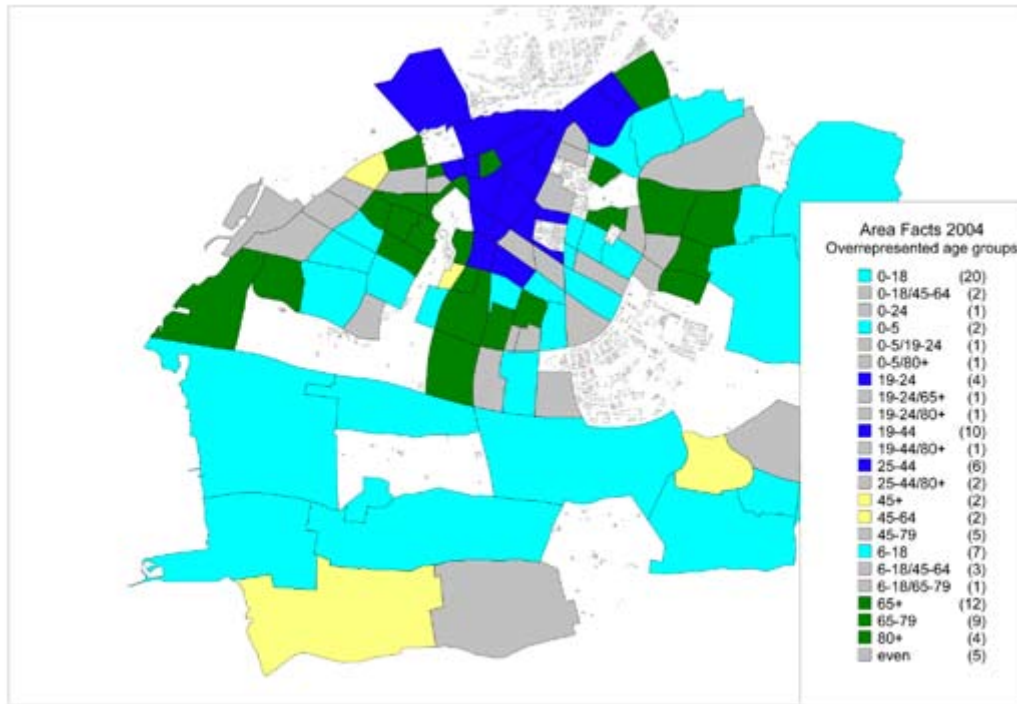


Figure 3:16 Overrepresentation of age groups in the city of Malmö.

## “Swedishness”

The value of “Swedishness”, i.e. the number of people not classified as either born elsewhere or born to parents who were born elsewhere, as is used by the city of Malmö.<sup>4</sup> The definition now actually excludes second-generation immigrants – people born in the country of Sweden, on Swedish soil, to parents who hold Swedish citizenship – meaning that this definition seems to aim at maximum exclusion and is contrary to the definition of Swedish citizenship. As stated above, I believe this definition is racist and should be changed by Statistics Sweden. In this survey I used the definitions provided as my main focus is not on the ethnic question but on educational segregation. I have no idea whether the numbers would be transferable to a map that measured citizenship. “Swedishness” here is identical to the ethnic definition provided by Statistics Sweden.<sup>5</sup>



Figure 3:17 “Swedishness” in the city of Malmö.

## Mobility



*Figure 3:18 Mobility in the city of Malmö.*

I used the data for the years 2001-2003, and created an indicator for mobility. Here again I used the five-grade scale from highest to lowest.

Mobility measures are often used in ethnic segregation research (cf. Bråmă 2007 who concludes that mobility is greater in areas connected spatially to the inner city than in areas with low “Swedishness”). Mobility could, in my opinion, be examined as a separate category as well as being used in ethnic segregation research, since it is also related to educational segregation.

Employment, Gender employment:



Figures 3:19 and 3:20 Men and women employed in the city of Malmö.



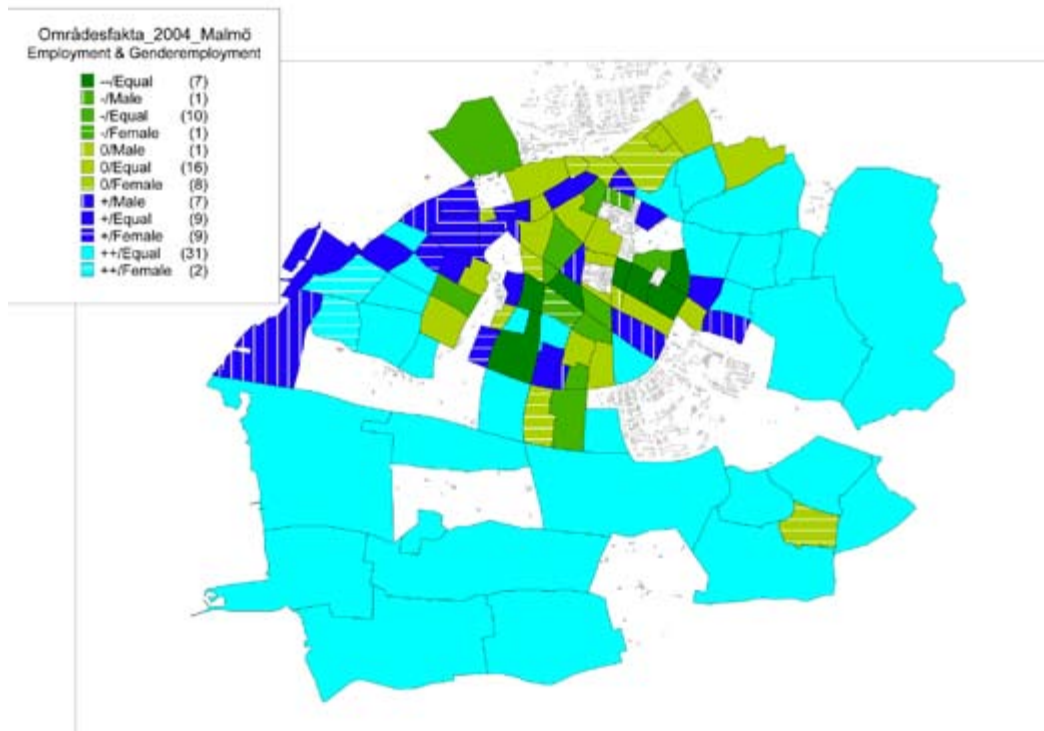


Figure 3:21 Overrepresentation of either sex in relation to employment in the city of Malmö.

The last map was created to show employment levels and gender employment simultaneously. Color represents employment while vertical lines indicate overrepresentation of male workers (i.e. more than the average for Malmö). Horizontal lines indicate overrepresentation of female workers.

### Political inclination:

For political inclination I used dark blue and light blue instead of ++ and + and dark red and light red instead of -- and - and 0 represents more of an equilibrium than a medium.

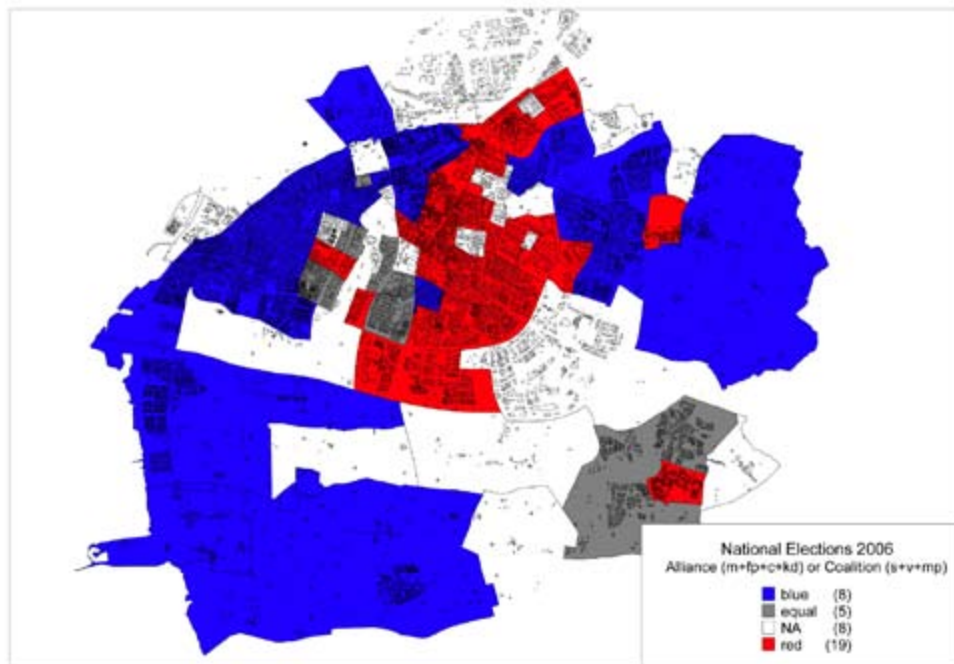


Figure 3:22 Political inclination in the city of Malmö.

This map shows radicalness/reactionariness and is very different from the blue-red scale. It follows divisions of age and education rather than income.

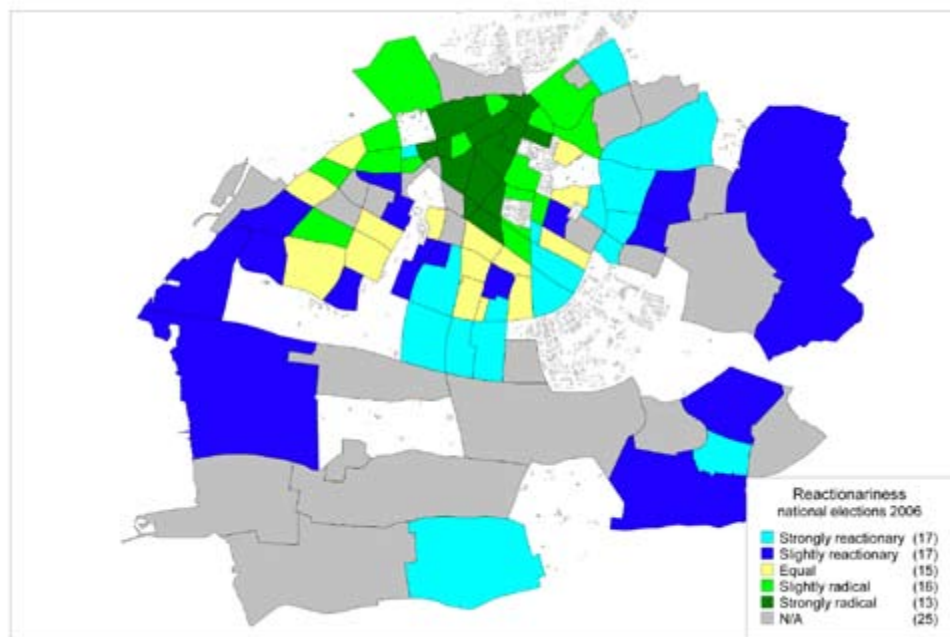


Figure 3:23 Reactionariness/radicalness in the city of Malmö.

## Arranging the subareas into social types, i.e. thematic groups based on the social variables – dependence on and inspiration from Pierre Bourdieu

### Theoretical issues from Bourdieu relevant to this dissertation

Below I discuss the social types as a result of how I adapted tools forged out of a relationship to the work of Bourdieu and applied those tools to this dissertation.

It may be unfair to call this dissertation a thesis dependent on and growing out of the work of Bourdieu. Nevertheless, I have made use of a few of his concepts and ideas. I initially tried to adapt to the work of Bourdieu. I also tried to follow Broady's suggestion to treat the key concepts of Bourdieu's sociology not as a system of formalized concepts, but as tools for research, practical means of producing architectural research (cf. Broady 1990:169), but the tools I produced may have borrowed too little from Bourdieu and too much from elsewhere to be called Bourdieuan. I will now discuss a few of Bourdieu's ideas in relation to the dissertation, to show how my work in key respects differs from how Bourdieu thought science should be pursued. I have relied mainly on Broady's exposition of Bourdieu's key concepts in his work *Sociology and epistemology (Sociologi och epistemologi)* from 1990 and Bourdieu's own words in the English translation of *Distinction* from 1984. Broady's work has been substituted for Bourdieu's own words in many cases, since I have not myself endeavored to fully comprehend the entirety of Bourdieu's writing but only sampled from his rich oeuvre. Donald Broady is the main translator and introducer of Bourdieu in the Swedish intellectual field, and he leaves me no reason to doubt his authority regarding Bourdieu. I have, however, used both his work and Bourdieu's rather freely as the following exposition shows.

Below, I describe a few of the features of Bourdieu's sociology that have inspired me and I have tried to emulate. In reality Bourdieu's tools could not become my tools – my options for constructing data were different and the tools I forged out of the situation also became different. The following is a short list of points taken from Bourdieu's philosophy of research and adapted to my circumstances:

1. Constructing the social space
2. Relations rather than substances
3. Social types, indicators of habitus
4. Co-variation instead of most important variables
5. The importance of cultural capital and education
6. Statistics and architectural research

#### 1. Constructing the social space

The systems constructed of relations between positions are, if constructed with proper care explanatory, not just snapshots of a section of the social world at a given point in time and space (Broady 1990:471).

The structure of a field is its pre-history; the structure of a field is the result of previous battles in the field. If the field of subareas in Malmö is such a field then the structure is exactly that: the result of historical battles over the field of subareas. For Bourdieu the structure is a snapshot of historical relations unfolding.

This constructed space of relations is embedded in architectural discourse and has a relation to other architectural research. That context is mainly given in chapter five where the residential morphology is identified. What needs to be said here is that I view the consumption of residential areas like the consumption of any other goods; i.e. as dependent both on the producers and consumers who together, constitute and define a field. I do not formally define such a field but proceed immediately to describing it in terms of the statistical indicators of its residents and of its space. This is an abstraction I use in order to create tools for my research. Bourdieu stresses how the consumer helps form the product, in essence by producing the producer through the process of a labor of identification and appropriation (Bourdieu 1984:100).

## 2. Relations rather than substances

“What science has to establish is the objectivity of the object which is established in the relationship between an object defined by the possibilities and impossibilities it offers, which are only revealed in the world of social uses...” (Bourdieu 1984:100).

The point of this stance is that the main properties of an element (a variable) are dependent on that element's position within the structure of relations to all other elements of the same sort. Broady states that the most important properties of an element consist of the position of that element within a system of relations between such elements. A degree of symbolic capital is defined not by essential properties, but by its relation to social groups that value these resources (cf. Broady 1990:468, Bourdieu 1984:485pp).

Relations, or rather the configurations that appear when studying and (re-)arranging relations, are key to my work. The configurations I study are the relations between subareas as positioned according to the human resources of each, as indicated by social variables. Is this structuralism rather than relationism?

Broady sees Bourdieu's relationism as different from structuralism in terms of the following points:

**a)** Bourdieu downplays bipolar relations (Broady 1990:469). So do I, by showing how different indicators grab onto each other and spread out into a panorama of positions and relations

**b)** Bourdieu explicitly criticizes the structuralist tendency to view structures as self-sufficient. Broady explicitly points out that Bourdieu transcends the difference between internal and external explanations. Through studies of the production of literary work, he also discovers the production of a logic of the social world (Broady 1990:469). My study, however, is probably structuralist in the respect that it only discover the structure of subareas. I have not managed to discover a logic of a social world in this work. I must see this as a future endeavor and something to aspire to rather than being explained in my work at this moment.<sup>6</sup>

I also believe that, by comparing the morphological field (in chapter five) with the field of social variables, I am in a way relating very different fields to each other in order to obtain a first grasp of what is at stake. The representations I dissect are normally used by city planners. They use representations like those in my survey, and if there can be homologies between the producers and mediators of each field of representations, this would make an excellent study in Bourdieu's sense of the word. However, I have not included such a study in the dissertation – I have merely paved the way for it.<sup>7</sup> I prepared for such a research step to be taken (cf. Broady 1990:472-474).

**c)** Bourdieu was relatively more open than the structuralists to genetic and historical explanations (Broady 1990:469). Broady claims (p. 471) that according to Bourdieu the traditional conflict between structural and historical analyses as well as that between synchronic and diachronic analyses is dissolved. I believe that I have carried out a synchronic analysis but that the morphological analysis in chapter five keeps historical and genetic information within the study. My studies of diachronic events are limited to this and to the few diagrams of change over time included in chapter two. This study is, however, more a study of structures than historically epistemological.

**d)** Using the concept of habitus, Bourdieu opened up a study of human agents' capacities for action (Broady 1990:469). I only indicated possible forms of habitus, not opened up studies of human agents at all.

Broady takes these four points (**a-d**) as indicative that the work of Bourdieu is more related to historical epistemology as exemplified by the philosophy of Cassirer than to structuralism. He goes on to give several examples of why he thinks Bourdieu should be understood in this way in all his work (Broady 1990:469, 471). As I showed above, my work is still limited to a study of structures. It only aspires to ascend to the level of historical epistemology. Broady's enumeration of properties belonging to a relationist scientific theory could also be interesting to view in relation to my work in the future.

First, Broady mentions that in his studies of Algerian society Bourdieu claims that each group constitutes its identity in **the difference** from other groups, and the geographical territory of each group is defined in relation to neighboring groups' landed properties (Broady 1990:469). In my opinion, there is no difference between Bourdieu's position and a structuralist one in this respect and I find it a transferable position to my grouping of the subareas of Malmö into social types. There is, however, a significant difference between

Bourdieu's work and mine in that Bourdieu examines the subjectively constructed identity of groups while I am quite content with objectively constructing identities out of a number of statistical indicators. The space I am thus constructing is very different from that of Bourdieu and his followers.

Second, Broady indicates that **hierarchical relations** are a primary key to the cultural sociology of Bourdieu, citing his early work on photography (Broady 1990:469).

Hierarchical relations are also important in my work on subareas in Malmö in that all the subareas are positioned within a field where each subarea is assigned a lower or higher rank depending on its indicators (Bourdieu 1983/1992:163-164).

### 3. Social types; indicators of habitus

The habitus, an objective relationship between two objectivities, enables an intelligible and necessary relation to be established between practices and a situation, the meaning of which is produced by the habitus through categories of perception and appreciation that are themselves produced by an observable social condition. (Bourdieu 1984:101).

I have worked with the observable social conditions mentioned in the quotation above in my definition of the social types – the residential situation that indicates habitus.

Bourdieu defines habitus as a system of predispositions that allow people to think, act and orient themselves in the social world. Habitus acts as a recreator or reshaper of the social world. Moreover, the practice generator and practice unifier Bourdieu seeks is that of class habitus. Class habitus, to Bourdieu, is the position of the class in the relations of production indivisible from the social origins of individuals. The position of the class in the relations of production is indicated by occupation, income or educational level, a certain ratio of men to women and a distribution in geographical space (Bourdieu 1984:101-102; cf. Broady 1990:228).

I mapped income and educational levels in relation to geographical space, but I had to omit social origin. My data was not on the individual level, in contrast to Bourdieu's, so it simply was not feasible to work with social origin. Social class, to Bourdieu, is not defined by one property but by the structure of relations between all pertinent properties (Bourdieu 1984:106). To construct such a system of relation I constructed the social types. They are not, however, social class indicators in the sense used by Bourdieu since the social origin factor has been eliminated. They can probably be indicators of habitus.

The taste for flavors of food, for example is inseparable from artistic tastes in an individual (Bourdieu 1984:99). Thus the taste for residences in an individual is part of a system of preferences which include diverse tastes, for instance the taste for food.

Thus, what is being consumed where an individual lives is structured by such structuring habituses. Again, Bourdieu traces habitus through the trajectories of individuals as well as the volume of cultural capital, and again since I only have data on areas, I have taken a different explanatory route, focusing on my ability to identify cultural capital through educational levels, leaving the trajectory aside.

These structures are indicated by the 17 social types I have inferred by reading a twelve-dimensional system of the subareas as elements, described in detail below. The 17 social types can be seen as indicators of 17 sorts of habituses, and these 17 types are primarily indicated by the three variables that structure education, but in several cases other variables such as age or income powerfully divide one type from another, where educational values are similar. This classification of 17 types is based on the data. With another set of data, indicating not only level of education but also type of education and profession, the results would be different. However, I think that there is something to be learned from the data in the form it has here. The two diagrams below show how the social types relate to each other as well how the areas relate to each other initially in a diagram based on education statistics.

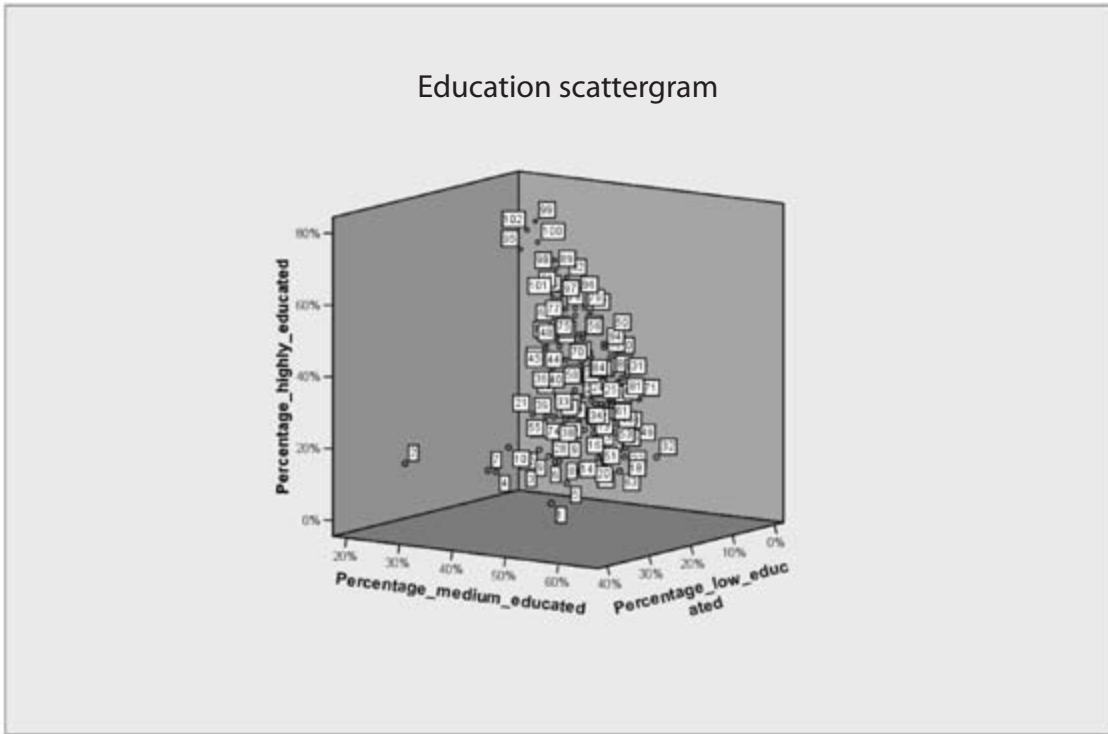


Figure 3:24 Diagram showing the relative positions of each subarea.

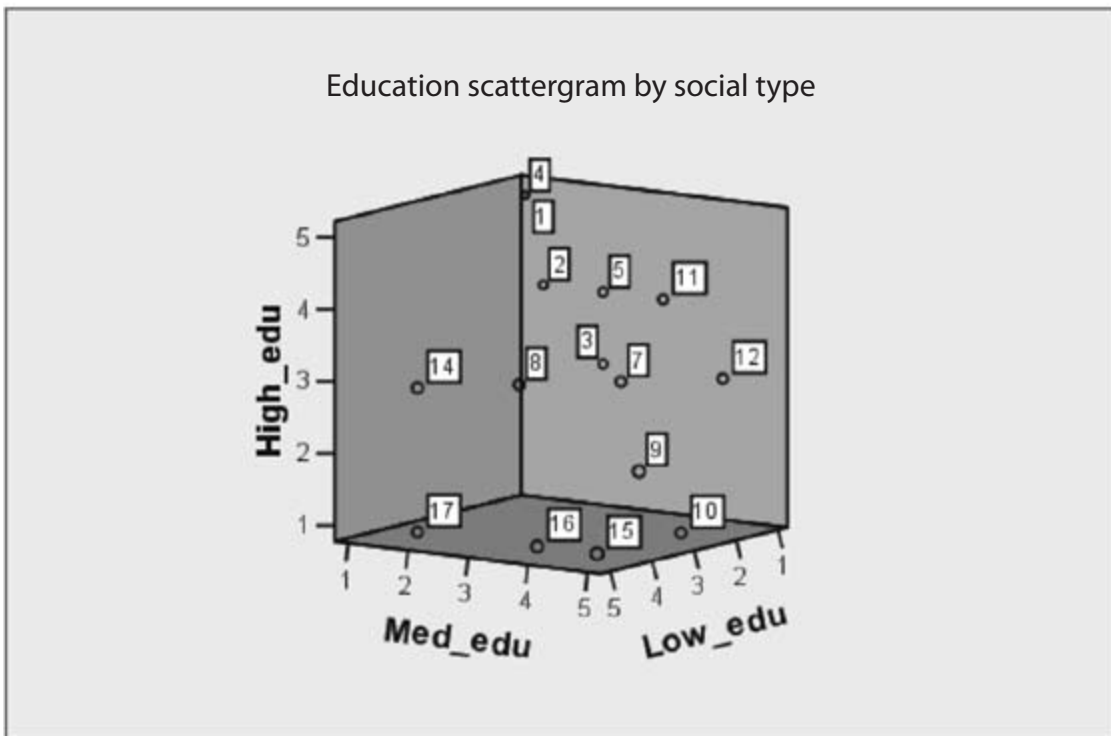


Figure 3:25 Diagram showing the relative positions of the 17 social types.



This indicates potentially successful habitus for an individual, had that individual decided to reside in such and such a neighborhood, without saying that an individual living in that neighborhood has such a habitus, and it does not say what such a habitus would consist of. The social type is merely an indicator of habitus, not the habitus itself. Further more qualitative research is needed to delve more deeply into this question.

I then arranged all the subareas into groups which thus constituted a type, which I called a social type since spatial variables were excluded from this sorting. The results follow below.

The idea of social types indicating residential segregation built on habituses echoes the thought that an individual is defined more by the people he or she spends time with than with any essential or substantial personality qualities that individual possess. This idea could reasonably be the basis of further research, as it might be possible to qualitatively study individuals' view of their residences, i.e. asking questions such as where would you wish to live and who would you wish to associate with.

#### 4. Co-variation instead of most important variables

Clusters of variables knitted together and put in a certain position in social space give determined effects, Broady writes. He ties that position to the social background of individuals, especially an individual's father's profession and educational background. It is important for Bourdieu to have data on individuals. I did not have that luxury. The ambitions of Bourdieu also presuppose multivariate analysis (Broady 1990:485-486).

The spirit of Bourdieu's sociology is well described by Broady when he writes that Bourdieu tests any number of combinations of variables on a single individual. Then he tests those combinations against empirical observations. I have tried to use the spirit of Bourdieu in testing different combinations of variables, not for individuals but for subareas, and thus to find a social logic of spatial positions rather than a social logic of individual positions. What I hope to do with my empirical observations in further work on subareas is some sort of material observations on material signs corresponding to the social variables; i.e. fences, postboxes, etc., in those cases where these can be signs of distinction. What I have done here is to test subareas against morphological positions. The results can be found in chapter five and in the conclusions.

Bourdieu's critique of differences between independent and dependent variables is also relevant. "Independent variables" such as age and education are not really independent; calling them independent conceals their interdependence. Age determines income which, in some respects is dependent on educational level. Different school generations have different access both to the educational system and to income, which is dependent on education (Bourdieu 1984:104-105).

I have not distinguished between dependent and independent variables, but have chosen to concentrate on a few variables as shown below.

#### 5. The importance of cultural capital and the educational institutions

Cultural capital consists of stored symbolic assets such as titles, degrees, institutions, laws, and written documents. Cultural capital thus has a historical genesis proliferated through educational institutions (and libraries, etc.) (Broady 1990:173).

I thus treat education as the primary indicator of social type (cf. Chapter Two) because I was interested in testing how important cultural capital was in a country such as Sweden in 2004 rather than in France during the late 1960s.



## 6. Statistics and architectural research

In architectural research, the field of morphology uses statistics. Groups such as Space Syntax make extensive use of linear regression analysis and Johan Rådberg, Anders Friberg and Rolf Johansson use descriptive statistics. Correspondence analysis has not been used in architectural research, while quantitative methods (as above) have. I explore the potential of using quantitative methods in architectural research, rather than focusing on any specific type of quantitative analysis. I used a form of correspondence diagram in chapter two and I have used regression analysis extensively throughout the dissertation. Linear regression analysis is easy to use and sufficient for my purpose of showing the interdependence of several variables.

Ethnographic methods, which are qualitative use information on very limited groups to make general assertions about the *esprit du temps* or large heterogeneous groups (the 1940s generation, the new middle class, the creative class, etc.). Statistics are needed in order to see the differences between norms and real behavior. On the other hand statistical information is not sufficient in itself. I have only created the 17 social types as groups to be observed ethnographically, this is a weakness. The ethnographic observation, as Bourdieu writes, is superior to the questionnaire or the unstructured interview. Methodical, systematic observation could follow upon the construct I have made in this dissertation, and could also be used to discuss and redefine the social types suggested here. However, it is beyond the scope of this dissertation. There are, however, the observations in chapter five of block morphology, and the comparisons with spatial data in chapter four. The types as constructed in this chapter sets the foundation for future ethnographic observations in relation to this data set.

The methodical principle is formulated by Bourdieu in *Travail et travailleurs en Algérie*, as discussed by Broady in his study. According to this principle, the researcher can choose his or her starting point in the familiar (i.e. qualitative observation – his or her own experienced relationship to the world or those of others, but must then break down these spontaneous, intuitionist representations, for which purpose statistics may be needed. After this detour the researcher can return to traditional ethnographic methods (Broady 1990:484-485, Bourdieu 1963:267). My dissertation is such a detour.

In order to break down spontaneous assessments, Bourdieu first creates a map of the subject to be studied. This dissertation is my map. Only in the next step, when the map has become suffused with meaning, is there the option of more detailed (qualitative) studies. Although the conclusions may then be close to an intuitive understanding, the interpretation achieves more meaning through the system of relations that unites the elements (Broady 1990:485).

Broady lists the following demands on the statistical methods:

- 1) **They should be tools to break down spontaneous assessments**
- 2) **They should do service in the work of constructing systems of relations**
- 3) **They should contribute to creating hypotheses** that can be tested and enriched with the help of methods for ethnographic and phenomenological interpretation.

I have tried to meet the criticism against using statistical adaptations that erase systems of relations by removing correlations from their social and cultural context in chapter five, where the correlations are given in their morphological contexts. However, the social variables, as they are taken at face value are indeed extracted from their social and cultural context. I have numbers of how many people have university educations, not what kind of university education they have. I have numbers on income per inhabitant but not how this income is made. I have the numbers on “Swedishness”, but not how this is contextual in relation to other national ethnicities. I have a figure for mobility but not information on where people move from and where they move to, etc. All my social data is thus decontextualized and I try only to recontextualize it in my chapter on morphology by observation and by matching the social types to morphological situations. This would be highly incomplete by Bourdieu’s standards. I hope in the future to supplement my study with systematic observations based on these statistics (Broady 1990:485). Further research could discover the discrepancies

between the field, as objectively constructed and the field as subjectively constructed by different actors. This is what Bourdieu does in examining homologies between the positions of field producers and the standpoints held in such fields. I have merely taken the first step here, by constructing the field objectively. This objective field is not objective in the sense of being the end of all discussion of how the field of residential segregation per subarea is constructed; it is but one (subjective) interpretation of objectivity. How is it objective? Only in that it constructs the areas as objects rather than as areas filled with subjective agents.

The architectural researcher should, like the sociologist, use statistics to help combat and suppress intuitionist representations, spontaneous thinking, daily life consciousness and the implicit assumptions of immediate consciousness (cf. Broady 1990:403-404; 483). Bourdieu merges statistical and ethnographical methods.

A field in the sense used by Bourdieu is, thus, a system of relations between positions. Using my data, then, I constructed the following one-dimensional fields where the elements were the subareas of Malmö: the field of people with university educations, the field of people with upper secondary school educations only, the field of people with compulsory school educations only, the field of mean income, the field of income per inhabitant, the field of mobility, the field of "Swedishness", the field of employment, the field of gender employment, the field of age, the field of political inclination, the field of reactionariness/radicalness. The elements of the field were subareas, and each of these could be plotted in a position along a single axis in relation to the other elements. The field of the subareas then consists of all these relations seen simultaneously.

I ranked all the areas over most of the variables, giving them one out of five on a relative scale, i.e. the fifth highest ranked were given a ++ designation, the next fifth a + designation, the third fifth a designation of 0, the fourth fifth a designation – and the last fifth a designation --.

A few variables were treated differently from the rest. For age group I examined whether an age group was overrepresented in relation to the figure for Malmö as a whole by checking whether the population number for the age group exceeded the norm for Malmö by 1.25, in which case that age group was overrepresented. For gender employment I used a similar method, comparing the figures for Malmö as a whole in relation to the figures for the subarea to see whether or not males or females were more often employed than the Malmö norm.

I then used a number of series of linear regression analyses to analyze the material. Before I present the linear regressions, I repeat Bourdieu's warning against linear thinking: "The structural causality of a network of factors is quite irreducible to the cumulated effects of the set of linear relations, of different explanatory force, which the necessities of analysis oblige one to isolate..." (Bourdieu 1984:107).

## Social types

I arranged the subareas into social types according to a hierarchy based primarily on the four social variables education, income, age and ethnicity. I then choose the type value (the most common value in the group) which became the norm value for the social type. As a tiebreaker for the social types if two (or more) values were equal for type value, I used population. I also chose a subarea that was most similar to the most typical values as a reference area. See below.

<b>KEY TO TABLES</b>		
Population	POP	
Education	EDU	University/Upper secondary school/ Compulsory school
Income	INC	Mean income/income per inhabitant
"Swedishness"	SWE	
Overrepresented age group(s)	AGE	
Mobility	MOB	
Employment	WOR	Overall/Gender overrepresentation
Politically blue or red	POL	DK BLU (dark blue), LT BLU (light blue), EQ (equal), LT RED (light red), DK RED (dark red)
Politically reactionary/radical	RAD	REAC (strongly reactionary), reac (slightly reactionary), EQ (equal), rad (slightly radical), RAD (strongly radical)

*Table 3:1 Key to tables.*

## Social type A (Hästhagen)

Subareas (delområden)	POP	EDU	INC	SWE	AGE	MOB	WOR	POL	RAD
Västra Hamnen	700	++/--/--	+/>++	0	19-44	+	-/0	DK BLU	rad
Inre Hamnen	111	++/--/--	0/>++	++	25-44	+	+/F	N/A	N/A
Davidshall	1,622	++/--/--	0/>++	+	25-44	+	+/0	DK BLU	RAD
Hästhagen	1,502	++/--/--	0/>++	++	25-44	+	+/F	DK BLU	RAD
Rörsjöstaden	4,049	++/--/--	0/>++	+	25-44	++	+/0	LT BLU	RAD
Fågelbacken	2,502	++/--/--	0/>++	++	25-44/80+	++	+/F	LT BLU	rad
Rönneholm	6,881	++/--/--	0/>++	++	25-44/80+	+	+/F	DK BLU	rad
Gamla Staden	7,645	++/--/--	0/>++	0	25-44	+	0/0	DK BLU	RAD
Ribersborg	8,042	++/--/--	0/>++	++	80+	0	+/F	DK BLU	rad
Kronborg	1,790	++/--/--	0/>++	++	65+	0	+/F	N/A	N/A
Rådmansvången	6,437	++/--/--	-/>+	0	25-44	+	0/0	EQ	RAD
Västra Sorgenfri	5,578	++/--/--	-/>+	+	19-44	++	0/0	LT RED	RAD
Social type A	46,859	++/--/--	0/>++	++	25-44	+	+/0	DK BLU	RAD

Table 3:2 Social type A (social values).

### Primary characteristic: education.

The subareas represented in social type A consist of the highest numbers of people with university educations coupled with the lowest numbers of people with upper secondary school only and the lowest numbers of people with compulsory school only. This characteristic is shared with the subareas of social type D.

### Secondary characteristic: income.

The subareas in social type A have both medium levels of mean income and the highest levels of income per inhabitant. This differs from social type D which has the highest levels of both mean income and income per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age group in social type A is the group 25-44. This differs from social type D which has overrepresentation of the age groups 0-18 and 45+.

### Fourth-level characteristic: "Swedishness"

The subareas in social type A have high levels of "Swedishness". This differs from social type D which has the highest level of "Swedishness".

## Other characteristics: mobility, employment and political inclination

Mobility levels are high, employment high, more women are employed in relation to the city norm. The subarea is politically dark blue and strongly radical. This differs from social type D which has the lowest levels of mobility, the highest levels of employment; more men are employed in relation to the city norm, the radical/reactionary ratio is equal.

Hästhagen is the most typical social type A area.

## Social type B (Möllevången)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Slussen	2,566	+/-/--	-/+	+	0	25-44	0/F	LT BLU	rad
Östervärn	2,628	+/-/-	-/0	++	-	19-44	0/F	LT RED	RAD
Värnhem	1,806	+/-/-	-/-	++	-	19-44	-/0	DK RED	RAD
Katrinelund	1,479	++/--/-	--/-	++	0	19-24&65+	-/M	DK RED	RAD
Möllevången	9,992	+/-/-	--/-	++	-	19-44	-/0	DK RED	RAD
Södervärn	1,481	+/-/-	--/-	++	-	19-44	-/0	LT RED	RAD
Norra Sofielund	3,524	+/-/0	--/-	++	-	19-44	+/M	DK RED	RAD
Social Type B	23,476	+/-/-	--/-	++	-	25-44	-/0	DK RED	RAD

Table 3:3 Social type B (social values).

### Primary characteristic: education.

The subareas represented in social type B consist of high numbers of people with university educations coupled with low numbers of people with upper secondary school only and low numbers of people with compulsory school only. This characteristic is not directly shared with any other social type though the subareas of social type E are the closest, and only differ in having medium numbers of people with upper secondary school only.

### Secondary characteristic: income.

The subareas in social type B have the lowest levels of mean income and low levels of income per inhabitant. This differs from social type E which has high levels both of mean income and income per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age group in social type B is 19-44. This differs from social type E where the group 65+ is overrepresented.

### Fourth-level characteristic: "Swedishness"

The subareas in social type B have low levels of "Swedishness". This differs from social type E which has high levels of "Swedishness".

### Other characteristics: mobility, employment and political inclination

Mobility levels are the highest, employment medium, no overrepresentation of either sex in relation to employment, politically dark red and strongly radical. This differs from social type E which has low levels of mobility, high levels of employment, more women are employed in relation to the city norm. It is politically light blue and slightly reactionary.

Möllevången is the most typical social type B area.

## Social type C (Kirsebergsstaden)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Östra Sorgenfri	5,835	+/+/-	-/0	+	-	19-24/80+	0/0	DK RED	rad
Ellstorp	1,508	+/+/-	--/+	+	0	19-44/80+	+/F	EQ	rad
Allmänna Sjukhuset	388	+/0/--	-/+	++	0	19-44	0/F	N/A	N/A
Annelund	1,724	0/+/-	--/0	+	-	19-44	0/0	DK RED	rad
Lönngården	1,255	0/+/-	--/0	++	-	19-44	0/0	LT RED	rad
Kirsebergsstaden	4,932	0/0/0	-/0	+	0	19-24	0/F	DK RED	rad
Social Type C	15,642	0/+/-	-/0	+	-	19-24	0/0	DK RED	rad

Table 3:4 Social type C (social values).

### Primary characteristic: education.

The subareas represented in social type C consist of medium numbers of people with university educations coupled with medium numbers of people with upper secondary school only and low numbers of people with compulsory school only. This characteristic is not directly shared with any other social type, but the subareas of social type E are the closest and only differ in having a high number of people with university educations.

### Secondary characteristic: income.

The subareas in social type C have low levels of mean income and medium levels of income per inhabitant. This differs from social type E which has high levels both of mean income and income per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age groups in social type C are 19-44 and 80+. This differs from social type E where the group 65+ is overrepresented.

### Fourth level characteristic: "Swedishness"

The subareas in social type C have low levels of "Swedishness". This differs from social type E which has high levels of "Swedishness".

### Other characteristics: mobility, employment and political inclination

Mobility levels are high, employment medium, more women are employed in relation to the city norm. It is politically dark red and slightly radical. This differs from social type E which has low levels of mobility, high levels of employment, more women are employed in relation to the city norm. It is politically light blue and slightly reactionary.

Kirsebergsstaden or Östra Sorgenfri is the most typical social type C area.



## Social type D (Västervång)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Fridhem	1,768	++/--/--	++/++	0	+	45+	+/M	DK BLU	EQ
Hyllieby	1,253	++/--/--	++/++	--	++	45-79	++/0	DK BLU	rea
Djupadal	3,946	++/--/--	++/++	--	++	0-18	++/0	DK BLU	EQ
Nya Bellevue	998	++/--/--	++/++	--	++	0-18	++/0	N/A	N/A
Rosenvång	2,204	++/--/--	++/++	--	++	0-18	++/0	DK BLU	rad
Bellevue	1,213	++/--/--	++/++	-	+	0-18/45-64	+/0	DK BLU	EQ
Västervång	951	++/--/--	++/++	--	++	6-18/45-64	++/0	DK BLU	rad
Solbacken	1,058	++/--/--	++/++	--	++	65+	+/0	N/A	N/A
Teatern	228	+/0/--	++/++	-	++	65+	+/M	N/A	N/A
Social Type D	13,619	++/--/--	++/++	--	++	6-18	++/0 <sup>8</sup>	DK BLU	EQ <sup>9</sup>

Table 3:5 Social type D (social values).

### Primary characteristic: education.

The subareas represented in social type D consist of the highest numbers of people with university educations coupled with the lowest numbers of people with upper secondary school only and the lowest numbers of people with compulsory school only. This characteristic is shared with the subareas of social type A.

### Secondary characteristic: income.

The subareas in social type D have the highest levels both of mean income and income per inhabitant. This differs from social type A which has medium levels of mean income and the highest levels of income per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age groups in social type D are 0-18 and 45+. This differs from social type A where the group 25-44 is overrepresented

### Fourth-level characteristic: "Swedishness"

The subareas in social type D have the highest levels of "Swedishness". This differs from social type A which has high levels of "Swedishness".

### Other characteristics: mobility, employment and political inclination

Social type D has the lowest levels of mobility, the highest employment, more men are employed in relation to the city norm, politically dark blue and equal parts of reactionaries and radicals. This differs from social type A where mobility levels are high, employment high, more women are employed in relation to the city norm, politically dark blue and strongly radical.

Västervång is the most typical social type D area.

## Social type E (Gamla Limhamn)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Limhamns hamnområde	1,106	+/-/-	+/>+	0	+	45-79	+/>0	N/A	N/A
Borgmästaregården	2,300	+/>0/-	0/>+	--	+	65+	+/>0	LT BLU	CON
Dammfri	3,574	+/>0/--	-/>+	0	++	65+	+/>F	LT BLU	rea
Mellanheden	1,606	+/>-/-	-/>+	0	++	80+	+/>F	N/A	N/A
Annetorp	2,888	+/>0/0	+/>+	-	++	65+	++/>F	LT BLU	rea
Lugnet	3,005	+/>-/-	0/>+	0	0	80+	0/>0	LT BLU	rad
Sibbarp	3,650	+/>0/-	+/>++	-	++	65+	+/>M	DK BLU	rea
Gamla Limhamn	5,230	+/>0/-	+/>+	-	++	even	++/>F	LT BLU	rea
Social type E	23,359	+/>0/-	+/>+	0	++	80+	+/>F	LT BLU	rea

Table 3:6 Social type E (social values).

### Primary characteristic: education.

The subareas represented in social type E consist of high numbers of people with university educations coupled with medium numbers of people with upper secondary school only and low numbers of people with compulsory school only. This characteristic is not directly shared with any other social type, but the subareas of social type C and social type B are close; the only differences being in having a medium number of people with university educations or a low number of people with upper secondary school only, respectively. The subareas in social type F consist of high numbers of people with university educations coupled with medium numbers of people with upper secondary school only and the lowest numbers of people with compulsory school only and thus also only differ slightly. The subareas of social type K only differ in having high numbers of people with upper secondary school only.

### Secondary characteristic: income.

The subareas in social type E have high levels both of mean income and income per inhabitant. This differs from social type C which has low levels of mean income and medium levels of income per inhabitant, and from social type B which has the lowest levels of mean income and low levels of income per inhabitant. The subareas in social type F have the highest levels of mean income and high levels of income per inhabitant. The subareas of social type K have the highest levels of mean income and high levels of income per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age groups in social type E is 65+. This differs from social type C where the groups 19-44 and 80+ are overrepresented, and from social type B where the group 19-44 is overrepresented. The most overrepresented age group in social type F is 0-18. In social type K the overrepresented age group is the group 6-18.

#### Fourth-level characteristic: “Swedishness”

The subareas in social type E have high levels of “Swedishness”. This differs from social type C and social type B which both have low levels of “Swedishness”. The subareas in social type F have the highest levels of “Swedishness”. Social type K has the highest levels of “Swedishness”.

#### Other characteristics: mobility, employment and political inclination

Social type E has low levels of mobility, high levels of employment, more women are employed in relation to the city norm. It is politically light blue and slightly reactionary.

This differs from social type C which have high levels of mobility, medium levels of employment, more women are employed in relation to the city norm. It is politically dark red and slightly radical. It also differs from social type B which have the highest levels of mobility, medium levels of employment, no gender overrepresentation of either sex in relation to employment, politically dark red and strongly radical. The subareas in social type F have low levels of mobility, the highest levels of employment, no overrepresentation of either sex in relation to employment. Political figures were unavailable owing to the voting district subdivision not coinciding with the subarea divisions. Social type K has the lowest levels of mobility, the highest levels of employment, no gender overrepresentation of either sex in relation to employment. It is dark blue and slightly reactionary.

Gamla Limhamn is the most typical social type E area.

## Social type F (Klagshamn)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Klagshamn	1,470	+/0/--	++/+	-	++	0-18	++/0	N/A	N/A
Vintrie	391	+/0/--	++/+	0	+	0-5	++/0	N/A	N/A
Skumparp	148	+/0/-	+/0	0	++	0-18	++/0	N/A	N/A
Toarp	352	+/-/-	+/0	-	++	0-18	++/0	N/A	N/A
Social type F	2,361	+/0/--	++/+	-	++	0-5	++/0	N/A	N/A

Table 3:7 Social type F (social values).

### Primary characteristic: education.

The subareas in social type F consist of high numbers of people with university educations coupled with medium numbers of people with upper secondary school only and the lowest numbers of people with compulsory school only. This characteristic is not directly shared with any other social type but the subareas of social type E only differ in having low numbers of people with compulsory school only.

### Secondary characteristic: income.

The subareas in social type F have the highest levels of mean income and high levels of income per inhabitant. This differs from social type E which has medium levels of mean income and the highest levels of income per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age group in social type F is 0-18. This differs from social type E where the group 65+ is overrepresented.

### Fourth-level characteristic: “Swedishness”

The subareas in social type F have the highest levels of “Swedishness”. This differs from social type E which has high levels of “Swedishness”.

### Other characteristics: mobility, employment and political inclination

The subareas in social type F have low levels of mobility, the highest levels of employment, no overrepresentation of either sex in relation to employment. Political figures were unavailable due to the district subdivision not coinciding with the subarea divisions. This differs from social type E which has low levels of mobility, high levels of employment, more women are employed in relation to the city norm. It is politically light blue and slightly reactionary.

Klagshamn is the most typical social type F area.

## Social type G (Lorensborg)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Gröndal	1,836	0/+/+	0/0	-	+	65+	++/0	LT RED	reac
Södertorp	1,217	0/+/+	0/+	--	+	45+	0/F	LT RED	reac
Kronprinsen	1,089	0+/0	-/+	-	++	65+	0/F	DK BLU	REAC
Lorensborg	3,825	0+/0	-/0	-	+	65+	0/0	LT RED	reac
Håkanstorp	1,242	0+/0	0/+	--	+	65+	+/0	LT RED	EQ
Social type G	9,209	0+/0	0/+ <sup>10</sup>	-	+	65+	0/0	LT RED	reac <sup>11</sup>

Table 3:8 Social type G (social values).

### Primary characteristic: education.

The subareas represented in social type G consist of medium numbers of people with university educations coupled with high numbers of people with upper secondary school only and medium numbers of people with compulsory school only. This characteristic is not directly shared with any other social type but the subareas of social type C and social type H only differ in having medium numbers people with upper secondary school only plus low numbers of people with compulsory school only and medium numbers people with upper secondary school only plus high numbers of people with compulsory school only.

### Secondary characteristic: income.

The subareas in social type G have low levels of mean income and medium levels of income per inhabitant. This characteristic is shared by social type C. This differs from social type H which has medium mean income and low income per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age group in social type G is 65+. This differs from social type C where the groups 19-44 and 80+ are over-represented and social type H where the group 0-18 is over-represented.

### Fourth-level characteristic: "Swedishness"

The subareas in social type G have high levels of "Swedishness". This differs from social types C and H which both have low levels of "Swedishness".

### Other characteristics: mobility, employment and political inclination

The subareas in social type G have low levels of mobility, medium employment, more women are likely to be employed than the city norm. It is politically light red and slightly reactionary. This differs from social type C with regards to mobility and political inclination. It has high levels of mobility, dark red and slightly radical political inclination. This differs from social type H with regards to political inclination which is equal on both the red-blue scale and the radical/reactionary quota. Mobility in social type H is low. Employment in both social types C and H is medium. Social type C has more women likely to be employed in relation to the city norm while social type H has more men likely to be employed in relation to the city norm.

Lorensborg is the most typical social type G area.

## Social type H (Kroksbäck)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Rostorp	1,066	0/0/0	0/0	0	0	19-24	0/0	N/A	N/A
Kroksbäck	4,780	0/0/+	0/-	-	-	0-18	0/0	EQ	EQ
Hindby	2048	-/+/+	0/0	0	-	6-18	+/M	EQ	REAC
Valdemarsro	701	-/-/+	++/-	+	-	0-18	0/0	N/A	N/A
Social type H	8,595	0/0/+	0/- <sup>12</sup>	0	-	6-18 <sup>13</sup>	0/0 <sup>14</sup>	EQ	EQ <sup>15</sup>

Table 3:9 Social type H (social values).

### Primary characteristic: education.

The subareas in social type H consist of medium numbers of people with university educations coupled with medium numbers of people with upper secondary school only and high numbers of people with compulsory school only. This characteristic is not directly shared with any other social type, but the subareas of social types C and G only differ in having low numbers of people with compulsory school only and high numbers of people with upper secondary school only, respectively medium numbers of people with compulsory school only.

### Secondary characteristic: income.

The subareas in social type H have medium levels of mean income and low levels of income per inhabitant. This differs from social types C and G which both have low levels of mean income and medium levels of income per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age group in social type H is 0-18. This differs from social type C which has overrepresentation in the groups 19-44 and 80+ and from social type G which has overrepresentation in the group 65+.

### Fourth-level characteristic: "Swedishness"

The subareas in social type H have low levels of "Swedishness". This differs from social type G which has high levels of "Swedishness" but does not differ from social type C which also has low levels of "Swedishness".

### Other characteristics: mobility, employment and political inclination

The subareas in social type H have low levels of mobility, medium employment, more men are likely to be employed in relation to the city norm, politically even and equally sided between reactionaries and radicals. This differs from social type C which has high levels of mobility, medium employment, more women likely to be employed in relation to the city norm, politically dark red and slightly radical. It also differs from social type G which has low levels of mobility, medium employment, more women likely to be employed in relation to the city norm, light red political inclination and slightly reactionary.

Kroksbäck is the most typical social type H area.

## Social type I (Västra Söderkulla)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Höja	1,913	--/+/++	0/0	--	0	45-79	+/0	DK RED	REAC
Östra Söderkulla	1,076	--/+/++	0/0	--	-	45-79	+/M	DK RED	EQ
Bellevuegården	4,037	-/+/+	-/-	0	-	80+	-/0	LT RED	EQ
Västra Söderkulla	4,414	-/+/+	0/0	-	0	65+	+/0	DK RED	EQ
Lindeborg	4,577	-/+/0	0/0	--	+	65-79	++/0	LT RED	REAC
Almvik	3,079	-/+/0	0/0	0	0	Even	0/F	DK RED	REAC
Social type I	19,096	-/+/+	0/0	--	0	65-79	+/0	DK RED	REAC

Table 3:10 Social type I (social values).

### Primary characteristic: education.

The subareas in social type I consist of low numbers of people with university educations coupled with the highest numbers of people with upper secondary school only and high numbers of people with compulsory school only. This characteristic is not directly shared with any other social type, but the subareas of social type J only differ in having the lowest numbers people with compulsory school only and medium numbers of people with compulsory school only, respectively.

### Secondary characteristic: income.

The subareas in social type I have medium levels of mean income and medium levels of income per inhabitant. This differs from social type J which has the highest levels of mean income and high levels of income per inhabitant.

### Tertiary characteristic: age group.

The most over-represented age group in social type I is 45+. This is similar to social type J which has overrepresentation of the groups 0-18 and 45-79.

### Fourth-level characteristic: "Swedishness"

The subareas in social type I have medium levels of "Swedishness". This differs from social type J which has high levels of "Swedishness".

### Other characteristics: mobility, employment and political inclination

The subareas in social type I have low levels of mobility, high levels of employment, no overrepresentation of either sex in relation to employment, politically dark red and slightly reactionary. This differs from social type J which has the lowest levels of mobility, high levels of employment, no overrepresentation of either sex in relation to employment, politically even and strongly reactionary.

Västra Söderkulla is the most typical social type I area.



## Social type J (Oxie Kyrkby)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Käglinge	1,949	-/++/+	++/0	--	++	6-18	++/0	LT BLU	reac
Oxievång	3,094	--/++/+	+/-	-	0	6-18	0/F	LT RED	REAC
Oxie Kyrkby	4,178	-/++/0	++/+	--	++	6-18/45-64	++/0	LT BLU	reac
Östra Skrävlinge	1,061	-/++/0	++/0	0	++	0-18	++/0	N/A	N/A
Lockarp	175	--/++/0	+/+	-	+	0-18	++/0	N/A	N/A
Kulladal	4,395	--/++/0	+/+	--	+	65-79	--/0	EQ	REAC
Gullvik	1,334	-/++/+	++/+	-	0	6-18/45-64	++/0	EQ	REAC
Social type J	16,186	-/++/0	++/+ <sup>16</sup>	-- <sup>17</sup>	++	6-18	++/0 <sup>18</sup>	LT BLU	REAC <sup>19</sup>

Table 3:11 Social type J (social values).

### Primary characteristic: education.

The subareas in social type J consist of the lowest numbers of people with university educations, the highest numbers people with upper secondary school only and medium numbers of people with compulsory school only. This characteristic is not directly shared with any other social type but the subareas of social type I only differ in having low numbers of people with university educations coupled with high numbers of people with compulsory school only.

### Secondary characteristic: income.

The subareas in social type J has the highest levels of mean income and high levels of income per inhabitant. This differs from social type I which has medium levels of mean income and medium levels of income per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age groups in social type J are 0-18 and 45-79. This is similar to social type J which has overrepresentation of the group 45+.

### Fourth-level characteristic: "Swedishness"

The subareas in social type J have high levels of "Swedishness". This differs from social type J which has medium levels of "Swedishness".

### Other characteristics: mobility, employment and political inclination

The subareas in social type J have the lowest low levels of mobility, high levels of employment, no overrepresentation of either sex in relation to employment, politically even and strongly reactionary. This differs from social type I which has low levels of mobility, high employment, no overrepresentation of either sex in relation to employment. It is politically dark red and slightly reactionary.

Oxie Kyrkby is the most typical social type J area.

## Social type K (Bunkeflostrand)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Södra Sallerup	1,272	+ / + / -	++ / +	--	++	0-18	++ / 0	DK BLU	reac
Bunkeflo-strand	5,120	+ / + / -	++ / +	--	++	6-18	++ / 0	DK BLU	reac
Riseberga	2,966	+ / + / -	++ / +	--	++	6-18/65-79	++ / 0	LT BLU	REAC
Bulltofta	1,203	+ / + / -	++ / 0	--	0	6-18	++ / 0	N/A	N/A
Johanneslust	969	+ / 0 / 0	++ / 0	--	+	0-18	++ / 0	EQ	rad
Eriksfält	1,106	+ / 0 / -	+ / 0	--	0	6-18	++ / 0	EQ	EQ
Social type K	12,636	+ / + / -	++ / + <sup>20</sup>	--	++ <sup>21</sup>	6-18	++ / 0	DK BLU	reac <sup>22</sup>

Table 3:12 Social type K (social values).

### Primary characteristic: education.

The subareas in social type K consist of high numbers people with university educations, high numbers of people with upper secondary school only and low numbers of people with compulsory school only. This characteristic is not directly shared with any other social type, but the subareas of social type E only differ in having medium numbers of people with upper secondary school only.

### Secondary characteristic: income.

The subareas in social type K have the highest levels of mean income and high levels of income per inhabitant. This differs from social type E which has high levels of mean income and high levels of income per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age groups in social type K is 6-18. This is different from social type E, which has overrepresentation of the group 65+.

### Fourth-level characteristic: "Swedishness"

The subareas in social type K have the highest levels of "Swedishness". This differs from social type E which has high levels of "Swedishness".

### Other characteristics: mobility, employment and political inclination

The subareas in social type K have the lowest levels of mobility, the highest levels of employment, no overrepresentation of either sex in relation to employment, politically dark blue and slightly reactionary. This differs from social type E which has low levels of mobility, high employment, more women are likely to be employed in relation to the city norm. It is politically light blue and slightly reactionary.

Bunkeflostrand or Riseberga is the most typical social type K area.

## Social type L (Virentofta)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Tygelsjö by	1,894	0/++/0	++/+	--	++	0-18/45-64	++/0	LT BLU	REAC
Kvarnby	741	0/++/0	+/+	-	++	0-18	++/0	N/A	N/A
Stenkällan	1,607	0/++/-	+/+	--	+	65-79	++/0	N/A	reac
Virentofta	2,938	0/++/-	++/+	--	++	65-79	++/0	LT BLU	reac
Jägersro Villastad	851	0/++/-	++/++	--	0	65-79	+/M	N/A	N/A
Västra Klagstorp	297	0/++/-	++/0	--	++	0-18	++/0	N/A	N/A
Videdal	2,582	0/++/-	++/+	--	+	65-79	++/0	LT BLU	REAC
Social type L	10,910	0/++/-	++/+	--	++	65-79	++/0	N/A	N/A

Table 3:13 Social type L (social values).

### Primary characteristic: education.

The subareas in social type L consist of medium numbers of people with university educations, the highest numbers of people with upper secondary school only and low numbers of people with compulsory school only. This characteristic is not directly shared with any other social type.

### Secondary characteristic: income.

The subareas in social type L have the highest levels of mean income and high levels of income per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age groups in social type L are 0-18 and 65-79.

### Fourth-level characteristic: "Swedishness"

The subareas in social type L have the highest levels of "Swedishness".

### Other characteristics: mobility, employment and political inclination

The subareas in social type L have the lowest levels of mobility, the highest levels of employment, no overrepresentation of either sex in relation to employment. It is politically light blue and strongly reactionary.

Virentofta or Tygelsjö by is the most typical social type L area.

## Social type M (Kristineberg)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Västra Kattarp	1,536	-/+ / ++	+ / 0	-	-	Even	0 / 0	LT RED	EQ
Kastanjegården	595	0 / + / +	++ / ++	--	0	45-79	++ / 0	N/A	N/A
Tygelsjö vång	158	0 / 0 / +	++ / ++	-	++	45-64	++ / 0	N/A	N/A
Kristineberg	1,011	-- / ++ / +	++ / ++	--	++	45-64	++ / 0	N/A	N/A
Social type M	3,300	0 / + / +	++ / ++	-	++	45-64	++ / 0	N/A	N/A

Table 3:14 Social type M (social values).

### Primary characteristic: education.

The subareas in social type M consist of low numbers of people with university educations, high numbers of people with upper secondary school only and high numbers of people with compulsory school only. This characteristic is not directly shared with any other social type, but social type I differs only in having the highest numbers of people with upper secondary school only.

### Secondary characteristic: income.

The subareas in social type M have the highest levels of mean income and high levels of income per inhabitant. Social type I has medium levels both of mean income and income per inhabitant.

### Tertiary characteristic: age group.

The most over-represented age group in social type M is 45-65. This is similar to social type I which has overrepresentation of the group 45 +.

### Fourth-level characteristic: "Swedishness"

The subareas in social type M have medium levels of "Swedishness". This is the same as social type I.

### Other characteristics: mobility, employment and political inclination

The subareas in social type M have low levels of mobility, high levels of employment, no overrepresentation of either sex in relation to employment, and voter turnout statistics were not available. The subareas of social type I have low levels of mobility, high levels of employment, no overrepresentation of either sex in relation to employment. It is politically dark red and slightly reactionary.

Kristineberg is the most typical social type M area.

## Social type N (Södra Sofielund)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Södra Sofielund	4,398	0/-/++	--/--	++	--	0-5/19-24	--/0	DK RED	RAD
Flensburg	437	0/+/0	--/--	++	-	19-24	--/0	N/A	N/A
Heleneholm	1,760	-/0/+	--/--	++	--	19-24	-/F	DK RED	CON
Social type N	6,595	0/-/++	--/--	++	--	19-24	--/0	DK RED	RAD

Table 3:15 Social type N (Social values).

### Primary characteristic: education.

The subareas in social type N consist of medium numbers people with university educations, low numbers of people with upper secondary school only and the highest numbers of people with compulsory school only. This characteristic is not directly shared with any other social type, but social type H differs only in having medium numbers people with upper secondary school only and high numbers of people with compulsory school only.

### Secondary characteristic: income.

The subareas in social type N have the lowest levels of mean income and the lowest levels of income per inhabitant. Social type H has medium levels of mean income and low income per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age groups in social type N are 0-5 and 19-24. This differs from social type H which has overrepresentation of the group 0-18.

### Fourth-level characteristic: “Swedishness”

The subareas in social type N have the lowest levels of “Swedishness”. Social type H has low levels of “Swedishness”.

### Other characteristics: mobility, employment and political inclination

The subareas in social type N have the highest levels of mobility, the lowest levels of employment, more women are likely to be employed in relation to the city norm. It is politically dark red and strongly radical. The subareas of social type H have low levels of mobility, medium levels of employment, more men are likely to be employed in relation to the city norm. It is politically even both on the red-blue scale and on the reactionary/radical ratio.

Södra Sofielund is the most typical social type N area.

## Social type O (Almgården)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Apelgården	3,357	--/+/++	0/-	--	--	65-79	-/0	DK RED	EQ
Almgården	1,638	--/+/++	-/-	0	0	even	0/0	DK RED	REAC
Segevång	3,831	--/+/++	-/-	-	-	65-79	0/0	DK RED	REAC
Lindängen	6,004	--/+/++	-/-	0	-	6-18	-/0	DK RED	REAC
Social type O	14,830	--/+/++	-/-	0	-	65-79	-/0	DK RED	REAC

Table 3:16 Social type O (social values).

### Primary characteristic: education.

The subareas in social type O consist of the lowest numbers people with university educations, the highest numbers of people with upper secondary school only and the highest numbers of people with compulsory school only. This characteristic is not directly shared with any other social type, but social type P differs only in having high numbers of people with upper secondary school only.

### Secondary characteristic: income.

The subareas in social type O have the low levels of mean income and low levels of income per inhabitant. Social type P has low levels of mean income and the lowest income level per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age groups in social type O are 6-18 and 65-79. This is similar to social type P which has overrepresentation of the groups 0-18 and 65-79.

### Fourth-level characteristic: "Swedishness"

The subareas in social type O have low levels of "Swedishness". Social type P has the lowest levels of "Swedishness".

### Other characteristics: mobility, employment and political inclination

The subareas in social type O have medium levels of mobility, low levels of employment, no overrepresentation of either sex in relation to employment. It is politically dark red and strongly reactionary. The subareas of social type P have low levels of mobility, medium levels of employment, no overrepresentation of either sex in relation to employment. It is politically dark red and slightly reactionary.

Almgården is the most typical social type O area.

## Social type P (Holma)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Nydala	5,337	--/+/++	-/-	-	-	65-79	0/0	DK RED	reac
Gullviksborg	3,182	--/+/++	0/--	-	--	0-18	0/0	DK RED	EQ
Holma	3,645	--/+/++	-/--	-	--	0-18	+/F	DK RED	reac
Almhög	3,180	-/+/+	-/-	+	--	0-5	-/0	DK RED	EQ
Augustenborg,	3,176	-/+/+	--/--	0	--	even	-/0	DK RED	rad
Persborg	1,714	-/0/++	-/--	-	--	0-18	0/M	DK RED	REAC
Hermodsdal	2,956	--/0/++	--/--	+	--	0-24	-/0	DK RED	REAC
Social type P	23,190	--/+/++	-/--	-	--	0-5	0/0	DK RED	reac

Table 3:17 Social type P (social values).

### Primary characteristic: education.

The subareas in social type P consist of the lowest numbers of people with university educations, high numbers of people with upper secondary school only and the highest numbers of people with compulsory school only. This characteristic is not directly shared with any other social type, but social type O differs only in having the highest numbers of people with upper secondary school only.

### Secondary characteristic: income.

The subareas in social type P have low levels of mean income and the lowest levels of income per inhabitant. Social type O has low levels of mean income and low levels of income per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age groups in social type P are 0-18 and 65-79. This is similar to social type O which has overrepresentation of the groups 6-18 and 65-79.

### Fourth-level characteristic: “Swedishness”

The subareas in social type P have the lowest levels of “Swedishness”. Social type O has low levels of “Swedishness”.

### Other characteristics: mobility, employment and political inclination

The subareas in social type P have low levels of mobility, medium levels of employment, no overrepresentation of either sex in relation to employment, are politically dark red and slightly reactionary. The subareas of social type O have medium levels of mobility, low levels of employment, no overrepresentation of either sex in relation to employment. It is politically dark red and strongly reactionary.

Holma is the most typical social type P area.



## Social type Q (Örtagården)

Subareas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Kryddgården	2,129	-/-/++	--/--	0	--	0-5/80+	--/0	DK RED	REAC
Törnrosen	3,042	--/-/++	-/--	-	--	0-18	--/0	DK RED	rad
Örtagården	4,848	--/-/++	-/--	-	--	0-18	--/0	DK RED	reac
Herrgården	4,898	--/-/++	-/--	0	--	0-18	--/0	DK RED	N/A
Social type Q	14,917	--/-/++	-/--	-	--	0-5	--/0	DK RED	reac

Table 3:18 Social type Q (Social values).

### Primary characteristic: education.

The subareas in social type Q consist of the lowest numbers of people with university educations, low numbers of people with upper secondary school only and the highest numbers of people with compulsory school only. This characteristic is not directly shared with any other social type, but social type P differs only in having high numbers of people with upper secondary school only.

### Secondary characteristic: income.

The subareas in social type Q have low levels of mean income and the lowest levels of income per inhabitant. Social type P has low levels of mean income and the lowest income per inhabitant.

### Tertiary characteristic: age group.

The most overrepresented age group in social type Q is 0-18. This is similar to social type P which has overrepresentation of the groups 0-18 and 65-79.

### Fourth-level characteristic: "Swedishness"

The subareas in social type Q have the lowest levels of "Swedishness", identical with those of social type P.

### Other characteristics: mobility, employment and political inclination

The subareas in social type Q have low levels of mobility, the lowest levels of employment, no overrepresentation of either sex in employment. It is politically dark red and slightly reactionary. The subareas of social type P have low levels of mobility, medium levels of employment, no overrepresentation of either sex in relation to employment. It is politically dark red and slightly reactionary.

Örtagården is the most typical social type Q area.

### Conclusions to chapter three

Below, I report my findings regarding covariance, having run a number of correlation analyses on the material to get an idea of how to group them together into social types. All of the correlation analyses were done on two variables and their respective ranks, as shown in the example below:

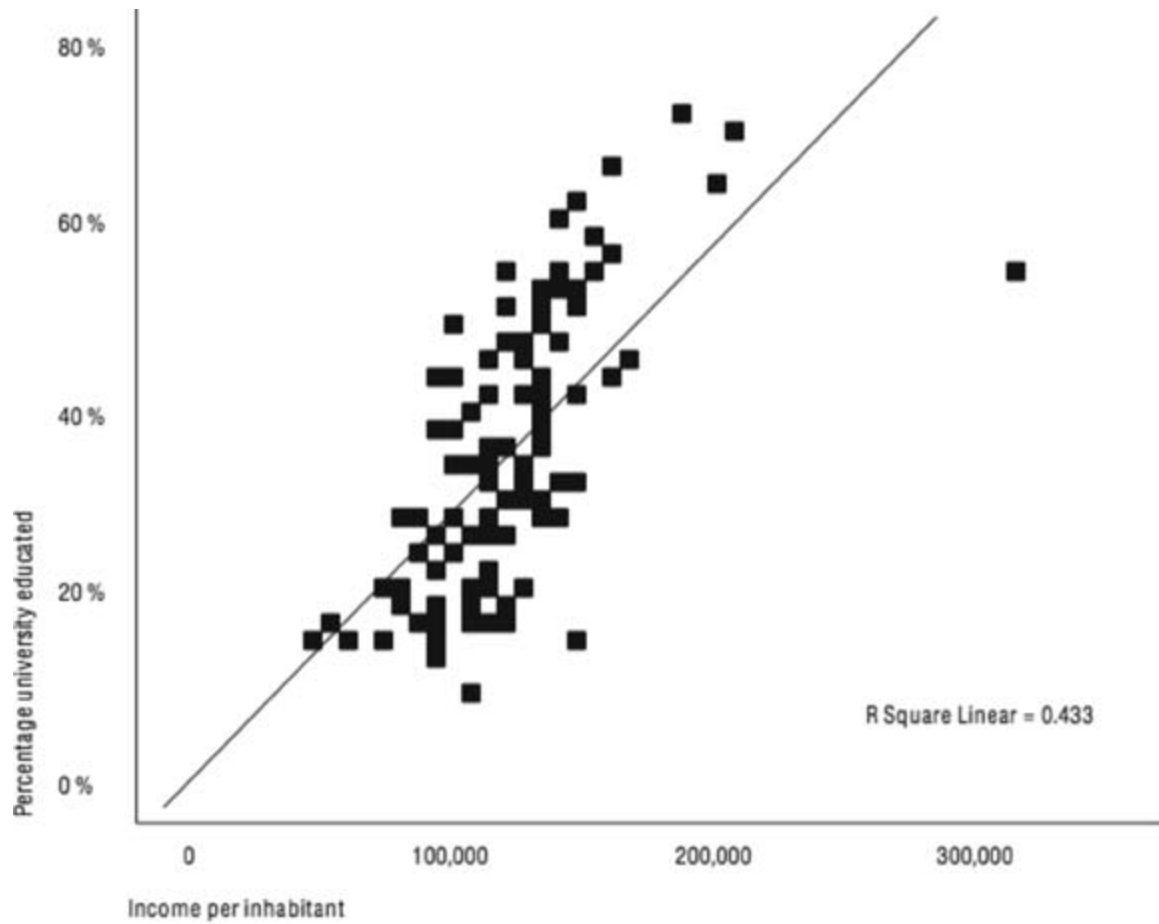


Figure 3:26 Correlation between percentage of people with university educations and income per inhabitant for the 103 subareas.

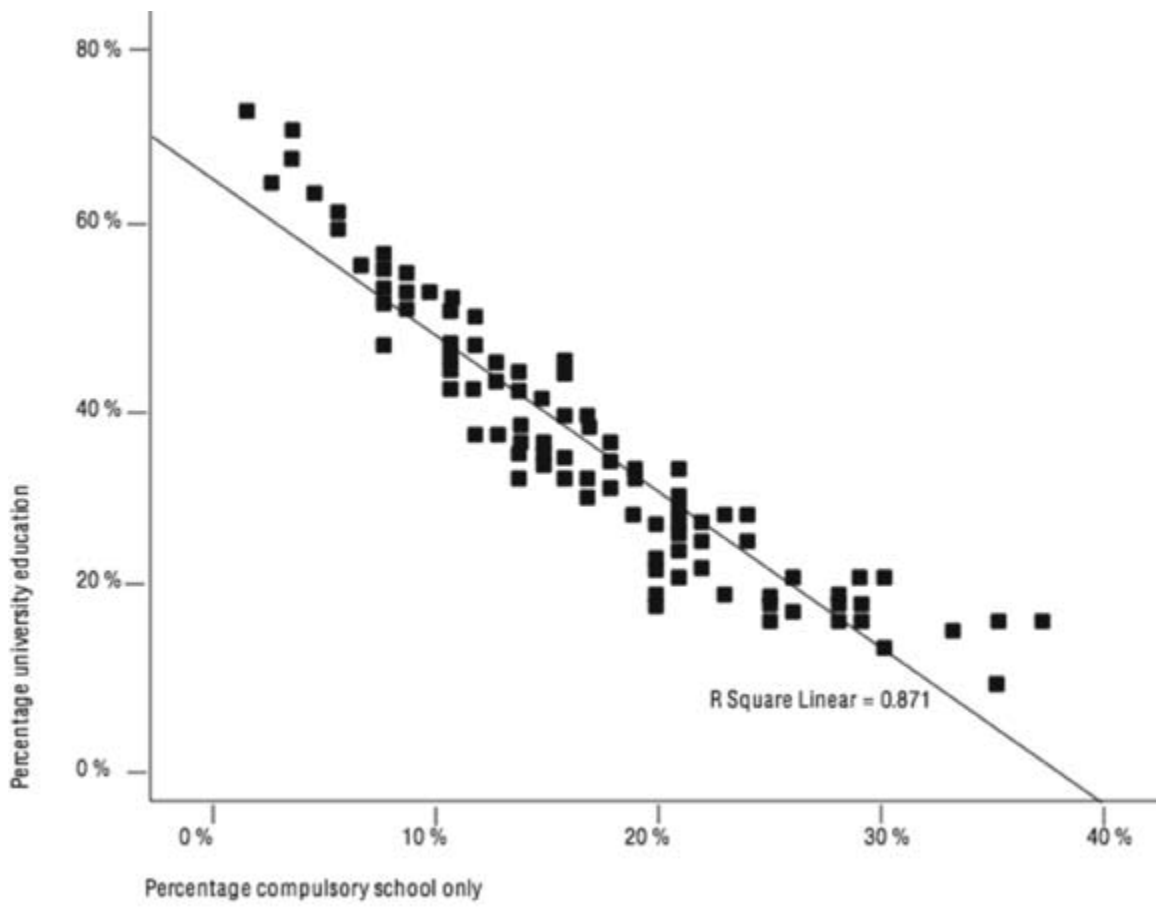


Figure 3:27 Correlation between percentage of people with university educations and people with only compulsory school educations for the 103 subareas. As the correlation is negative, I have noted the correlation as -0.871 in the tables below.

Below are my findings. (Only correlations with a value over 0.3 are listed as that level is commonly used as an indicator of significance. Age groups correlations to each other were eliminated as well as political and radicalness. The full table is in appendix ii):

Table 3:19 Correlation table.

Variable 1	Variable 2	R2-correlation
University education	Upper secondary school education	-0.64
University education	Compulsory school education	-0.871
University education	Income per inhabitant	0.433
University education	"Swedishness"	0.305
Upper secondary school education	Compulsory school education	0.313
Compulsory school education	Income per inhabitant	-0.48
Compulsory school education	"Swedishness"	-0.503
Mean income	Income per inhabitant	0.531
Mean income	Mobility	-0.304
Mean income	Age group 45-64	0.393
Mean income	Employed	0.355
Income per inhabitant	"Swedishness"	0.44
Mobility	Age group 19-24	0.467
Mobility	Age group 25-44	0.57
Mobility	Age group 45-64	-0.415
"Swedishness"	Employed	0.707
Employed	Age group 19-24	-0.353

The findings in the table may be summarized as follows;

Subareas with high levels of people with university educations tend to have high income per inhabitant, high levels of “Swedishness” and low levels of people with upper secondary and people with compulsory school educations only.

Subareas with high levels of people with upper secondary school educations tend to have high levels of people with compulsory school educations only and low levels of people with university education.

Subareas with high percentages of people with compulsory school educations only tend to also have high levels of people with upper secondary school educations only and low levels of people with university educations, “Swedishness” and income per inhabitant.

Subareas with high mean incomes tend to have high income per inhabitant, overrepresentation of the age group 45-64, high levels of the gainfully employed and low mobility.

Subareas with high income per inhabitant tend to have high levels of “Swedishness”, high mean incomes, high levels of people with university educations and low levels of people with compulsory school educations only.

Subareas with high mobility tend to have high levels of the age group 19-24 and 25-44 but not of the age group 45-64, and high mean incomes.

Subareas with high levels of “Swedishness” tend to have high levels of the gainfully employed, high income per inhabitant, high levels of people with university educations and low levels of people with compulsory school educations only.

Subareas with high levels of the gainfully employed tend to have high levels of “Swedishness”, high mean incomes and low levels of the age group 19-24.

- 
1. For certain areas, notably Västra Hamnen, the mobility statistics represent new inhabitants, and whether the area has any long term mobility or stability can certainly not be determined from these numbers.
  2. Wong notes that in segregation studies the most important attribute data are population counts of different ethnic groups. If ethnic segregation had been my main avenue of investigation, the data would be insufficient. However, I believe data on the majority group at least gives some idea about ethnic segregation (Wong 1996).
  3. Johan Asplund once commented on the difference between classical sociology and modern sociology anno 1970. His reasoning can be paraphrased to the effect that classical sociology is concerned mainly with the question: what does [property] F mean? while modern sociology saw as its scientific endeavor to ask questions of the type: In what way does [property] F occur in relation to [property] x? In Asplund's spirit, I would like to think of my work here as having a 'modern' rather than a 'classical' flavor. I do not ask what a social type [a bundle of properties] means, but rather relate properties to a number of variables.

4. One may remark that this criterion does not fit with the definition of Swedish citizenship as used by the Government Offices of Sweden (Regeringskansliet) but is a dual excluder. One has to be both *jus soli* and *jus sanguinis*, both by blood and by soil, according to this criterion, to qualify as Swedish. This is probably to distinguish within the group of non-Swedish people. However, why this criterion does not follow the definition by which one qualifies for Swedish citizenship, if one's parents have a Swedish citizenship then being born to them one should be considered Swedish. Such a criterion would just as easily achieve a distinction between first and second generation immigrants. However, this would make it impossible to distinguish between second generation immigrants (whose parents probably became citizens) and people who then could be said to be 'more' Swedish on account of their parents. This is problematic.
5. A recent study of Gothenburg where it was shown that the city had only mixed-minority enclaves and assimilation-pluralism enclaves is noteworthy. Polarised enclaves and ghettos were absent. One may assume that Malmö is similar in this respect, in which case "Swedishness" gives a good measure of ethnic segregation in the city, better than examining data for "Polishness" or "Africanness", for example (BråmÅ 2007).
6. Bourdieu approaches cultural products from two directions. On the one hand he studies relations between the world of representations. On the other hand he studies relations between agents who produce and mediate those representations. I have only studied the representations, not the relations between those who produce and mediate them. But to my defense, I can add that Bourdieu says that these two worlds must be studied separately. Only when each has been done justice on its own terms can the links between them be studied. I have tried to do justice to the world of representations on its own terms. The second task remains for future work.  
 Also, Bourdieu endeavors to study the producers and mediators of these representations, i.e. the producers and mediators of strategic city planning. The connection between the world of representations and the social world is made by the concepts of field and habitus. I have not connected the social world(s) with the world of representations, so I am not using the concepts of field and habitus in the sense of Bourdieu. The world of representations is equipped with its own inner logic and yes it is connected with the social field through homologies, which I have not studied in my work. Only the internal logic is within the scope of my survey.
7. A sketch for such a study might look like this:  
 The relations between a preference for social data and a preference for spatial data can be seen homologous to relations between the producers of social and spatial data, respectively (the strategic office vs. the city planning office) which, in turn, can be seen homologous to a struggle between the educational fraction of cultural geographers, political scientists and sociologists vs. architects, landscape architects and engineers. This would be a possible way of expanding the data, but I have not studied it. According to Bourdieu only a study of the producers of this data can uncover the roots of the practices and discourses. (Broady 1990:474-475)
8. The gender distribution is fairly equal with the exceptions of the Fridhem and Teatern subarea where it is slanted towards male workers.
9. Politically the areas are dark blue and leaning towards radicalness for the age groups that are over-represented are younger, and towards reactionariness for the older ones.
10. Mean incomes are medium to low and age group 65+ is overrepresented. The underrepresentation of families leads, as usual, to slightly higher incomes per capita than mean incomes.
11. People vote light red and are slightly reactionary. Kronprinsen is an exception being both dark blue and strongly reactionary.

12. Mean incomes are medium, with the exception of Valdemarsro which has the highest income level.
  13. The over represented age groups are the young (0-18) in Kroksbäck, Hindby and Valdemarsro and 19-24 in Rostorp.
  14. Only in Hindby are male workers overrepresented.
  15. Politically, Hindby is strongly reactionary, while blue and red weigh equal in the other areas or statistics are not available.
  16. Income per capita is medium to the highest with the exception of Oxievång, where it is low.
  17. Mobility levels are lowest to low, with medium only in Östra Skrävlinge.
  18. Employment is highest in most areas, medium in Oxievång and lowest in Kulladal.
  19. Politically, where the statistics are available the situation is fairly equal tending towards red in Oxievång and Västra Kattarp and blue in Oxie Kyrkby, which is strongly reactionary as well.
- 
20. Mean incomes are highest to high only in Eriksfält.
  21. "Swedishness" is either highest as in Södra Sallerup, Bunkeflostrand and Riseberga or medium-high as in Johanneslust, Bulltofta and Eriksfält.
  22. Politically, the area is blue and reactionary for Södra Sallerup, Bunkeflostrand and Riseberga but equal and conventional tending towards radical in Johanneslust and Eriksfält.





# Spatial variables and social types

## CHAPTER FOUR

Having defined the 17 social types, I now examine how they relate to each other spatially. I found 34 of the variables in chapter three to be spatial, and these are the ones I treat in this chapter. In addition to the spatial variables from Area Facts, I have analyzed indoor space, outdoor space and centrality, by producing GIS maps and a space syntax map. In the chapter five I have also treated block morphology. In this chapter, I only treat the variables from Area Facts. The relevant spatial variables in the survey can be thematically arranged to indicate a series of resource levels per subarea. I arranged the spatial variables thematically arranged in terms of **outdoor space, indoor space, centrality, ownership structure and building age**.

### Area and outdoor space

The area of each subarea was available in Area Facts 2004. The original source was Malmö City Planning Offices and the measure used was hectares (1 hectare=2.471 acres).

Because in some areas that area included large portions of agricultural lands, in others that area included recreational or industrial areas, I decided to not use the area as measured for the subareas in Area Facts. Instead, I used the GIS tools and the property area, as it was made available to me from Malmö City Planning Office. I summarized the property areas for all residential buildings in each subarea and used it as the relevant area of each of the subareas in this study.

The measurement **outdoor space** is the number of square meters per inhabitant out of doors calculated by dividing the area of the subareas (as summarized per property area including the built area) by the population. The higher the number, the greater the resource level for that subarea's inhabitants.



Figure 4:1 Outdoor space.

## Room units and indoor space.

A room unit is the total number of rooms available in the residential building mass of each subarea. Thus a household of 2 rooms accounts for 2 room units. Kitchens are not counted as rooms. Household data was available in Area Facts (*Områdesfakta*) 2004.

Indoor space is thus the number of room units per inhabitant.

Rådberg and Friberg consider this measure (room units) useful, especially when comparing larger areas (such as subareas) in contrast to blocks, particularly when the exploitation measure is not available (as in this survey). The exploitation measure – built area times number of floors – was not available (Rådberg & Friberg 1996:38).

Indoor space as calculated is represented below for the city of Malmö.



Figure 4:2 Indoor space.

## Integration values and centrality

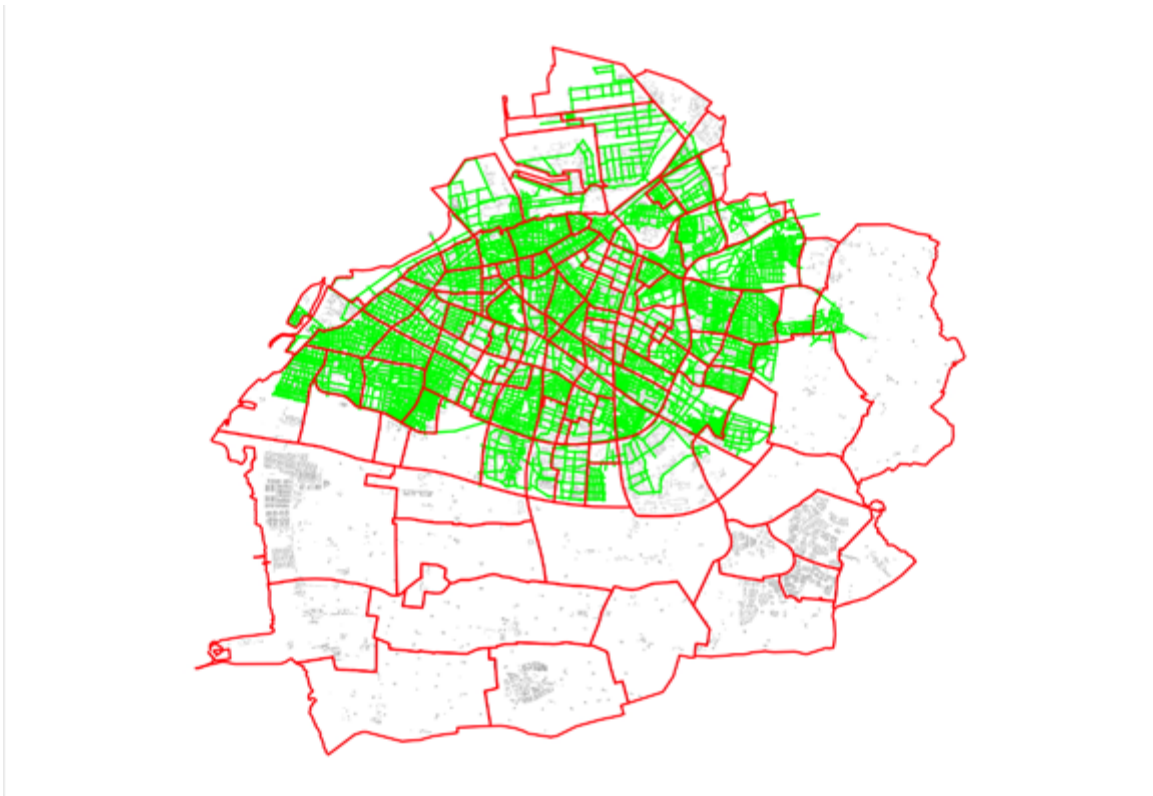
Centrality was measured using my space syntax map of Malmö from the AGORA project (cf. Space Syntax Limited 2004, Hillier 1996, Hillier & Hanson 1984). A topological map, such as the space syntax map, drawn along axial lines, defines its own centrality by the integration value assigned to each line by the space syntax software. Instead of one central point, a number of lines with high integration values comprise an integration core. I incorporated the values of the lines into my study by assigning each subarea a value based on the integration values of the axial lines running through the areas. I compared these measures with geometrical values based on an arbitrarily chosen central point (the City Hall) and found that the values were similar. As a topological map, however, the space syntax map avoids the problem of setting a central point. I decided to use the space syntax values to assign centrality values to each subarea.

## The characteristics of a space syntax axial map

A space syntax axial map is drawn by finding the longest and smallest number of lines that cover all the public space of a city (or all publicly accessible convex spaces on the map). These lines are drawn on a normal map of the city showing buildings and other accessibility impediments in the public space. Consider each line a node in a graph where the connections (junctions) between the lines are similar to connections between nodes. Thus a line normally passes through several aligned streets and sometimes across squares and other open public spaces. Then each line is assigned a value, based on its connections to the other lines and measuring its depth or shallowness in relation to all other lines (nodes) in the system. Finally, the depth of each line is compared to the depth of every other line. This results in a value, called the integration value, that enables comparison of each line to every other line. The lines are colored by the software from red via orange, yellow and green to blue in order of integration value. The warmer colors thus represent a higher degree of integration, or shallowness, where the reddest line is the line with the least distance (in terms of junctions) to all the other lines in the system, and the bluest line is the line that has the longest distance to every other line in the system. This gives a measure of centrality. Space syntax is normally used for various other purposes besides measuring centrality, see Hillier 1996 for examples.



Figure 4:3 Low resolution radius  $n$  space syntax axial map. Red lines are the most integrated and blue lines the least integrated. Notice the change in scale. The integration core is roughly 10% of the most integrated lines, i. e. the red and orange lines and the top yellow.



*Figure 4:4 The relationship between the subareas of Malmö and the space syntax map spread. When choosing which lines would correspond to which area, I used the rule of thumb that the line with the highest integration value, where the length of that line was at least 50% within the borders of the subarea, was to be the line whose value was chosen.*

The space syntax map, however, does not cover all the subareas of the city of Malmö, but only the central city body (*stadskroppen*). Areas outside the central city body were given an overall lowest value for centrality.

Every subarea (the polygons with red lines) with a Space Syntax map drawn for it (the green lines represent unprocessed Space Syntax axial lines) was given a centrality value based on the axial line with the highest value in that polygon. Most of the length of that axial line however, had to be within the polygon in order to count.



Figure 4:5 Centrality map based on the space syntax map.



## Building age.

Area Facts measures building age in five bracketed categories: Before 1940, 1940-1960, 1960-1970, 1970-1980 and after 1980. I combined the categories 1960-1970 and 1970 to 1980 to obtain an even 20 year period.



Figure 4:6 Distribution by percentage of buildings with building age pre-1940. 0-values eliminated.



Figure 4:7 Distribution by percentage of buildings with building age between 1940 and 1960. 0-values eliminated.



Figure 4:8 Distribution by percentage of buildings with building age between 1960 and 1980. 0-values eliminated.



Figure 4:9 Distribution by percentage of buildings with building age after 1980. 0-values eliminated.

Building age was then organized into a relative scale where each subarea was seen in relation to its relative position in the city for the relevant time period, i. e. how much of the percentage of total built residences for the time period was within the subarea. The highest values were designated ++, the next highest + the third 0 the fourth – and the lowest --. This distribution should roughly equal 20 percent of the areas in each category, but there was a complication in the relatively large numbers of subareas with 0 percent. This led me to interpret the numbers differently, in that the areas with 0 were excluded and the other four categories were divided equally. Then the 0 percentage areas were added to the lowest category (--). The same procedure was used for ownership structure below.

## Ownership

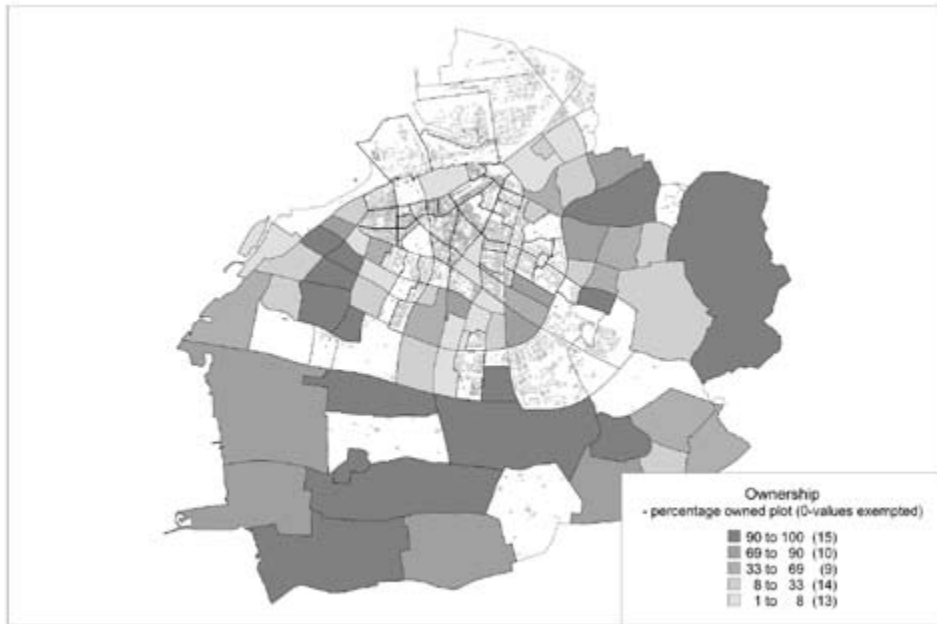


Figure 4:10 Percentage owner-occupancy. 0-values eliminated.



Figure 4:11 Percentage tenant-owned apartments. 0-values eliminated.



Figure 4:12 Percentage rental. 0-values eliminated.

## Ten relevant spatial variables

Each of the ten relevant spatial variables (indoor space, outdoor space, location, built before 1940, built between 1940 and 1960, built between 1960 and 1980, built after 1980, percentage owner-occupancy, percentage tenant-owned apartments (in tenant owner's associations), percentage rental apartments) was given a relative value based on the relationship between the areas and spread in an equal count where this was possible with regard to the numbers. I. e. if a number was 0, all areas with that number were given the same relative value even if this violated the equal count principle. Roughly 20 percent of the areas then received each numerical value, converted in the table for ease of reading to the characters ++, +, 0, -, -- in the order of relative strength.

The social type summary was not based on the spatial values but on the social values (see chapter 3), and thus in the summary of the type indicators a 0 value can sometimes indicate that most of the areas had this value, and in some cases that it is an average value of the areas that are included in the type. The summary (SOCIAL TYPE A row below) was made by examining the data and weighting more heavily populated areas more than areas with low populations count. The summary is supplemented by a description of the ownership structure and the building age of the areas included in the type. I found it clearer to represent these two groups of variables with circle diagrams while indoor space, outdoor space and centrality were already well represented on the GIS maps. Consistency was measured by comparing the spread of data among the variables, and a preliminary judgment made as to whether each type could be considered a segregated type with coinciding social and spatial values.<sup>1</sup>

## Social type A (Hästhagen)

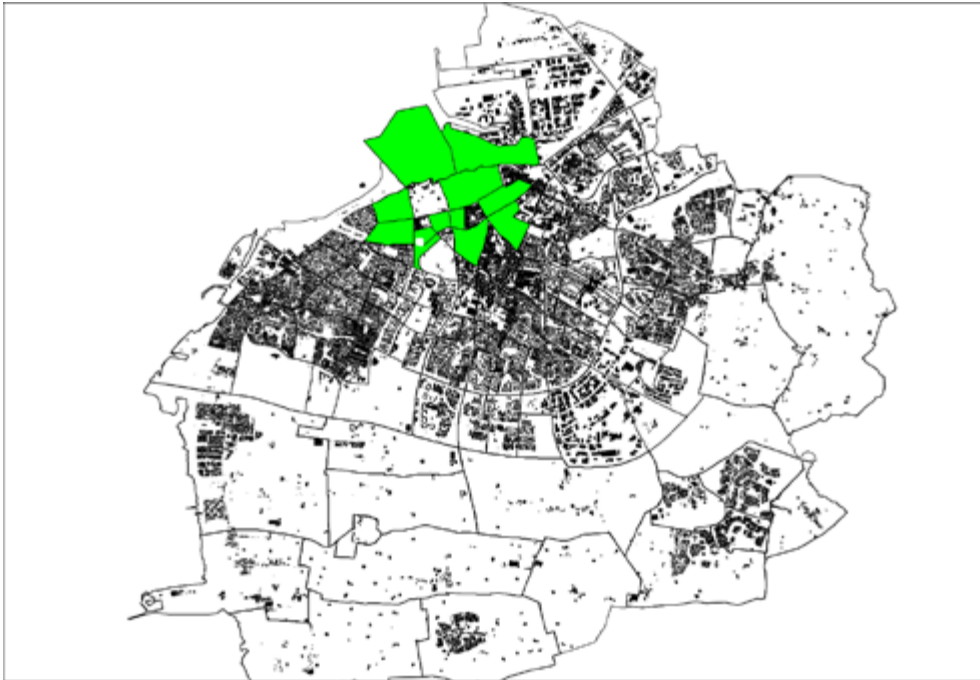


Figure 4:13 Social type A (geographical).

Geographical spread of subareas categorized as social type A: dominating the historical core of Malmö (Starting at 11.30, going clockwise: Västra Hamnen, Inre Hamnen, Gamla Staden, Rörstaden, Västra Sorgenfri, Rådmanvången, Davidshall, Hästhagen, Fågelbacken, Kronborg, Rönneholm and Ribersborg).

This social type characterizes 12 subareas and the property area covered is about 8% of the total property area of Malmö. The population of these areas is approximately 47,000, which amounts to approximately 17% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Västra Hamnen	700	++	-	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inre Hamnen	111	0	+	-	+	--	-	++	--	--	++
Davidshall	1,622	++	-	++	++	--	-	0	--	-	++
Hästhagen	1,502	++	--	+	++	0	--	--	--	0	++
Rörstaden	4,049	++	--	++	++	--	--	--	--	+	+
Fågelbacken	2,502	++	-	+	+	++	--	0	--	+	+
Rönneholm	6,881	++	-	++	+	++	-	--	--	0	++
Gamla Staden	7,645	+	-	+	+	-	0	+	-	-	++
Ribersborg	8,042	++	--	++	+	++	--	--	--	-	++
Kronborg	1,790	++	-	-	--	++	0	--	--	++	0
Rådmanvången	6,437	0	--	++	+	0	0	+	--	+	+
Västra Sorgenfri	5,578	-	--	+	++	-	0	--	--	+	+
Social Type A	46,859	++	-	++	+	++	0	--	--	+	++

Table 4:1 Social type A (spatial values).

## Social type A ownership structure

The ownership structure is largely rental, ranging from the recently developed Västra Hamnen with 47% rental to the 19<sup>th</sup> century apartments in Inre Hamnen with 100% rental. Hästhagen is 79% rental.

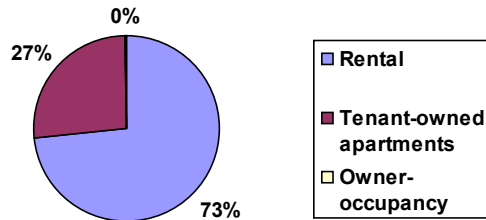


Figure 4:14 Ownership structure in social type A.

## Social type A Building age

The oldest mass of buildings in the central core is located along the former donational lands (land subject to special rules for use) that line the southern part of the canal (Améen 1964:118-122). The subareas are called Rörsjöstaden and Hästhagen (plan from ca 1870), Davidshall (plan from 1924) and Västra Sorgenfri (built in the early twentieth century).

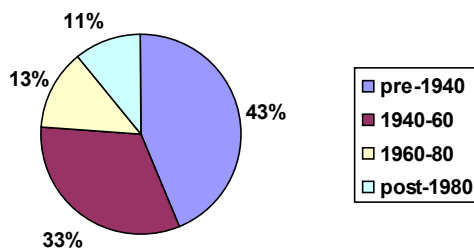


Figure 4:15 Distribution of building age in social type A.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have a high degree of consistency. Social type A thus qualifies as a segregated type with regard to the social and spatial values.

## Social type B (Möllevången)



Figure 4:16 Social type B (geographical)

Geographical spread of subareas categorized as social type B: dominating the areas immediate east and south of the historical core of Malmö (To the east; from west to east: Slussen, Östervärn, Värnhem and Katrinelund). To the south; from west to east: Södervärn, Möllevången, Norra Sofielund).

This social type characterizes 7 subareas and the property area is approximately 3% of the total property area of Malmö. The population of these areas is approximately 23,500, which amounts to approximately 8% of the total population of Malmö. This type could be further subdivided into an eastern (Slussen, Östervärn, Värnhem and Katrinelund) and a southern part (Möllevången, Södervärn and Norra Sofielund), as the differences and similarities tend to follow those lines.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Slussen	2,566	+	--	+	+	--	-	++	--	+	+
Östervärn	2,628	-	--	+	++	--	0	--	--	-	++
Värnhem	1,806	-	--	+	+	-	+	--	--	0	++
Katrine-lund	1,479	0	--	+	--	--	++	--	--	+	+
Möllevången	9,992	-	--	++	++	--	0	--	--	-	++
Söder-värn	1,481	-	--	++	++	0	--	--	--	0	++
Norra Sofielund	3,524	-	--	++	++	-	-	-	-	0	+
Social Type B	23,476	-	--	+	++	--	0	--	--	0	++

Table 4:2 Social type B (spatial values).

## Social type B ownership structure

The ownership structure is largely rental ranging from Slussen and Norra Sofielund with approximately 65% rental to Östervärn with 92%.

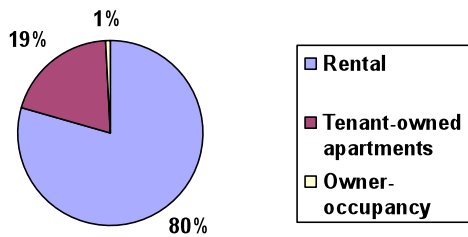


Figure 4:17 Ownership structure in social type B.

## Social type B Building age

The bulk of the area has buildings from before 1940. Exceptions are Värnhem and Katrinelund with a majority (~55% and ~90%, respectively) of building from 1960-80. Östervärn and Möllevången also have significant sections built between 1960 and 1980 (~25% each). The period 1940-1960 has very limited representation in these areas.

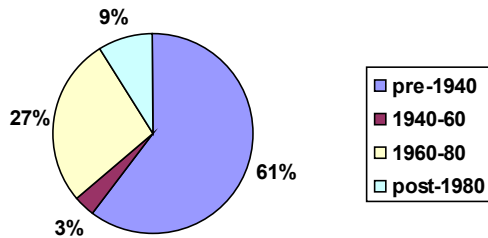


Figure 4:18 Distribution of building age in social type B.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have the highest degree of consistency. Social type B thus qualifies as a segregated type with regard to the social and spatial values.



## Social type C (Kirsebergsstaden)



Figure 4:19 Social type C (geographical)

Geographical spread of subareas categorized as social type C: dominating the areas immediately adjacent to the areas in Malmö that constitute social type B (From north to south of the five eastern areas: Kirsebergsstaden, Ellstorp, Östra Sorgenfri, Annelund and Lönngården). To the west Allmänna Sjukhuset.

This social type characterizes 6 subareas and the property area is approximately 3% of the total property area of Malmö. The population of these areas is approximately 15 500, which amounts to approximately 6% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Östra Sorgenfri	5,835	+	-	++	0	++	-	--	--	++	0
Ellstorp	1,508	+	--	0	++	+	--	--	--	++	--
Allmänna Sjukhuset	388	+	--	++	++	--	-	--	--	+	+
Annelund	1,724	+	-	++	--	++	--	--	--	++	0
Lönn-gården	1,255	--	-	+	++	+	--	--	--	++	0
Kirsebergsstaden	4,932	-	-	0	+	+	-	0	-	+	+
Social Type C	15,642	+ <sup>2</sup>	-	++	++	+	-	--	--	++	0

Table 4:3 Social type C (spatial values).

## Social type C ownership structure

The ownership structure is largely tenant-owned apartments (*bostadsrätt*) ranging from Kirsebergsstaden and Allmänna Sjukhuset with roughly 50% to Ellstorp with 100%)

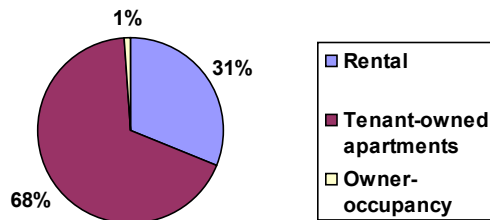


Figure 4:20 Ownership structure in social type C.

## Social type C Building age

The dominant building age is the post-war period 1940-60 and buildings built before 1940, with Annelund representing one extreme with 100% buildings from the post-war period and Allmänna Sjukhuset the other extreme with about 90% of the buildings from before 1940. A maximum of 22% of the buildings were built after 1960 (in Kirsebergsstaden).

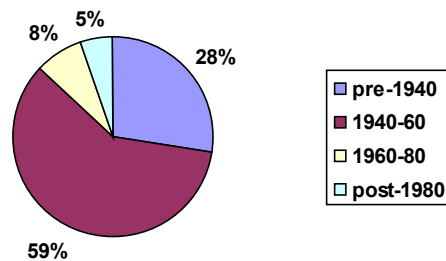


Figure 4:21 Distribution of building age in social type C.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have a high degree of consistency. Social type C thus qualifies as a segregated type with regard to the social and spatial values.

## Social type D (Västervång)



Figure 4:22 Social type D (geographical)

Geographical spread of subareas categorized as social type D: dominating the areas to the southwest of the historical core in Malmö (From north to south: Fridhem, Västervång, Bellevue, Nya Bellevue, Rosenvång and Djupadal). Solbacken is semi-centrally located and Teatern is very centrally located.

This social type characterizes 9 subareas and the property area is approximately 14% of the total property area of Malmö. The population of these areas is approximately 14,000, which amount to approximately 5% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Fridhem	1,768	++	+	0	0	0	--	++	0	+	0
Hyllieby	1,253	+	+	-	-	--	+	0	++	--	-
Djupadal	3,946	+	+	-	0	+	0	0	++	-	-
Nya Bellevue	998	-	++	0	++	0	0	-	++	--	--
Rosenvång	2,204	-	++	0	+	+	-	--	++	-	-
Bellevue	1,213	-	++	0	+	0	0	-	++	-	--
Västervång	951	0	++	-	0	+	-	+	+	-	--
Solbacken	1,058	++	++	+	0	+	0	-	+	-	0
Teatern	228	++	-	++	--	+	0	--	--	--	++
Social Type D	13,619	- <sup>3</sup>	++	0	0	+	0	-	++	-	-

Table 4:4 Social type D (spatial values).

## Social type D ownership structure

The ownership structure is largely owner-occupancy (generally more than 87%), with the exception of the apartment areas where ownership is either 50% tenant-owned apartments and 50% rental, as in Fridhem and Solbacken, or 100% rental, as in Teatern.

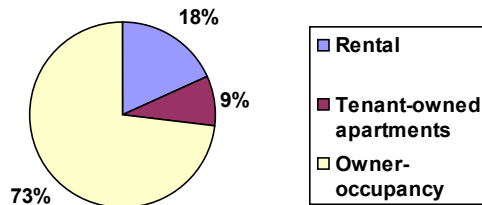


Figure 4:23 Ownership structure in social type D.

## Social type D building age

The dominant building age is pre-war and post-war as in Bellevue, Rosenvång and Nya Bellevue, or post-war and 1960-80s, as in Djupadal, Hyllieby, Västervång, Solbacken and Teatern. Only Fridhem was primarily built after 1980.

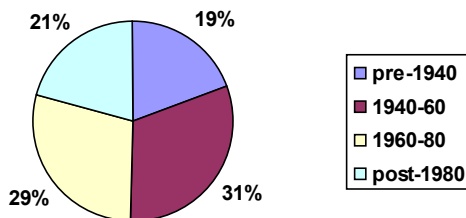


Figure 4:24 Distribution of building age in social type D.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have a high degree of consistency. Social type D thus qualifies as a segregated type as regards the social and spatial values.

## Social type E (Gamla Limhamn)

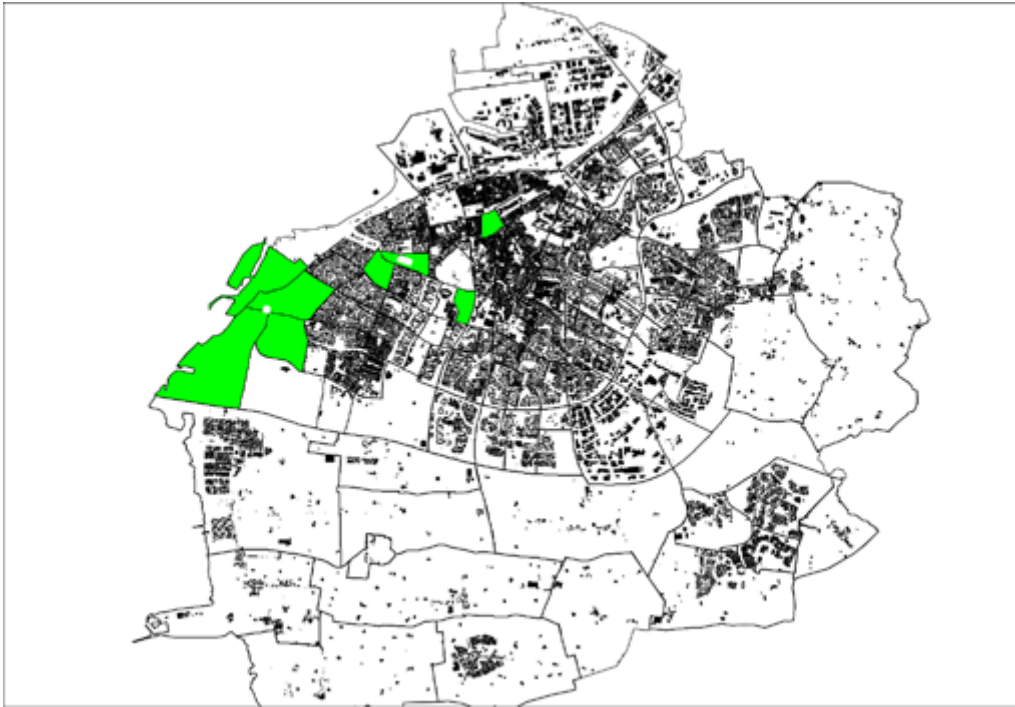


Figure 4:25 Social type E (geographical)

Geographical spread of subareas categorized as social type E: dominating the areas historically part of the Limhamn municipality (From north to south, west to east: Limhamns hamnområde, Gamla Limhamn, Sibbarp and Annetorp) as well as several areas adjacent to or in the historical core of Malmö (From west to east: Dammfri, Mellanheden, Borgmästaregården and Lugnet).

This social type characterizes 8 subareas and the property area is approximately 10% of the total property area of Malmö. The population of these areas is approximately 23,000, which amount to approximately 9% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Limhamns hamnområde	1,106	++	0	-	--	--	--	++	-	++	0
Borgmästaregården	2,300	++	0	++	--	--	++	--	--	++	0
Dammfri	3,574	++	0	++	--	++	--	--	--	++	0
Mellanheden	1,606	+	0	+	-	++	-	-	-	+	+
Annetorp	2,888	+	+	-	0	+	-	+	0	+	0
Lugnet	3,005	++	-	++	0	--	+	++	--	0	++
Sibbarp	3,650	+	+	--	0	+	0	0	+	-	0
Gamla Limhamn	5,230	+	0	-	+	+	-	-	0	0	0
Social type E	23,359	+	0	-	0	+	-	-	--	++	0

Table 4:5 Social type E (spatial values).

## Social type E ownership structure

The ownership structure is roughly equal between rental and tenant-owned apartments (*bostadsrätt*) where Limhamns hamnområde, Borgmästaregården, Dammfri and Annetorp have more tenant-owned apartments while Mellanheden, Lugnet and Gamla Limhamn have a larger share of rental housing. Only Sibbarp is primarily owner-occupancy.

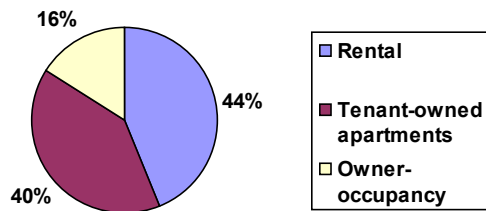


Figure 4:26 Ownership structure in social type E.

## Social type E building age

The dominant building age is post-war 1940-1960s with the exceptions of Borgmästaregården which is 100% from 1960-80, Lugnet which is primarily 1960-80, and Limhamns hamnområde which was built after 1981.

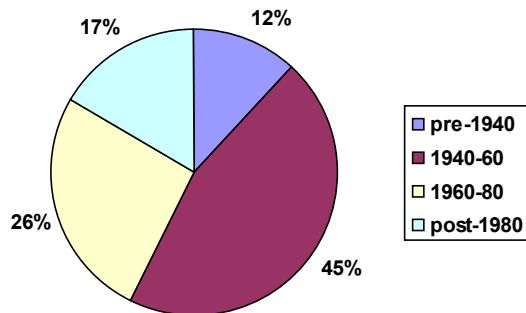


Figure 4:27 Distribution of building age in social type E.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have a low degree of consistency (high for indoor and outdoor space as well as building age). Social type E thus does not qualify as a segregated type with regard to the social and spatial values.

## Social type F (Klagshamn)



Figure 4:28 Social type F (geographical)

Geographical spread of subareas categorized as social type F: dominating the agricultural areas to the south of the main city body (*stadskropp*) (From north to south: Vintrie, Skumparp and Klagshamn) as well as to the east of Oxie (Toarp).

This social type characterizes 4 subareas and the property area is approximately 3% of the area of Malmö. The population of these areas is approximately 2,300, which amounts to nearly 1% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Klagshamn	1,470	--	++	--	++	-	--	++	+	0	-
Vintrie	391	--	++	--	++	--	--	+	++	--	--
Skumparp	148	--	++	--	++	--	-	+	++	--	--
Toarp	352	-	++	--	+	-	-	++	+	0	-
Social type F	2,361	--	++	--	++	-	--	++	+	0	-

Table 4:6 Social type F (spatial values).

## Social type F ownership structure

The ownership structure is largely owner-occupancy with Toarp having the fewest, with 66% while both Vintrie and Skumparp have roughly 100%.

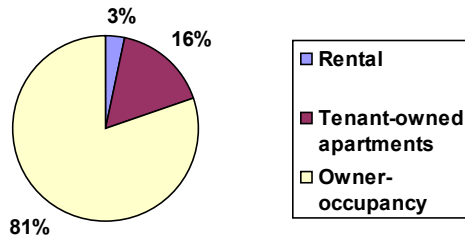


Figure 4:29 Ownership structure in social type F.

## Social type F building age

The dominant building age is either pre-war, with levels between 40% and 70% or post-1981, with 25-50%. The period 1940-1980 saw very little building in these subareas.

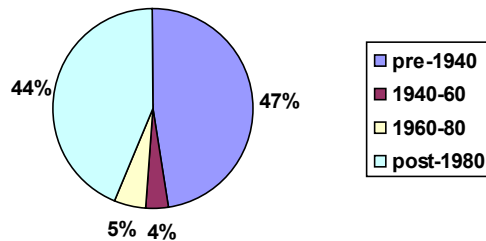


Figure 4:30 Distribution of building age in social type F.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have the highest degree of consistency. Social type F thus qualifies as a segregated type with regard to the social and spatial values.



## Social type G (Lorensborg)



Figure 4:31 Social type G (geographical)

Geographical spread of subareas categorized as social type G: dominating a number of areas semi-centrally located (From west to east, north to south: Kronprinsen, Håkanstorp, Lorensborg, Södertorp and Gröndal).

This social type characterizes 5 subareas and the property area is approximately 3% of the total property area of Malmö. The population of these areas is approximately 9,000, which amounts to approximately 3% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Gröndal	1,836	0	0	+	-	--	+	0	0	0	+
Södertorp	1,217	++	0	-	--	--	++	--	--	++	--
Kronprinsen	1,089	++	--	0	--	-	+	--	--	--	++
Lorensborg	3,825	++	0	0	--	++	--	--	--	+	+
Håkanstorp	1,242	+	0	0	0	++	--	-	0	++	-
Social type G	9,209	++ <sup>4</sup>	0 <sup>5</sup>	0	--	++	--	--	--	++	+

Table 4:7 Social type G (spatial values).

## Social type G ownership structure

The ownership structure is either rental, as in Kronprinsen, Lorensborg and Gröndal (70-100%), or tenant-owned apartments (*bostadsrätt*) as in Håkanstorp and Södertorp (65-100%).

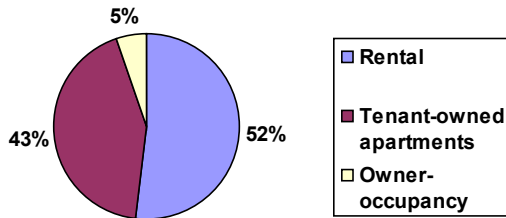


Figure 4:32 Ownership structure in social type G.

## Social type G building age

The dominant building age is post-war with Lorensborg (100%) and Håkanstorp (65%) built before 1960 while Södertorp, Kronprinsen and Gröndal were built between 1960 and 1980 (from 84-100%).

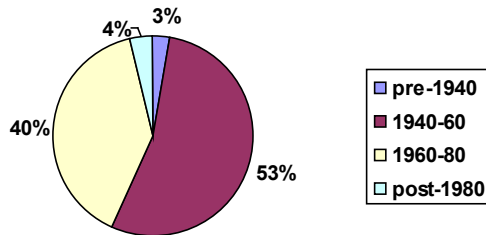


Figure 4:33 Distribution of building age in social type G.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have the highest degree of consistency. Social type G thus qualifies as a segregated type with regard to the social and spatial values.

## Social type H (Kroksbäck)



Figure 4:34 Social type H (geographical)

Geographical spread of subareas categorized as social type H: dominating a number of areas peripheral to the main city body (*stadskropp*) (From west to east, north to south: Rostorp, Valdemarsro, Kroksbäck and Hindby).

This social type characterizes 4 subareas and the property area is approximately 4% of the total property area of Malmö. The population of these areas is approximately 8,500, which amounts to approximately 3% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Rostorp	1,066	0	+	-	+	+	--	--	0	-	+
Kroksbäck	4,780	0	0	+	-	-	+	--	0	0	0
Hindby	2,048	-	0	++	0	+	-	+	0	+	0
Valdemarsro	701	--	+	-	+	--	0	+	+	--	0
Social type H	8,595	0	0	-	+	+	+	--	0	0	0

Table 4:8 Social type H (spatial values).

## Social type H ownership structure

The ownership structure varies with rentals being slightly more common in Rostorp and Kroksbäck at 55% and 44%, respectively, and owner-occupancy most common in Hindby and Valdemarsro, at 75% and 45%, respectively.

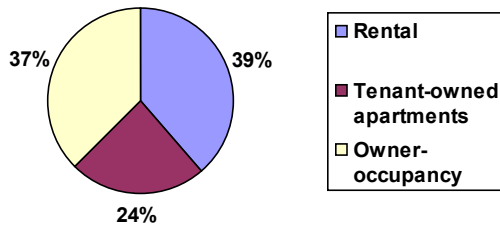


Figure 4:35 Ownership structure in social type H.

## Social type H building age

Building ages also vary, with Kroksbäck clearly being from 1961-80 (88%) while Rostorp is 50% pre-war and 50% post-war (1941-60), Hindby is 56% post-war, and Valdemarsro is 41% pre-war.

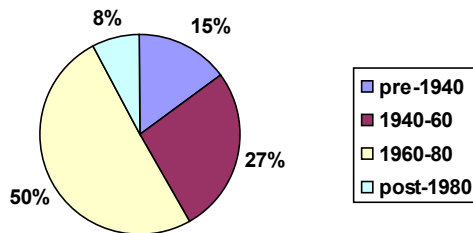


Figure 4:36 Distribution of building age in social type H.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have a low degree of consistency. Social type H thus does not qualify as a segregated type with regard to the social and spatial values.

## Social type I (Västra Söderkulla)



Figure 4:37 Social type I (geographical)

Geographical spread of subareas categorized as social type I: dominating a number of areas south of and peripheral to the main city body (*stadskropp*) (From west to east, north to south: Västra Söderkulla, Östra Söderkulla, Lindeborg, Almvik) as well as two semi-central areas located southwest (Bellevuegården) and southeast (Höja) of the historical core.

This social type characterizes 6 subareas and the property area is approximately 7% of the total property area of Malmö. The population of these areas is approximately 19,000, which amounts to approximately 7% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Höja	1,913	+	0	+	0	--	+	--	-	++	--
Östra Söderkulla	1,076	+	0	-	-	--	++	-	-	++	--
Bellevuegården	4,037	-	0	+	--	--	+	+	-	--	++
Västra Söderkulla	4,414	+	0	0	-	--	++	--	-	++	-
Lindeborg	4,577	+	0	-	-	--	+	+	-	++	-
Almvik	3,079	0	0	-	--	--	++	-	-	++	--
Social type I	19,096	+	0	-	-	--	++	+	-	++	--

Table 4:9 Social type I (spatial values).

## Social type I ownership structure

The ownership structure is largely tenant-owned apartments (*bostadsrätt*) with levels above 80% in all areas except Bellevuegården, which, in contrast, is 96% rentals.

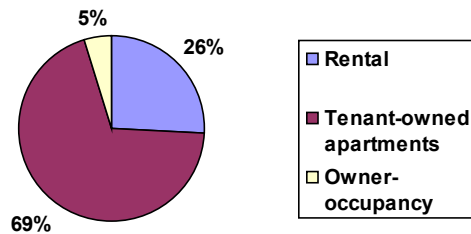


Figure 4:38 Ownership structure in social type I.

## Social type I building age

Building age is almost completely 1960-80 ranging from 73% up.

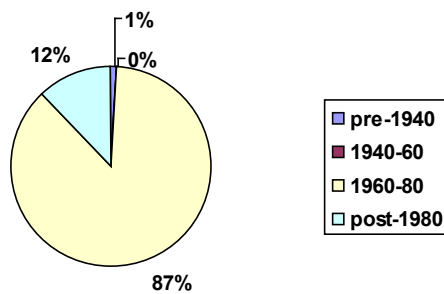


Figure 4:39 Distribution of building age in social type I.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have the highest degree of consistency. Social type I thus qualifies as a segregated type with regard to the social and spatial values.

## Social type J (Oxie Kyrkby)



Figure 4:40 Social type J (geographical)

Geographical spread of subareas categorized as social type J: dominating a number of areas peripheral to the main city body (*stadskropp*) (From west to east: Kulladal, Gullvik, Östra Skrävlinge) as well as Lockarp (to the south) and Oxie (From the south to the north: Käglinge, Oxievång, Oxie kyrkby).

This social type characterizes 7 subareas and the property area is approximately 12% of the total property area of Malmö. The population of these areas is approximately 12,000, which amounts to approximately 4% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Käglinge	1,949	-	++	--	0	--	0	++	+	-	0
Oxievång	3,094	--	+	--	--	--	0	++	0	++	-
Oxie Kyrkby	4,178	0	+	--	-	--	+	--	+	0	-
Östra Skrävlinge	1,061	--	+	--	0	--	--	++	0	+	0
Lockarp	175	++	++	--	++	0	--	--	++	--	-
Kulladal	4,395	+	+	+	0	0	0	-	0	++	-
Gullvik	1,334	0	+	+	0	--	0	++	+	-	-
Social type J	16,186	0	+	--	0	--	0	++	0	++	-

Table 4:10 Social type J (spatial values).

## Social type J ownership structure

The ownership structure is owner-occupancy, in most areas from 68% up, and tenant-owned apartments (*bostadsrätt*) in Östra Skrävlinge, Kulladal and Oxievång, (42%, 62% and 78%, respectively).

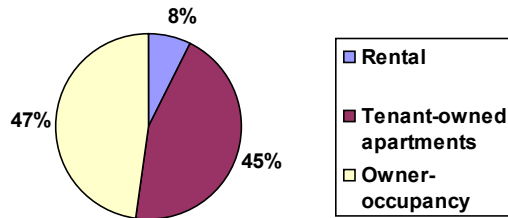


Figure 4:41 Ownership structure in social type J.

## Social type J building age

Building age is either 1960 to 1980 (Oxie Kyrkby 90%, Kristineberg 80%), post-1981 (Käglinge 63%, Oxievång 79% and Östra Skrävlinge 90%, or mixed (Kulladal, Gullvik). Lockarp is almost completely 1960-80, ranging from 73% up.

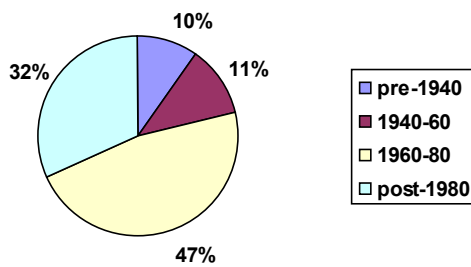


Figure 4:42 Distribution of building age in social type J.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have a low degree of consistency. Social type J thus does not qualify as a segregated type with regard to the social and spatial values.



## Social type K (Bunkeflostrand)

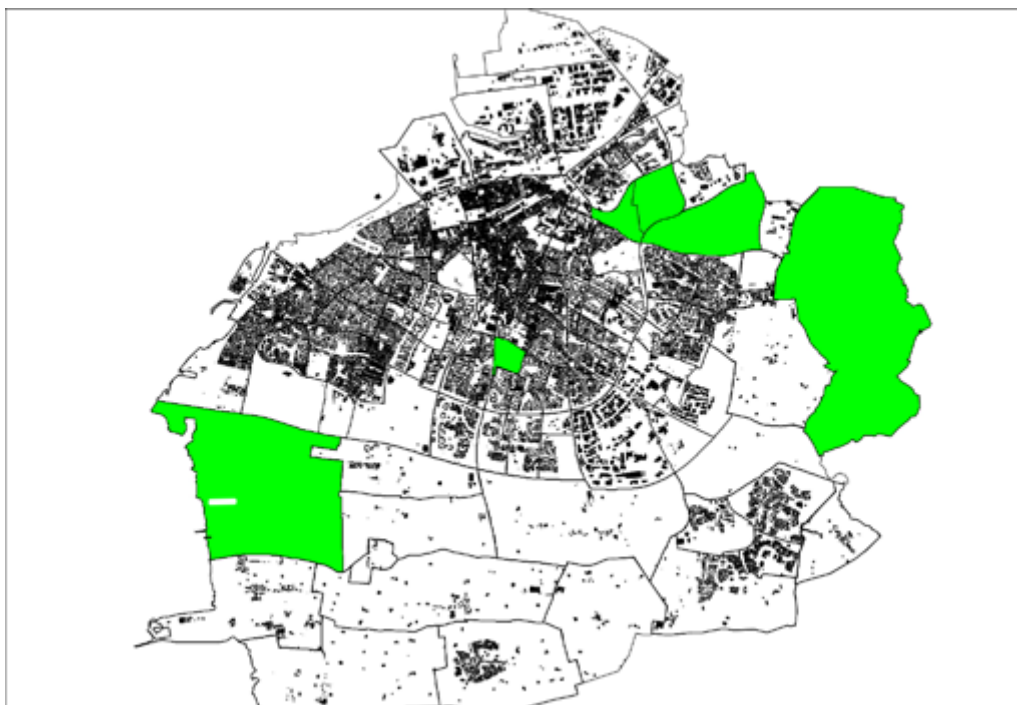


Figure 4:43 Social type K (geographical)

Geographical spread of subareas categorized as social type K: dominating peripheral areas to the north-east of the main city body (*stadskropp*) (From west to east: Johanneslust, Bulltofta, Riseberga) as well Bunkeflostrand (to the southwest) and Södra Sallerup (to the far east). Eriksfält is an area that is characterized by this type as well.

This social type characterizes 6 subareas and the property area is approximately 10% of the total property area of Malmö. The population of these areas is approximately 12,500, which amounts to approximately 5% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Södra Sallerup	1,272	--	+	--	+	0	--	++	++	--	-
Bunkeflo-strand	5,120	-	++	--	0	-	+	+	++	--	0
Riseberga	2,966	+	++	-	0	0	0	+	++	-	-
Bulltofta	1,203	--	+	-	-	--	--	++	0	++	--
Johanneslust	969	-	+	-	++	--	--	+	+	0	-
Eriksfält	1,106	-	++	0	+	0	0	+	+	-	0
Social type K	12,636	<sup>-6</sup>	++	-	0	0	--	+	++	--	-

Table 4:11 Social type K (spatial values).

## Social type K ownership structure

The ownership structure is more than 85% owner-occupancy in Södra Sallerup, Bunkeflostrand, Riseberga and Eriksfält. Johanneslust has approximately 65% owner-occupancy and approximately 25% tenant-owned apartments (*bostadsrätt*) while Bulltofta has 75% tenant-owned apartments and 25% owner-occupancy. There is almost no rental accommodation.

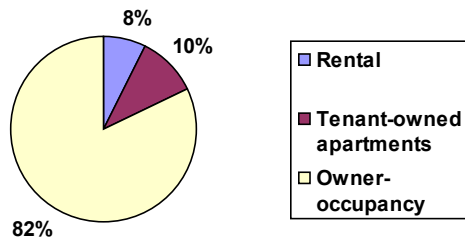


Figure 4:44 Ownership structure in social type K.

## Social type K building age

The buildings in this type are very heterogeneous in terms of age. Some were built pre-1940, after which they were neglected for 40 years and then razed and rebuilt/renovated post-1980, such as Sallerup and Johanneslust. Other areas have been in the process of construction continuously since the 1940s (Riseberga) or the 1960s (Bunkeflostrand), or built almost entirely after 1981 (Bulltofta), while still other areas have been built up since the pre-WWII era (Eriksfält), although this area was mainly built between 1941 and 1960.

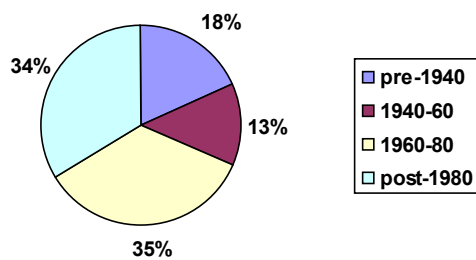


Figure 4:45 Distribution of building age in social type K.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have a medium degree of consistency. Social type K thus does not qualify as a segregated type with regard to the social and spatial variables.

## Social type L (Virentofta)

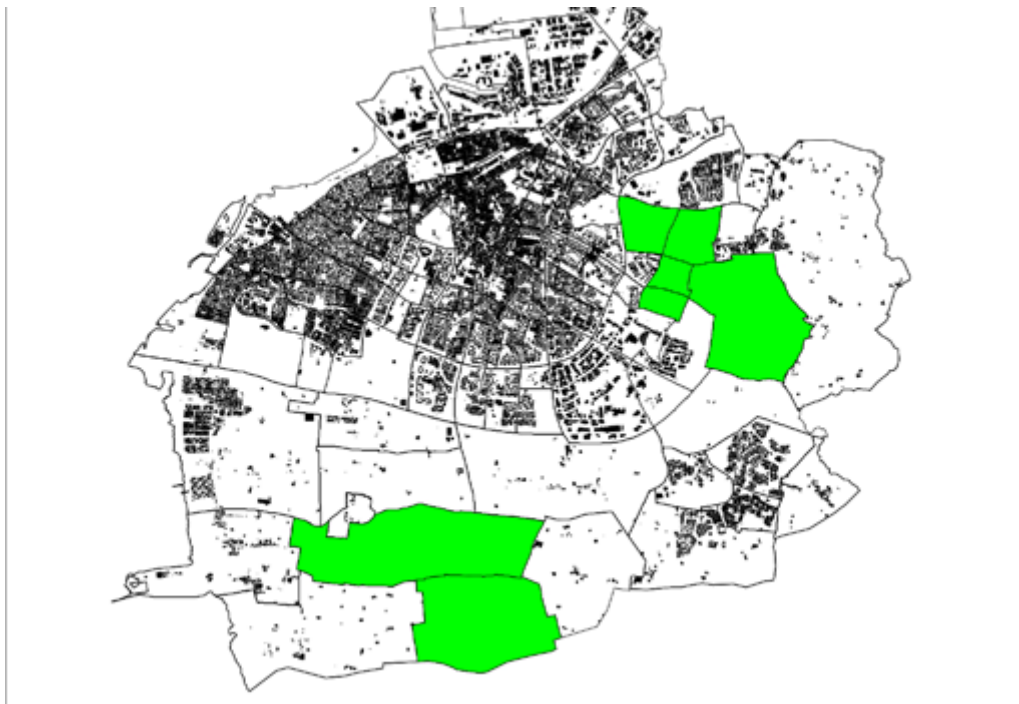


Figure 4:46 Social type L (geographical)

Geographical spread of subareas categorized as social type L: dominating areas to the east (From west to east, north to south: Videdal, Virentofta, Stenkällan, Kvarnby and to the south Tygelsjö by (north) and Västra Klagstorp (south) of the main city body (*stadskropp*)).

This social type characterizes 7 subareas and the property area is approximately 7% of the total property area of Malmö. The population of these areas is approximately 8,500, which amounts to approximately 3% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Tygelsjö by	1,894	0	+	--	0	--	+	0	+	-	-
Kvarnby	741	0	+	--	0	--	--	++	0	+	+
Stenkällan	1,607	+	+	0	-	-	+	--	0	++	-
Virentofta	2,938	+	++	0	0	-	+	-	+	0	--
Jägersro Villastad	851	++	++	-	--	--	++	--	++	--	--
Västra Klagstorp	297	0	++	--	++	0	--	0	++	--	+
Videdal	2,582	+	++	-	0	0	+	-	+	0	-
Social type L	10,910	0	++	--	0	--	+	-	+	0	-

Table 4:12 Social type L (spatial values).

## Social type L ownership structure

The ownership structure is between 68% and 100% owner-occupancy in all areas except Kvarnby which is 46% rental and 38% tenant-owned apartments (*bostadsrätt*).

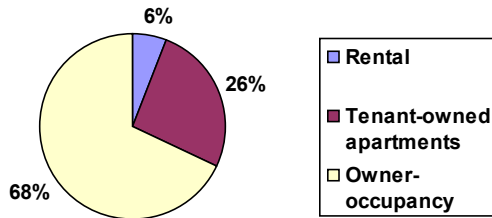


Figure 4:47 Ownership structure in social type L.

## Social type L building age

Building age is 1961-80 (67-99%) for all areas but Kvarnby, which is 89% post-1980 and Västra Klagstorp, which is 76% pre-1940.

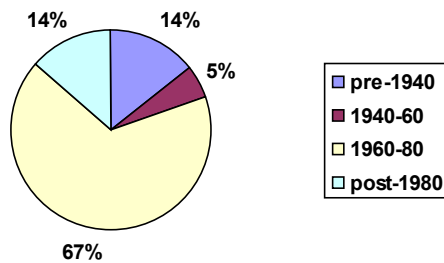


Figure 4:48 Distribution of building age in social type L.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have a medium degree of consistency. Social type L thus does not qualify as a segregated type with regard to the social and spatial values.

## Social type M (Kristineberg)



Figure 4:49 Social type M (geographical)

Geographical spread of subareas categorized as social type M: dominating areas from the southwest of the main city body (Tygelsjö vång) by areas peripheral or semi-central to the city body (*stadskropp*) (Kastanjegården and Västra Kattarp, respectively) to the southeastern Oxie area of Kristineberg.

This social type characterizes 4 subareas and the property area is approximately 3% of the total property area of Malmö. The population of these areas is approximately 3,500, which amounts to approximately 1% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Västra Kattarp,	1,536	-	+	+	+	+	--	--	+	0	--
Kastanjegården	595	+	++	--	--	--	++	--	++	--	--
Tygelsjö vång	158	-	++	--	++	-	-	0	++	--	-
Kristineberg	1,011	0	+	--	-	--	+	--	++	--	--
Social type M	3,300	-	+	--	+	--	--	--	++	--	--

Table 4:13 Social type M (spatial values).

## Social type M ownership structure

The ownership structure is 95-100% owner-occupancy except in Västra Kattarp, where it is 68%.

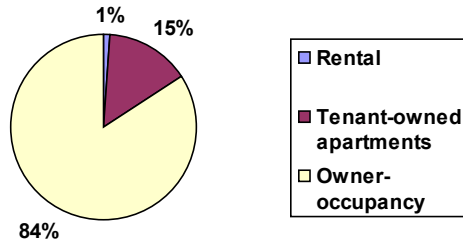


Figure 4:50 Ownership structure in social type M.

## Social type M building age

Building age is 1961-80 in Kristineberg and Kastanjegården (79% and 100%, respectively) while in Tygelsjö vång it is 68% pre-1940. Västra Kattarp is 51% 1941-60 and 42% pre-1940.

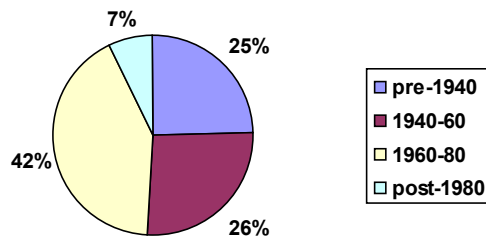


Figure 4:51 Distribution of building age in social type M.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have a high degree of consistency. Social type M thus qualifies as a segregated type with regard to the social and spatial variables.

## Social type N (Södra Sofielund)

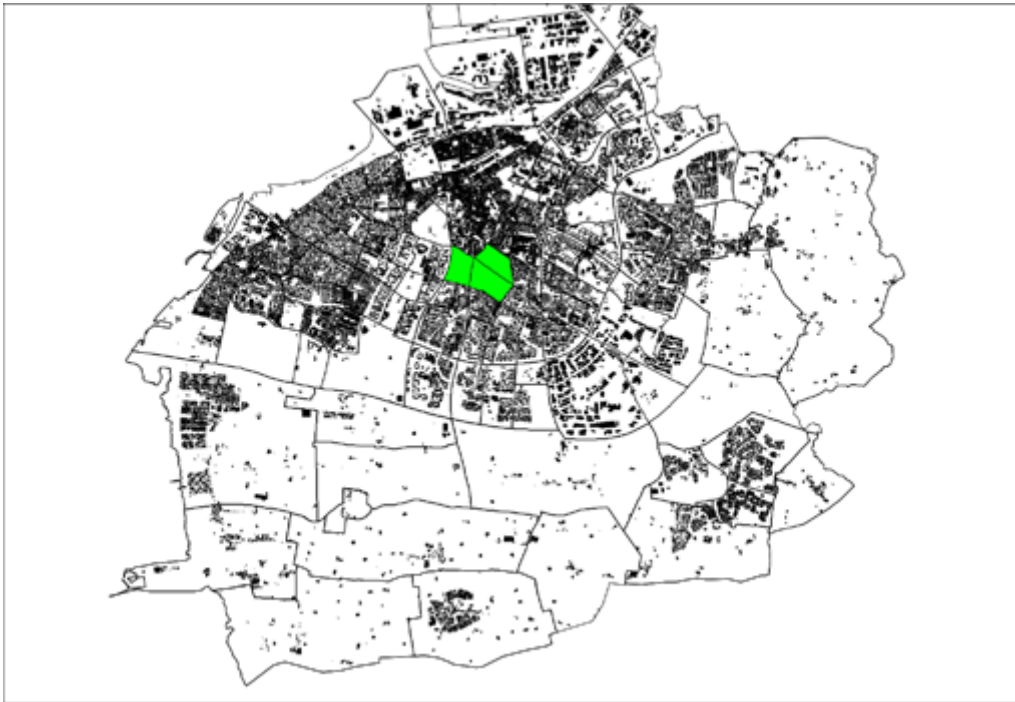


Figure 4:52 Social type N (geographical)

Geographical spread of subareas categorized as social type N: dominating three areas at the topological center of Malmö: Flensburg, Heleneholm, Södra Sofielund.

This social type characterizes 3 subareas and the property area is approximately 4% of the total property area of Malmö. The population of these areas is approximately 6,500, which amounts to approximately 2% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Södra Sofielund	4,398	--	-	++	+	+	-	-	-	0	+
Flensburg	437	-	-	+	+	--	+	--	--	+	+
Heleneholm	1,760	--	--	++	-	++	-	--	--	-	++
Social type N	6,595	--	-	++	+	+	-	--	--	0	+

Table 4:14 Social type N (spatial values).

## Social type N ownership structure

The ownership structure is rental ranging from 55% in Flensburg to 89% in Heleneholm. In Flensburg there are also 45% tenant-owned apartments (*bostadsrätt*).

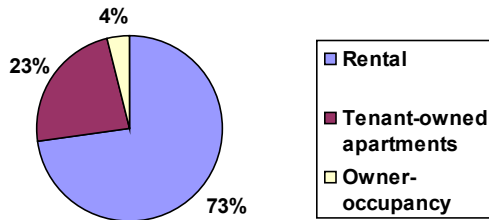


Figure 4:53 Ownership structure in social type N.

## Social type N building age

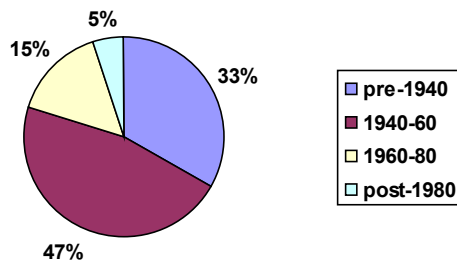


Figure 4:54 Distribution of building age in social type N.

Building age is pre-1940 (40%) and 1941-60 (38%) in Södra Sofielund and 1941-60 in Heleneholm (80%). In Flensburg roughly half the area (46%) is 1961-80, while the other half (45%) is pre-1940.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have a high degree of consistency. Social type N thus qualifies as a segregated type with regard to the social and spatial variables.



## Social type O (Almgården)



Figure 4:55 Social type O (geographical)

Geographical spread of subareas categorized as social type O: dominating four areas peripheral to the main city body (*stadskropp*). From north to south: Segevång, Apelgården, Almgården, Lindängen.

This social type characterizes 4 subareas and the property area is approximately 3% of the total property area of Malmö. The population of these areas is approximately 15,000, which amounts to approximately 5% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Apelgården	3,357	0	-	0	--	--	++	--	--	++	--
Almgården	1,638	+	-	0	--	--	++	--	--	--	++
Segevång	3,831	-	-	-	--	0	+	-	-	++	0
Lindängen	6,004	0	0	-	--	--	+	0	--	+	+
Social type O	14,830	0	-	-	--	--	+	--	--	++	+

Table 4:15 Social type O (spatial values).

## Social type O ownership structure

The ownership structure is completely rental in Almgården and completely tenant-owned apartments (*bostadsrätt*) in Apelgården. Segevång is mixed, 54% tenant-owned apartments and 41% rental apartments while Lindängen is 57% rental and 43% tenant-owned apartments.

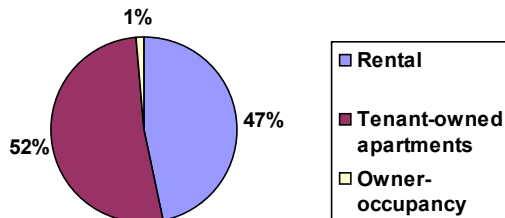


Figure 4:56 Ownership structure in social type O.

## Social type O building age

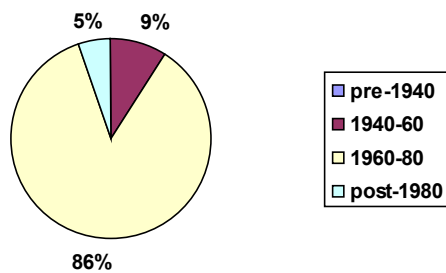


Figure 4:57 Distribution of building age in social type O.

Building age is largely 1961-80 in all areas except Segevång (levels above 90%). In Segevång 32% was built between 1940 and 1960 while 63% was built between 1960 and 1980.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have a high degree of consistency. Social type O thus qualifies as a segregated type with regard to the social and spatial variables.

## Social type P (Holma)



Figure 4:58 Social type P (geographical)

Geographical spread of subareas categorized as social type P: dominating a number of areas (From north to south: Persborg, Augustenborg, Almhög, Nydala, Gullviksborg, and Hermodsdal in the southern part of the city, as well as Holma to the west).

This social type characterizes 7 subareas and the property area is approximately 5% of the total property area of Malmö. The population of these areas is approximately 23,000, which amounts to approximately 9% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Nydala	5,337	-	-	0	-	--	++	--	-	+	+
Gullviksborg	3,182	--	0	-	-	--	+	0	0	0	+
Holma	3,645	--	-	-	--	--	++	--	--	+	+
Almhög	3,180	0	0	++	-	++	--	--	-	+	+
Augustenborg	3,176	-	-	++	-	++	--	--	--	-	++
Persborg	1,714	--	--	+	--	++	--	--	--	--	++
Hermodsdal	2,956	--	--	-	--	--	++	--	--	--	++
Social type P	23,190	--	-	-	-	--	++	--	--	+	+

Table 4:16 Social type P (spatial values).

## Social type P ownership structure

The ownership structure is largely rental. Gullviksborg has a more varied ownership structure, while Nydala, Holma and Almhög have areas with tenant-owned apartments.

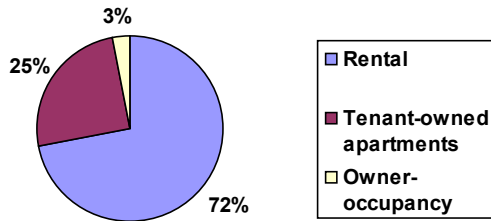


Figure 4:59 Ownership structure in social type P.

## Social type P building age

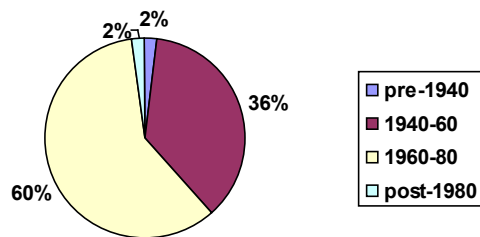


Figure 4:60 Distribution of building age in social type P.

Building age is largely 1961-80 (80-100%) in all areas except Augustenborg and Persborg which are neighborhood units from 1941-60 (95-100%).

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have a medium degree of consistency. Social type P thus does not qualify as a segregated type with regard to the social and spatial variables.

## Social type Q (Örtagården)



Figure 4:61 Social type Q (geographical)

Geographical spread of subareas categorized as social type Q: dominating a number of areas east of and peripheral to the main city body (*stadskropp*). From west to east: Törnrosen, Örtagården, Herrgården, Kryddgården.

This social type characterizes 4 subareas and the property area is approximately 3% of the total property area of Malmö. The population of these areas is approximately 23,000, which amounts to approximately 6% of the total population of Malmö.

Subareas	POP	IND	OUT	LOC	-1940	1940-1960	1960-1980	1980+	OWN	CO-OP	RENTAL
Kryddgården	2,129	--	0	0	--	--	++	--	--	0	+
Törnrosen	3,042	--	-	0	--	--	++	--	--	--	++
Örtagården	4,848	--	--	+	--	--	++	--	--	--	++
Herrgården	4,898	--	--	++	--	--	++	--	--	--	++
Social type Q	14,917	--	--	0	--	--	++	--	--	--	++

Table 4:17 Social type Q (Spatial values).

## Social type Q ownership structure

The ownership structure is 100% rental except in Kryddgården where it is 70%.

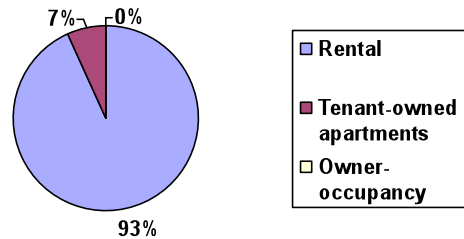


Figure 4:62 Ownership structure in social type Q.

## Social type Q building age

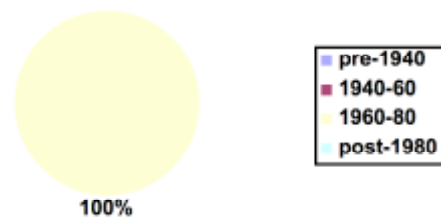


Figure 4:63 Distribution of building age in social type Q.

One hundred percent of the buildings were built between 1960 and 1980.

The statistics in relation to this social type happen to demonstrate unusual extremes making the type perfect illustration of the connection between different individual variables. The absence of disturbing factors, such as an area of owner-occupancy anywhere among these areas is also noteworthy.

The basic spatial characteristics (indoor and outdoor space, centrality, ownership structure, and building age) have the highest degree of consistency. Social type Q thus qualifies as a segregated type with regard to the social and spatial variables.

## Conclusions to chapter four - correlation analysis

I performed correlation analyses on all of the variables given above, not for the purpose of finding the most important variables, but for the purpose of indicating the inter-relationships between various variables. The procedure is outlined in chapter three. For the full table, see appendix (ii).

Table 4:18 Table of significant regression r-square values for spatial values, relating to social values (larger than 0.3).

Social variable	Spatial variable	Dir	Value
Mean Income	Outdoor space	+	0.81
Mean Income	Post-1980	+	0.722
Mean Income	Rental	-	0.705
Reactionary	Pre-1940	-	0.676
“Swedishness”	Outdoor space	+	0.675
Employment	Outdoor space	+	0.659
Mean Income	Owner-occupancy	+	0.656
Mean Income	Centrality	-	0.626
Employment	Post-1980	+	0.625
Reactionary	Centrality	-	0.615
“Swedishness”	Post-1980	+	0.559
University education	Pre-1940	+	0.556
Income per capita	Post-1980	+	0.538
Older age	Tenant-owned apartments	+	0.523
Political Blueness	Post-1980	+	0.52
Mobility	Outdoor space	-	0.508
Reactionary	Between 1960 and 1980	+	0.495
Political Blueness	Outdoor space	+	0.477
Compulsory school only	Between 1960 and 1980	+	0.475
University education	Between 1960 and 1980	-	0.474
Employment	Rental	-	0.459
Mobility	Centrality	+	0.457
Income per capita	Outdoor space	+	0.445
Compulsory school only	Pre-1940	-	0.423
Employment	Centrality	-	0.413
Employment	Owner-occupancy	+	0.412
“Swedishness”	Owner-occupancy	+	0.411
“Swedishness”	Centrality	-	0.394
Mobility	Rental	+	0.384
Mobility	Owner-occupancy	-	0.384
“Swedishness”	Rental	-	0.373
Low Education	Post-1980	-	0.359
Upper secondary school only	Centrality	-	0.354
Reactionary	Rental	-	0.335
Upper secondary school only	Pre-1940	-	0.327
Income per capita	Indoor space	+	0.316
Income per capita	Rental	-	0.295

## Conclusions from the tables

The strongest social predictor of spatial values is mean income. The second to fourth strongest predictors are reactionariness, "Swedishness" and employment. The fifth to ninth predictors are university education, income per capita, political blueness, compulsory school only and mobility. Age only seems to predict one spatial factor (tenant-owned apartments), and medium education only two (not central and not before 1940).

A high mean income indicates high levels of outdoor space, building built post-1980, owner-occupancy and not rental, not central.

High levels of reactionariness indicate building built between 1960 and 1980 and not building built pre-1940, not central, not rental.

High levels of "Swedishness" indicate outdoor space, building built post-1980, owner-occupancy and not central, not rental.

High levels of employment indicate outdoor space, building built post-1980, owner-occupancy, not rental, not central.

University education indicates building built pre-1940 and building not built between 1960 and 1980.

High income per capita indicates building built post-1980, outdoor space, indoor space and not rental.

Political blueness indicates building built post-1980, outdoor space.

Compulsory school only indicates building built between 1960 and 1980 and building not pre-1940 and not post-1980.

Mobility indicates centrality, rental and not outdoor space, not owner-occupancy

Older age indicates tenant-owned apartments

Upper secondary school only indicates not central and not pre-1940.

Of the spatial indicators, outdoor space seems to be the most powerful indicator of social variables. Second most important seem to be building built post-1980. Third to fifth seem to be rental, building built pre-1940 and owner-occupancy. Sixth to seventh are centrality and building built between 1960 and 1980. tenant-owned apartments and high levels of indoor space indicate one social variable each.

Outdoor space indicates high mean income, "Swedishness", employment, political blueness, high income per capita and not mobility.

Building built post-1980 indicates high mean income, employment, "Swedishness", high income per capita, political blueness and not low education.

Rental indicates mobility and not high mean income, not employment, not "Swedishness", not reactionary, not high income per capita.



Building built pre-1940 indicates university education, and not reactionary, not upper secondary school only and not compulsory school only.

Owner-occupancy indicates high mean income, employment, “Swedishness”, and not mobility.

Centrality indicates mobility and not high mean income, not reactionary, not employment, not “Swedishness”, not upper secondary school only.

Building built between 1960 and 1980 indicates reactionary, compulsory school only, and not university education.

Tenant-owned apartments indicate older age.

Indoor space indicates high income per capita.

Most types were segregated, meaning that spatial values were consistent enough for the social type selection to have been successful, at least with regard to the basic spatial characteristics. In the next chapter, I reexamine this statement in relation to block morphology; i. e. building types.

- 
1. Andersson, Bråmås and Hogdal (2007:18) mentions two spatial variables in relation to the heterogeneity of the housing market segments which in their case is different from the subareas: ownership and building type. In my opinion the heterogeneity could be explored more and aside from the variables used in this chapter, the next chapter deals more extensively with building block morphology (building type).
  2. People have high levels of space access indoor with the exception of Lönngården.
  3. People have either the highest levels of indoor space (in the apartment dominated areas) or low levels in housing with children.
  4. People in social type G generally enjoy the highest levels of indoor space – the most prominent exception is Gröndal.
  5. Outdoor space accessibility is at medium levels except for Kronprinsen.
  6. Indoor space is low to the lowest except in Riseberga where it is high.

# Residential block morphology and social types

## CHAPTER FIVE

### Introduction

In chapter three the social types were defined and explained. In chapter four, spatial variables were discussed. In this chapter, another approach to the problem of associating social types with spatial data is used. The problem itself is a traditional one in architectural research and urban planning theory. In the U.K., the work of Patrick Geddes stands out as an attempt to associate social types with spatial data (e.g. Geddes 1915, Andersson 1989). In Sweden, there is the work of Gregor Paulsson and his team (see Paulsson 1950:X-XI for the members of the team), and the monumental *Svensk Stad* from 1950 stands out as the single most influential socio-morphological work of the 20<sup>th</sup> century. Paulsson could link social environments and events to building types by means of a class society mechanism, giving his typology a nearly 1:1 relationship between social types and building block morphology. In the societies described by Paulsson and his team, urban societies from the days of trade capitalism and early industrialism, ca 1840-1930, the merchants lived in merchants' houses, the workers in workers' housing and the bourgeoisie lived in bourgeoisie environments. Certainly, when merchant houses were transformed to rental apartments (in late 19<sup>th</sup> century), class distinctions meant much more than they do today, and the living quarters of the bourgeoisie remained identifiable. Why isn't this the case today? The answer to that question splits into two analytical trajectories.

First, class society is not the same today. As I have called on the work of Pierre Bourdieu to show, education constitutes a major class divider today while in the past it was a unifier of class. Class society, whether or not one agrees with my interpretation of Pierre Bourdieus work, is certainly not based on the opposition between middle class and working class. Interpreting Gregor Paulssons work, one might find that that opposition is more relevant to Swedish society around 1950 than the time Paulsson describes. Thus a different interpretation of class society is needed to take the social variable into account. As I have shown in chapter three, that interpretation may be based on the opposition between people from the middle class with university educations and the economically strong middle class. In this chapter, however, the historical distinction between the working class and the middle class is still relevant, as I go through the historical genesis of building morphology and its social relevance.

Second, the more or less strict association of a social type with building morphology is broken. This survey shows that for every residential morph, the social types that inhabit it can vary, giving a division along two axes. How can we take this into account when trying to associate building block morphology with social types? As elsewhere, I propose to deal with it from both directions. The construction of the social types has been dealt with in the previous chapters. In this chapter, the main question is how to relate block morphology to those types.

The questions a residential block morphology survey could possibly answer are:

- 1) What, or which combinations of, block morphology (-ies) exist to a significant extent in Malmö?
- 2) How are such morphologies constituted?
- 3) What are the parts of the block morphs that are relevant to a block morphology?
- 4) How do such block morphologies relate to the division of Malmö into social types, as previously defined?

The social types were defined and explained in chapter three. In this chapter, they are seen as givens and represented in tables. The decision to go into block morphology at all, rather than to stay at the level of spatial variables as defined in chapter four, also has to do with the perceived inadequacy of the spatial variables to say anything relevant on the block level of space. It is my opinion, that the social variables that define the social types are more developed than the spatial variables. Spatial research has not come as far as social research in terms of defining relevant variables. Hopefully this will change.<sup>1</sup>

This chapter consists of three parts, and is also related to appendix (i). The first part describes the morphological definitions used in the survey, along with the characteristics and constitution thereof, together with a few examples. The second, gives the morphs, seen through the 17 social types previously defined. These 17 social types can be seen as the perspective of the other eye; i.e. the social eye, wherein spatial characteristics such as building age, ownership structure, historical background and the distribution of block morphologies are seen through the social type definition. The third part is a conclusion, bringing together the perspectives of the two eyes and resulting in a three-dimensional view of the relation between spatial morphs and social types. There is also the area survey itself in appendix (i) covering every subarea in Malmö in 2004 with a housed population over 100.

In part one 18 morphs are defined. A morph, i.e. a form or pattern, is taken as the basic unit of the block morphology, and is defined in the table below.

The study of urban morphology is a distinct genre in architectural research. The scope of this dissertation does not allow for a comprehensive account of the subject. Suffice to say that I have borrowed inspiration from three of the subject's grandfathers, M. R. G. Conzen, Gianfranco Caniggia, Gian Luigi Maffei, while focusing on relating my work to that of the Swedish contemporary researcher, Johan Rådberg and his associate Anders Friberg. From Conzen I have specifically borrowed the idea of the axiom of the period specificity of forms as I have sought a morphogenesis of morphs (cf. Conzen 2004:60-61). The intended invention, whether this invention can be traced to the architect's mind or to social and economic circumstances triggering the spatial invention, is another concept that played a major role when I was formulating the morphs below. This branch of thinking is borrowed from Finn Werne (cf. 1997a:21-45). I wrote about the idea of routes as morphological meaning-carriers in an article published in 2004 (Persson 2004), and the concept has also been investigated by Caniggia & Maffei (2001:194-233). My 18 morphs can be seen as the one-eyed vision of a spatial-social viewer; i.e. as the spatial eye. The vision of the spatial eye should be supplemented by that of the social eye, which is the content of the second part of this chapter, before the reader moves on to the conclusions, putting the perspectives together.

The appendix is based partly on existing surveys and partly on studies of GIS maps, thus being a hybrid between a compilation of surveys and a fully independent survey. The survey I used most was Anders Rejnert's and second was Tyke Tykesson's. They were project directors for *Malmö Stadsbebyggelse En översiktlig inventering* (1989) and *Bostadsmiljöer i Malmö* (2001-2002), respectively. The decision was mine to make the most of existing surveys, as I considered them highly professional and adequate although I adjusted them for the purpose at hand and related them to the GIS studies I executed myself. If the resulting area survey describes an area differently than the original surveyor intended, the change in intention is attributable to me. The existing surveys were also important to me in defining morphologies and morphs, and in outlining the properties of such morphs; I am thus doubly indebted to the original surveyors.

## Part One: Definitions and descriptions of residential block morphologies

### Defining morphs

I have used 6 morphological super-categories: *supermorphs*, to serve as a conceptual framework for the morphs that define blocks. A supermorph relates to a spatial idea or intention, or a concept which I claim originated in a certain time period. Even if the idea or intention is transformed or changed over time, the basic conceptual idea remains identifiable.

Every supermorph contains two to four morphs. The area survey was executed on the morph level. Each morph also has the potential to be further divided into submorphs, and such a division has been sketched in the morph description. The submorph division however, was not in focus for the area survey and should not be considered exhaustive but rather indicative of potential further development.<sup>2</sup>

I have surveyed 18 morphs. These morphs are specific to the city of Malmö, but are defined in relation to architectural research, and as such I hope they have relevance beyond the city of Malmö. In addition to architectural research, I have used a few older geographical and sociological sources I have benefited from reading, and which were relevant to the task at hand (see below).

<b>Morph ID</b>	<b>Morph name</b>	<b>Spatial organization, supermorph level</b>	<b>Spatial organization, morph level</b>	<b>Spatial organization, submorph level</b>	<b>Historical genesis</b>	<b>Stylistic markings</b>	<b>Historical function</b>
I:1	Pre-industrial village street	Routescape	Pre-industrial village street	Round village street, row house village street	Pre-1800; pre-land reforms	Vernacular architecture	Animal herding, agricultural logistics
I:2	Liberal routescape	Routescape	Buildings adjacent to access route	Pre-industrial town street, highway related buildings, railroad re-loading center, town access route related buildings (småfolksstråk)	1850-1890; industrialism, liberalism	Facade architecture	Industrial logistics, population mobility
I:3	Largely industrialized or commercialized ground floor plot	Routescape	Large singular plot with regional route access	Residential highrise with ground floor public use, petty industrial residential grid block	1900-1960	Landmark architecture, crossroads architecture	Small industry, shopping mall, department store
II:1	Closed grid block with yard buildings	Orthogonal street grid	Aggregated buildings on rectangular plot	With or without large gate, with or without several gates, internal or external stairwells, converted town-houses or merchant yard	1880-1920	Classical, new Renaissance, Jugend, national romanticism, neo-Gothic	Rental apartments
II:2	Closed grid block with open yard	Deformed orthogonal street grid	Simultaneous built rectangular plot, or transformed closed grid block with yard buildings		1920-1930	Sitteen motifs, Neoclassical, influence of scale	Rental apartments with common areas
II:3	Slum clearance block	Orthogonal street grid or older town street grid	Postwar regulated building in older block structure		1960	Technological architecture	Highly regulated rental apartments and common areas
III:1	Converted summer cottage	Single, repeatable street, enclave area street network	Single plot house, multiple plot house	Street plot house, partitioned plot house with easement, co-op cottage area, converted allotment cabins	1900s	Romantic architecture	Part year residence, secondary house
III:2	Bourgeois large one-family house (villa)	Small unique street network	Single plot house, unique	Patrician house, consul house, public official house	Late 1800s; industrialism	Baroque architecture, mansard roofs	Replacement of town house (merchant house) as main residence
III:3	Less regulated "own your own home" (egnahm)	Agricultural land, outside city borders, re-development	Single plot house, repeatable		1904-1938	Type drawings, vernacular architecture, free variation	Working class housing

IV:1	More regulated "own your own home" (egnahm)	Agricultural land, inside city border, re-development	Multiple plot house; single plot house repeated		1904-1938	Type drawings, vernacular architecture, low degree of initial variation	Working class housing
IV:2	Massproduced industrial suburban one-family housing	Agricultural land re-development	Multiple plot house	Catalogue home	1950s	Industrial building, production lines	Housing for the well-to-do middle class
IV:3	Row house blocks	Agricultural land redevelopment	Multiple plot house, communal area development	Terraced housing, house linked by a garage to adjacent house, multiple residence house	1930-1970	Area plan uniqueness, industrial repeatable building,	Housing for people from the middle class with university education
IV:4	Post-modern row house	Agricultural land redevelopment	Multiple plot house, communal area development	Terraced housing, house linked by a garage to adjacent house, kitsch cities	1980s	Architectural style renaissance	Housing for people from the middle class with university education
V:1	Free-standing lamellar	Orthogonal grid	Open blocks, often no difference between front and back, building in park	Lamellar loaf, tower block, street-oriented lamellar, transversal lamellar, parallel lamellar	1930s-1950s	Large scale craftsmanship	Urban worker's housing
V:2	Lamellar yard shape	Orthogonal grid	Semi-open blocks, clearer division between front and back	L-shape block, U-shape block, O-shape block	1930s-1950s	Large scale craftsmanship	Urban worker's housing
VI:1	Early modern megablock	Traffic separated large enclave	Arrangement in smaller units that include green-space		Late 1950s-1960	Industrial building, production lines, logistic production, decorative ambitions	Redeployment of the working class
VI:2	Late modern megablock	Traffic separated large enclave	Arrangement in repeated building, the area as a whole adjacent to a larger green area		1960-1970	Industrial building, production lines, logistical production, technological aesthetics	Redeployment of the working class
VI:3	Post-modern reform block	Redevelopment of industrial or agricultural land or plot	High density non-grid block		1980s	Trademark architecture	Housing for people from the middle class with university education

Table 5:1 Defining the morph.

The architectural research I refer to is primarily the work of Johan Rådberg: *Doktrin och täthet i svenskt stadsbyggande 1875-1975* (1988), *Svenska Stadstyper* (with Anders Friberg 1996), *Stadstyp och kvalitet* (with Rolf Johansson 1997) and *Attraktiva kvarterstyper* (2000). A work which has had a great impact on mine, as mentioned before, is Gregor Paulsson's *Svensk Stad* from 1950. I have also used, although they have been less central to my work, the works of Björn Linn: *Storgårdskvarteret* (1974), Sonja Vidén, Klas Schönning &

Kerstin Nöre: *Flerbostadshusen i Sverige* (1985), Hans Arén: *Radhuset som folkbostad* (1980) and Leif Jonsson: *Från egnahem till villa* (1985).

The geographical research I refer to is primarily the work of Lennart Améen: *Stadsbebyggelse och domänstruktur* (1964) and *Stadens gator och kvarter* (1973).

From the field of sociology I have used the work of Mats Franzén & Eva Sandstedt: *Grannskap och stadsplanering* (1981)

For each morph calculations were made as to the proper percentage of the area of Malmö occupied by the morph in question and of the population of the morph. The area calculation was based on the property area occupied by the morph at the ground level. The population estimation was based on the percentage of households in the morph. In some instances it was convenient to abbreviate these measurements as MCA (part of Malmö's city area) and EPOP (estimated part of Malmö's population). Both of these calculations can be questioned on different levels, but in the end I deemed them adequate for the purpose at hand, giving fair estimates of the social and spatial quantities relating to each morph. Social, in this context, meaning, variables relating to individuals and spatial meaning variables relating to ground level area coverage.

<b>Morphological classification</b>					
<b>I. Routescape</b>	<b>II. Closed grid block</b>	<b>III. Single plot one-family house</b>	<b>IV. Multiple plot one-family house</b>	<b>V. Lamellar building in the grid</b>	<b>VI. Megablock</b>
I:1 Pre-industrial village street	II:1 Closed grid block with yard buildings	III:1 Converted summer cottage	IV:1 More regulated "own your own home" ( <i>egnahem</i> )	V:1 Free-standing lamellar building	VI:1 Early modern megablock
I:2 Liberal routescape	II:2 Closed grid block with open yard	III:2 Bourgeois large one-family house ( <i>villa</i> )	IV:2 Massproduced industrial suburban one-family housing	V:2 Lamellar yard shape	VI:2 Late modern megablock
I:3 Largely industrialized or commercialized ground floor plot	II:3 Slum clearance block	III:3 Less regulated "own your own home" ( <i>egnahem</i> )	IV:3 Row house block		VI:3 Post-modern reform block
			IV:4 Post-modern row house block		

Table 5:2 Morphological classifications.

## SUPERMORPH I: Routescape (*stråkbebyggelse*)<sup>3</sup> (mainly pre-industrial to ca. 1960)

(Surveyed as 8.5 % of the Malmö area and 4.6 % of the estimated population of Malmö in this study)

This supermorph contains three morphs:

1. the *pre-industrial village street*
2. the late 19th century *liberal routescapes* based on the liberal reforms in Sweden legislated between 1846 and 1870.
3. the 20<sup>th</sup> century *largely industrialized or commercialized ground floor plot*

One explanation of the intentional connection (the connection between the intentions behind these morphs) that constitutes this supermorph is the building blocks' relation to a street network, either as landmark buildings or as buildings relating to routes (*stråk*). This connection can have agricultural, industrial or commercial roots, as I wrote in a previous article, the concept of route has other roots as well (Persson, R. 2004)<sup>4</sup>. The historical concept of routes and the connections between routes and productive settlements have also been studied by Caniggia & Maffei (2001:194-233). However, the routescape classification I've used here is limited to particular eras and the derivation of these particular spatial patterns over time.

For example, a 19th century block relates to the 19th century orthogonal grid, a mid-20th century block of relates to the freeway network and a pre-industrial building relates to the country road network. The reinvention of the morph after 1960 distinguishes between mixed use (housing mixed with either commercial or industrial uses) giving commercial or industrial complexes on the one hand and housing areas on the other. I have therefore limited the supermorph timespan to ca. 1960.<sup>5</sup>

One possible submorph division would be into mixed-use housing blocks where the ground floor has largely been appropriated for other uses than housing, but where the building has not yet developed into an entity where traffic is separated for pedestrians and cars like the commercial landmark building submorph. All submorphs, mixed use buildings and commercial landmark buildings should be able to be classified as buildings relating to routes. Reinsert calls for a survey of the submorph access route buildings (*tillfartsbebyggelse*) (Reinsert et al. 1989:13-14).<sup>6</sup>

## Spatial morph I:1: Pre-industrial village street

This morph is rooted in the time before the conversion of Swedish rural villages through the land reforms (*skiftet*) during the period 1800 to 1850 (Werne 1993:244-279). Basically, this morph was originally constituted by a road through the centre of the village where farm animals were herded towards their grazing grounds. It existed in towns and villages alike, since Swedish towns were largely agricultural until the 20<sup>th</sup> century. One important landmark relating to the village street is the village church, often situated on the main village street. The village street was originally populated by people who did not own property; i.e. craftsmen who set up shop along the herding route. After the land reforms the outskirts of the cities were also populated by the mobile working class (*arbetsfolk utan burskap*), who developed routes into a form of working class routescape (*småfolksstråk*) (Paulsson 1950:104-107; Améen 1964:48-50).

In the typology of Johan Rådberg, this morph is represented either as tradesmen's and craftsmen's blocks (*handels- och hantverkarkvarter*) and is limited to the time period before 1875 (Rådberg 1988:435) or as pre-industrial towns, irregular or grid plans (*förindustriell stad, oregelbunden plan eller förindustriell stad, rutnätsplan*) (Rådberg & Friberg 1996:47-53, cf. Paulsson 1950:101-104; 109-114). Rådberg's typology focuses on the fact that the blocks were based on an agricultural economy with combined housing and workplace. Rådberg's later typology also identifies a number of possible submorphs, such as the medieval block signified by the polar placement of work and housing buildings, and it considers the more regulated grid plan, which in Sweden mainly stems from the 17<sup>th</sup> century, separately from other pre-industrial morphs. It is also the type that Rådberg considers the most attractive of all block types (Rådberg 1997:82). In my morphology the *pre-industrial village street* is limited to such instances where I can identify the street pattern of a main village street, preferably including a church, and such a village street has not been superseded by younger structures in so that the village street pattern has become unrecognizable. The buildings themselves, however, can be from various time periods.

The analogous pre-industrial town street that leads to the pre-industrial town square (cf. Paulsson 1950:97-100, Thomasson 2004:198-203) is not considered a separate morph in my survey, although its historical importance certainly warrants it. It is part of the liberal routescape morph. I made this decision based on the small number of empirical patterns that could be recognized since only Gamla Staden in Malmö proper was a town during the pre-industrial era.

The blocks Rådberg labels either as tradesmen's and craftsmen's blocks or as pre-industrial towns I have often referred to other groups such as the *less regulated "own your own home" blocks* or the *liberal routescapes*, depending on whether I have deemed the building blocks to refer more directly to a route or not. It is thus a more narrow definition than the ones Rådberg use.<sup>7</sup>



## Spatial morph I:2: *Liberal routescape*

With the advent of liberalism in 1846, craftsmen could set up shop along the routes as well. A common practice was that landowners sold plots along the main roads to and from the towns, thus creating routes for the commoners, working class routescapes (*småfolksstråk*), which have played a large role in 20th century planning, especially in Malmö, where several such routes are main commercial streets today. This morph includes the submorphs street houses (*gatehus*). A street house was built by the craftsman who was going to live in it. A mason built a brick house, a carpenter a wooden one, later combining home and workplace (Paulsson 1950:494; Werne 1997b:85-91). Long, low working class buildings (*arbetarlängor*) are included in this group as well (Paulsson 1950:121 – The Scanian (southern Swedish) working-class building was a brick building) although they evolved morphogenetically into row house blocks. Yet another possible submorph is the railroad based town center. The station building was associated with the central parts of a village or town by architectonic means: broad streets, open squares, parks, exclusive housing, hotels and office buildings. Blocks that were converted during the conversion of merchant houses in the central parts of the city during the late 19<sup>th</sup> century could sometimes have significant office or shopping uses warranting submorph classification of a city block (Paulsson 1950:416-429). I classified these blocks under the morph “largely industrialized or commercialized ground floor plot”.

In Johan Rådberg’s typology this morph is represented either as tradesmen’s and craftsmen’s blocks (*handels- och hantverkarkvarter*) and is limited to the time period before 1875 (Rådberg 1988:435, cf. Paulsson 1950:101-104) or as pre-industrial town, irregular or grid plan (*förindustriell stad, oregelbunden plan eller förindustriell stad, rutnätsplan*) or even as Closed grid block with yard buildings (*stenstadskvarter med gårdshus*). The typology Rådberg uses for small town blocks with yard buildings (*småstadskvarter med gårdshus*) is also referred to this morph in my classification. Another type that Rådberg classifies is the shantytown (*kåkstad*), where he points out that these were built on areas outside the borders of the city proper (cf. Améen’s analysis of Malmö’s “outside the border building” (*utomgränsbebyggelse*) municipality Sofielund (Améen 1964:124-129) (Rådberg & Friberg 1996:47-57; 75-78; 133-134).

Thus Rådberg does not recognize the need to classify buildings erected as a result of the liberal reform in 1846. I have felt the need to do this because of the characteristics of spatial invention the buildings and patterns resulting from the liberal reform represent in Malmö.<sup>8</sup>

I also classified some of the closed grid block with yard buildings as liberal routescapes, namely the mixed use buildings that line the historical highway routes that run through Malmö. There is thus an empirical overlap in my classification between the historical function and Rådberg’s building type classification. This overlap follows from my use of *routescape* as a conceptual tool since the concept in itself is not limited to building types (Persson 2004; cf. also what Caniggia and Maffei would call a higher hierarchy, that of the production landscape (Caniggia & Maffei 2001:194)).

### Spatial morph I:3: Largely industrialized or commercialized ground floor plot.

The landmark building and its commercial use on the ground floor, where access to a route has two distinct meanings: both the route as a logistical asset and the route for consumer access are critical and typical for this morph. I have limited the morph to building blocks that are both residential and commercial excluding monofunctional industrial and commercial building blocks. It is a matter of scale to determine where a single building or building block is considered part of a liberal routescape and where it warrants classification as a largely commercialized or industrialized ground floor plot, and the classification is not always easy to make. Shop windows on the ground floor or commercial signs in abundance are telltale signs of a commercial block on a trivial level. The intentional spatial process where merchant houses (*handelsgårdar*) were converted into shopping streets (*butiksgator*) during the 1870s as described by Bosse Bergman (2003:23-25) would be associated with the development of shopping centers, two morphs with the same supermorphic intention. For my purposes, I deemed that there is a plausible link between these morphs. Rådberg does not identify this morph, largely industrialized or commercialized ground floor plot, as a consistent type.

### SUPERMORPH II: The closed grid block (ca.1880-1930)

(Surveyed as 5.7 % of the Malmö area and 15.8 % of the estimated population of Malmö in this study)

Merchant houses which (together with craftsmen's blocks) were the dominant block type in the towns for the first two thirds of the 19<sup>th</sup> century, were converted to rental apartment housing during the late 19<sup>th</sup> century. This process was attributable to urbanization and de-agriculturalization, as the mixed use that was integral to the merchant houses became exclusive use as housing. As the buildings along the street were converted into shops on the ground floor and expensive housing on the upper ones, the craftsmen's and work buildings in the courtyard were converted into rental housing for rural farmworkers who were becoming working class city dwellers. General densification of the numbers of people living in both merchant houses and traders' quarters resulted in much higher exploitation of the city grid. This process began as early as the 1850s and 1860s (Paulsson 1950:323-330; 405-410). The explosive and unregulated growth of the city of Malmö, like that of other cities led to government regulation in 1874 (Rådberg 1988:152-155, 159). One of the most important planning instruments for regulation was the orthogonal grid, which took no account of terrain or previous property relations. Georg Gustafsson's plan of Rörståden in 1872 is the main example in Malmö. Government regulation, however, was largely ineffective as the regulations were side-stepped or circumvented as the exploitation of the grid block for rental apartments continued to increase during the late 19<sup>th</sup> century. The rise of building entrepreneurs, less educated craftsmen or trade dabblers able to establish prosperous businesses thanks to the increase in demand on the building market resulted in a general decline in housing quality. Another significant urban morphological change was when narrow, dark streets and light, open yards became broad city streets and yards with narrow light-wells (see Paulsson 1950:489-494; cf. Améen 1964:120-121 for a discussion of the impact of donational land on the process). I call the morph from this time period *closed grid block with yard buildings*.

A planning law in 1907 and another in 1921 outlawed buildings in yards, in 1923 HSB (a tenant owner association) was founded. During the 1920s and 30s HSB building production in Malmö was based on the post-WWI humanist ideals of architects and planners, although the buildings were wide and apartments still small. The proposal for building regulations in 1919 supported zoning and specific building morphs in different zones (Rådberg 1988:200; Linn 1974:196-199). *Closed grid block with open yard* is the morph for the city core.

The third morph in this supermorph is the slum clearance block. Slum clearance as a concept had followed the legislative discussion regarding the closed grid blocks, and came into the foreground after 1954 when the Government Commission Report on Slum Clearance (*saneringsutredning*) focused on the absence of sun and daylight in many closed grid blocks. Perhaps the intentions of the hygienist city planning movement of the 1850s and 1860s (Paulsson 1950:220-232) was transformed by later generations into 1930s functionalism

and later into post-WWII building. When older, unhygienic areas were torn down and replaced by new “healthy” buildings must also be seen in conjunction with the development of the 12-meter thick building in contrast with the more narrow lamellar buildings during the 1930s to 1950s. This mainly happened for reasons of maximizing building efficiency in relation to the number of households needed to bring in the rent for a property. During this period older housing was in principle regarded as subject to the same normative rules as new housing, which meant that many old buildings had to be drastically renovated (cf. Rådberg 1988:345-348; cf. Lindman 1967, Holm 1967). This morph shares more stylistic elements with 1960s megablocks than with grid blocks but, in contrast to the megablock, tends to respect the street grid. Therefore it has been included in this supermorph.<sup>9</sup>

## Spatial Morph II:1: Closed grid block with yard buildings (ca. 1880-1914).

‘*Sammanträngt byggnadsätt*’ - ‘compressed blocks’ (Rådberg 1988:201) is a Swedish term from 1919. As follows from the description above, this morph was a morphological cornerstone during the pre-WWI years of urban transformation. It features a clear division between the front and the back of a building, i.e. the streetside and the courtyard side of the block are clearly separated. The morph also often has commercial or industrial ground floors. I found it difficult to separate this morph from *the largely industrialized or commercialized ground floor plot* above, and the distinction is not always clear. Generally, adjacency to an important route warrants classification to the supermorph routescape, while blocks at least one block away from such routes are classified as closed grid blocks. However, the absence of any significant commercial activity was also an important criterion for classification as a closed grid block.

Some examples of stylistic identification can be mentioned as well. In the 1880s the closed grid block was characterized by smaller scale, classical facades, the use of light colors or a neo-Renaissance style based on French or Italian models, with narrower buildings. In the 1890s the closed grid block was characterized by larger scale. It was richly decorated and the facade was often natural stone or red machine-made bricks. The 1890s favored massive architecture. The 14 m wide buildings originate from this period, while housing from the previous two decades was often 12-13 m wide (Vidén, Schönning & Nöre 1985:64-67). In the early 1900s the fashion was Jugend, using light plaster and unified facades, or a version of national romanticism or even neo-Gothic eclecticism (Ranby in Rejnert 1989:33-34).

Blocks often have four or five storeys and no elevators. The blocks are built along the plot border and there are buildings in the courtyard, creating the characteristic situation with a lightwell in the courtyard. Such buildings are also typically simpler in facades and craftsmanship. Street buildings are built with a main partition wall, load-bearing outer walls and apartments with windows opening on both the street and the courtyard. Stairwells are mainly situated along the yard facade and an additional set of kitchen servant stairs is common. Parking is outside the plot in the street. Basements are common and so are attic floors. Yard building apartments with windows facing one direction only were originally restricted to 1 room and a kitchen. The building regulations from 1874 prescribed 18 m wide streets, fire prevention measures and imposing building heights, but regulations tended to be of a fait accompli nature (Rådberg 1988:152-155; Linn 1974:56-67).

In Rådbergs typology this type is called closed grid block with yard buildings (*stenstadskvarter med gårdshus*) and my classification is very similar (Rådberg & Friberg 1996:55-58).

In Malmö Georg Gustafsson’s plan for Rörstjörstaden in 1872 and the southwestern buildings of this area out of which a few buildings belong to the subarea Lugnet is a good example of the architecture of this era (Tykesson (ed) 2003:138, 144).

## Spatial morph II:2: Closed grid block with open yard (1925-1935)

This morph applies to post-1920s open yard closed city grid blocks. A Swedish term from 1919 is *radstående byggnadsätt* (line building blocks) (Rådberg 1988:200).

The improved free space area in the courtyards typical of this morph can be explained by the stagnation in building before and during WWI and subsequent state involvement in housing policy (Linn 1974:196-199). The main characteristic is the absence of buildings in the courtyard – leading to a formation of a larger inner courtyard. (Cf. figure in Vidén, Schönning & Nöre 1985:65).

Buildings were still tall – four or five storeys. The city plan features closed blocks in a deformed orthogonal grid inspired by Sittean planning – featuring place-making (the meticulous planning of small outdoor places) and fond motifs (the placement of buildings with imposing facades at the end of streets). Stylistic elements were calm, sometimes just simple undecorated facades. The time period favored classicism of form; plaster and yellow brick were popular. Six or eight partitions in windows were common, with some rectangular bay windows of red brick. There was a heavier architecture too – heavy granite entrance posts and gateposts and large scale buildings reminiscent of fortresses. Balconies were common, often with dense fencing in lightly painted iron. The socle was plastered or made in a rustic work with associations to brickwork. Gateways had decorations in high relief with figurative motifs. In the yards there were often fences situated along the plot border. Stairwells were often artistically decorated (Reisner et al. 1989:16-17, 52).

In Rådberg's typology this type is either called reform blocks: large yard blocks, etc. (*reformkvarter: storgårdskvarter m. m.*) or line building blocks (*radstående hus*), which I have considered as submorphs of the same morph. Rådberg found it necessary to distinguish between building blocks that were planned and constructed as units with open yards and building blocks with separate buildings but adding up to a building block with an open yard on the back. On the morph level I did not find it necessary to separate these two submorphs, not least owing to the small number of building blocks of the first sort (Rådberg & Friberg 1996:59-62;79-82).

## Spatial morph II:3: *Slum clearance block*<sup>10</sup>.

The 1954 Government Commission Report on Slum Clearance (*saneringsutredningen*), as described above, transformed inner city grid blocks into units resembling megablocks but in many cases restricted by their relation to an existing street grid. This statement however must be modified with the realization that the inner city street grid was heavily restricted for car traffic during these times creating a differentiation of the traffic users as pedestrians, bicyclists and vehicle drivers were forced to use different routes. This process is still in effect today. The focus on sun, light, noise and pollution discredited any symbolic historical values present in the houses and streets and that process was aborted and replaced during the 1970s with post-modern morphologies, which among other things tried to re-create symbolic value in the street.

Rådberg's classification seems to neglect this morph completely.

## SUPERMORPH III: The single plot one-family house (*enfamiljshus*)

(Surveyed as 22.8 % of the Malmö area and 5.9 % of Malmö's population in this study)

The one-family house has various historical roots in Sweden. Some are particular building types with their own merits and history; I describe them below. Another is the conceptual spectrum that runs from building for self-sufficiency, to building for achievement of engineering goals (air, sun, sanitation and comfort), to building for representation of historical and cultural values, i.e. building for the manifestation of symbolic power (cf. Paulsson 1950:305-322).

There are three traditions to consider, morphogenetically and based on class considerations. First, there is the bourgeois large one-family house (*villa*), which historically represents the rise of the merchant class to prominence. Second, there is the craftsmen's houses, which represent the change in conditions for urban craftsmen. Third, there is the "own your own home" (*egnahem*), which represents the emancipation of the working class. I have taken these three traditions into account by creating the three morphs contained in supermorph III. The three morphs, however, are not the continuations of those three traditions. Why?

By the time when by my reckoning the modern Swedish one-family house is to be considered a morph, based on my perception of what can be observed today, the merchant houses in the central parts of the town were being converted into rental apartments. Simultaneously, the bourgeoisie started to create one-family housing outside the town centers inspired, in some cases, by foreign aristocratic models, and in some cases by Swedish summer cottages which can be traced as far back as the 15<sup>th</sup> century. The convergence of these two historical lines gave the bourgeois large one-family house of the upper classes in Sweden. It was characterized by spontaneous exploitation, with little or no regulation (Paulsson 1950:334-345). These two historical lines resulted in two residential morphs; *the bourgeois large one-family house* and *the converted summer cottage*. A third morph resulting from this process is the agricultural estate within the city borders (*landeriet*), which had an impact on Malmö, but which can be said to have left significant traces in what could be called an institutional morphology today, rather than the residential morphology I am concerned with here (see Améen 1964:50; Cf. also Enhörning 2006 for a comprehensive study on the agricultural estate within the city borders of Göteborg).

During the same time period workers in the outer areas of town, often along liberal routescapes, built their own homes and rented a room out or two to other workers. These houses, from the 1840s and forward, were built not on the basis of aristocratic or bourgeois models but from the traditions and models of vernacular peasant buildings (Paulsson 1950:409-410; Werne 1997b:84-91). Other buildings in this tradition I classify as *liberal routescapes*, and they thus belong to a different supermorph – the routescape. In some cases, houses belonging to this tradition have been wrongly classified in the survey as less regulated "own your own home" houses simply because of the difficulties of identifying them in the plan or on aerial photos.

The third tradition to consider is of a more rural nature. The "own your own home" movement came from philanthropic ideals, politically motivated to stop emigration and to support patriotism from the 1870s and forward, and was, in effect, building forms adapted to urbanization and industrial life (Jonsson 1985:9-13).

The spirit of the *the single plot owner-occupied urban family home* is well described by Catarina Thormark: "In the two areas of one-family housing almost every house is so completely changed that it sometimes is hard to discern whether the house is from the 1930s or the 1970s. Here is an example of almost all possible building materials and garden decorations." (Reisnert et al. 1989:193.)<sup>11</sup>

### Spatial morph III:1: *Converted summer cottage* (ca. 1900-today)

This morph traces its history to the bourgeois seaside resorts, health resorts and spas popular from mid to late 19<sup>th</sup> century. Spacious villas had been made available for rich families to rent adjacent to hotels and public establishments integral to the bourgeois conception of public space prior to WWI. The custom spread to the petite bourgeoisie during the 20<sup>th</sup> century and from the 1970s onward summer housing began to be converted into year round homes. The original houses are often deeply embedded in green areas and built in romantic style architecture, sometimes with explicit regulations that forbid fences and other 'town-related' structures (Paulsson 1953:65-76).

In the 1960s, the one-family house was often re-modeled to resemble the American prairie house (Jonsson 1985:173).

This morph is most easily traced along streets that have changed historically from summer cottage streets to streets with one-family year-round homes. Rådberg classifies areas with these buildings as sparse one-family housing areas (*glesa småhusområden*). There is no significant difference in the description of the Rådberg type and my morph description.



### Spatial morph III:2: *Bourgeois*<sup>12</sup> large one-family house (ca. 1900-today)

This morph was conceived as a retreat from the dirty and noisy late 19<sup>th</sup> century inner city exploitation and planned as areas where plot sizes could vary and houses could be freely placed at regulated distances from streets and other private homes. The combination of cultural capital and economic capital represented by the people who built such homes is significant (Paulsson 1953:93-118). Individual building plans, catering to the housing consumer's wishes were and remain the norm, whether the models are the Carolingian manor house of the 1800s, the brutal 1960s Bernt Nyberg-homes or the functionalist 1930s homes. The plan is often Sittean baroque, inspired by: *Der Städtebau nach seinen Künstlerischen Grundsätzen*. Street views: streetscapes, perspectives, fond buildings, organic lines, park-like environments, centralized placement of buildings and large gardens. The morph adapts to mixes of style depending on period - national romanticism, classical, functionalist, or more recent architectural styles. Rådberg labels the type<sup>13</sup> as one-family house, large plots (*villastad, stora tomter*). Aside from his assumption that this pattern cannot be spotted in contemporary building we agree in principle on the type/morph. The bourgeois large one-family house morph in contemporary building developed through two different processes. One was where plots were partitioned and one larger piece of property is divided into smaller ones. The other, its opposite, is where (sometimes summer cottages) (smaller) house plots were developed with contemporary high (or low) fashion architecture.

### Spatial Morph III:3: Less regulated “own your own home” block (1904-1938(1948))

This morph was conceived as description of housing to discourage emigration and socialism due to the changes in the agricultural market during the 1880s. The “own your own home” movement (*egnahemsrörelsen*) was born in the 1890s and was not initially supported by the state but by industrialists as part of preventive measures to discourage the exploited working class from abandoning the country (Edling 1996:386-392; Germundsson 1993:20-39; Paulsson 1953:86-92). It also has many nationalistic style elements, i.e. in the history of style it would be related to national romanticism. In design it was inspired by foreign one-family housing such as Bournville, England (Paulsson 1953b:88).

Beginning in 1904, the institutionalization of “own your own home” loans (*egnahemslån*) began and this remained a powerful economic incentive for the morph until the Government Commission Report of 1938 decided that their time had passed. Subsequent legislation and parliamentary decisions restricted their use and finally abolished them in 1948. “Own your own home” loans were long term state loans offered to able, diligent working class breadwinners who could build their own houses. There were several reasons for the 1904 reform: securing manpower supply in the countryside, counteracting emigration and socialism, reacting to the transformation of the peasant laborer into a wage earner, promoting land reclamation, and improving living conditions for the working class population (Germundsson 1993:218-219).

In 1907, Malmöhus Regional “Own Your Own Home” Community (*Malmöhus läns egnahemsförening*) was formed. Many of the “own your own homes” were outside the borders of the city of Malmö in rural or semi-rural areas at the time of their conception. Throughout the 20<sup>th</sup> century, however, the areas in question became incorporated within the City of Malmö. Initially a condition for the loan was that the plot should be located outside the borders of the city, though this was soon revised (Reisnert et al. 1989:15).

In Malmö this led to the two distinctly different morphs I denote as *more regulated* (see below – spatial morph IV:1) and *less regulated “own your own home” blocks*, where the more regulated areas were those that were located within the city borders at the time of their building.

The less regulated “own your own home” blocks were initially located outside the borders of the city proper and were not subject to city planning. The plot prices were low, and few rules and regulations applied. In addition hens, rabbits and even a pig were allowed as domestic animals. Therefore these areas have a very heterogeneous nature with varying sizes of buildings, placement of buildings on plots etc. Land plots were

sold undeveloped by the local government, a cooperative or a private person, and developed mainly by small craftsmen and industrial workers (Reisnert et al. 1989:16).

The areas surveyed in this chapter are areas of dwelling "own your own homes" (*bostadsegnahem*) rather than the more rural form of small farms "own your own homes" (*småbruksegnahem*).<sup>14</sup>

Even so, the less regulated "own your own home" was often placed on the plot towards the streetline, giving ample opportunity for a small vegetable patch.

Such houses were often 1½ storeys with a basement (necessary for food storage) built in bonded brick of varying sizes and colors with a large frontispiece, although the variations are great in terms of roof-angles and e.g. mansard roofs as well as plaster or paneling facades. The plan was often the traditional own-your-own-plan with a hallway, kitchen and two rooms on the ground floor and two rooms on the first floor (Reisnert et al. 1989:15-16, 121, 125).

Rådberg classifies this morph as a sub-type of the type one-family housing blocks (*småbuskvarter, friliggande hus*). The notable difference between my classification and Rådberg's is that Rådberg does not differentiate the morphogenetics of the vast majority of one-family housing from the 1900s and onward. His type includes large one-family houses, housing in the garden city and "own your own homes" (*villastad, trädgårdsstad och eignahem*). Rådberg refuses to acknowledge the historical separation of different building types for different social groups, although he does acknowledge several different sizes of buildings and plots as significant. In my view, his typology needlessly obscures the historical process of wealth accumulation related to the social uses of different residential areas and thus their social significance. I propose acknowledging the historical process diachronically, that is as a historical process, although the current social association may be different, analyzed, through social variables. I believe there is no need to argue that since the historical working class association with certain house types is not the same as that of the contemporary working class (however such a class may be defined) with those same building types, we must ignore or obscure the history of the working class. The same argument goes for the bourgeois large one-family house.

## SUPERMORPH IV: The multiple plot one-family house (1920s-today)

(grupphusbebyggelse)

(Surveyed as 33.9 % of Malmö area and 17.8 % of the estimated population of Malmö in this study)

This supermorph traces its history from industrial housing in the 18<sup>th</sup> century, at for example at the Iron Works. It has strong connections to industrial interests and mass production. In 1908 the state loans for "own your own homes" were expanded to include "own your own homes" of the dwelling type (*bostadsegnahem*) within the borders of towns. This development led to the involvement of state regulatory bodies, through town regulations and town politics, in housing for the workers. During the 20<sup>th</sup> century these two rationalities, industrial rationality and its need for housing for manual workers and state rationality with the need for orderly regulations and corps of white-collar workers (bureaucracy) has defined the supermorph of the multiple plot family house. During the first half of the 20<sup>th</sup> century, the supermorph was dominated by "own your own homes", while massproduced industrial suburban one-family houses dominated the second half of the century. The transition between the two types was a gradual one, not clear break, and elements of both morphs have merged into contemporary multiple plot one-family houses. The most significant difference is the switch from the "own your own home" focus on the home as a production unit with the vegetable patch as the clearest example, and the mass produced industrial suburban one-family house with a focus on the house as a unit for conspicuous consumption. Several submorphs exist and have been subsumed under one of the morphs, because it was not possible to separate them in a meaningful way. Further research might independently survey submorphs such as the catalogue home, the white-collar one-family house, the brick one-family house, the timber one-family house and the 1960s one-family bungalow (Jonsson 1985:284-288). The third morph to consider in this supermorph is the row house block. As with the other morphs in this category, its origins go back to industrial and agricultural housing in linear forms but, in contrast to the

other morphs, rowhouses in Sweden became associated with the middle class during the 20<sup>th</sup> century. From the 1930s professional architects gave the row house the distinction of being the accepted and correct form of efficient housing for the 20<sup>th</sup> century, the result being that the middle-class with its new purchasing powers could force the working class out of the rowhouse market. Row houses were built in sufficiently low quantities that it remained an exclusive form of housing, thus adding to its distinction over the course of the century (Arén 1980:S1-S13). In its post-modern form, it has increased in quantity in pace with the size of the middle class and now constitutes one of the main forms of contemporary building. The common constituent of the morph is its character of seriality as opposed to individuality. One or a few forms are used repeatedly to produce a series of more or less identical one-family housing blocks.

## Spatial morph IV:1: More regulated “own your own home” block (ca. 1910-1950)

The explanation for the differences between the less and more regulated “own your own home”s is the influence of city planning regulations. *More regulated “own your own homes”* were planned as part of the city proper, in contrast to *less regulated “own your own homes”*.

This morph uses uniform scales, regulated roof angles and placement on plot very consistently. It is based on regulated architecture with Scanian 1920s classicism inspired by or taken from the designs of the State Building Office – Scanian association for building (*Statens byggnadsbyrå – Skånska föreningen för byggnadskultur*).

Beginning in 1920 Swedish state loans were more directed to support for one-family housing. In 1923, architects flocked to an exhibition in Gothenburg and showed the proper design of “own your own home” areas for the immediate future. Typical stylistics for the Scanian variation are: calm facades, cantilevering of the wall at the rafter foot, absence of a bargeboard, steep saddle-back roofs, cross-partitioned or six-partitioned windows, no eaves on the gables and white plaster facades. The State Building Office issued principles stating that verandas and bay windows did not fit with Scanian vernacular tradition, but such principles were largely ignored in practice. The traditional plan is a hallway, a kitchen and two rooms on the ground floor and two rooms upstairs. The vegetable patch ideal that harkened from WWI was preserved and supplemented with ideas regarding healthy recreation for workers. The morph has many artful gates. Pavements are asphalted or sometimes graveled, which is typical for the earlier eras of suburban one-family housing (Reisnert et al. 1989:15-16). The survey includes later buildings on the same plots. Some traits of that later building are that some of the functionalist housing from the 1930s has low roofs. From the 1930s to the 1950s features of note include the decrease in facade decoration, non-partitioned windows and yellow brick facades. An interesting variation is the ca. 1945 HSB Boro house with one storey saddle roof and 30 degrees angle and vertical wood panel, (Reisnert et al. 1989:15-16) but as the decade drew to a close the morph was replaced with massproduced industrial suburban one-family housing. In Västra Kattarp, the architect (Oscar Hägg) made type drawings of free-standing and two-family houses in picturesque Jugend style with bonded brickwork as well as imitations of half-timber work and small-partitioned windows. This area was featured at the 1914 Baltic Exhibition as a ‘good example’. Of note also are the type drawings in the Government Commission Report on Practical and Hygienic Housing (*Praktiska och hygieniska bostäder*) (cf. Larsson et al. 1921:172).<sup>15</sup>

Rådberg uses a type he calls mixed open garden city (*blandad öppen trädgårdsstad*), to denote this particular form of block arrangement and stresses that it contains a mix of building types in it and that it was planned according to aesthetic principles in contrast to the less regulated forms of “own your own homes” or single family housing areas in general. In short, I believe the difference between Rådberg’s classification and mine relies on the difference in our view of regulations. Where I tend to see a difference between less and more regulated, Rådberg sees to see a difference between the presence and absence of aesthetics (Rådberg 1996: 95-98).



## Spatial morph IV:2: Massproduced industrial suburban one-family housing (ca. 1950-1980)

As early as 1918 an industrial housing company was formed in Sweden (*AB Industriebostäder*). Of at least equal importance was the first Government Commission Report on Practical and Hygienic Housing published in 1921 (*Praktiska och hygieniska bostäder*). In 1923 the Gothenburg exhibition displayed prototypes that in practice led either to the more or less regulated “own your own homes” or the row house block. However, after 1930 urban planning shifted direction and there was very little focus on development of new types of single family dwellings (Rådberg 1988:210-214; Jonsson 1985: 285; Linn 2006:115). In 1945, the Government Commission Report on Social Housing (*Bostadssociala utredningen*), maintained that the single family house was housing meant for rural areas and small towns and that the economic situation for wage earning families remained such that general state loans and subsidies were necessary in order for wage earners to be able to live in decent housing. In 1956 the Government Commission Report on Political Housing (*Bostadspolitiska utredningen*) had a slightly different assessment when it held that only financially weak households would be in need of subsidies and favorable loans. The general economic level of the wage earner had risen to such an extent that general housing subsidies were no longer deemed necessary. However, the political paradox, as pointed out by Jonsson, was that general economic support for single family houses remained, while support for housing in apartments became conditional dependent on the inhabitants need for support. In 1965 the Government Commission Report on Raised Standards of Housing (*Höjd bostadsstandard*) accepted that one third of new housing in the large cities (Malmö, Gothenburg and Stockholm) should be one-family housing. In 1969 the Government Commission Report on Rational One-family House Construction (*Rationellt småhusbyggande*) considered one-family housing part of a state social initiative aimed among other things at countering segregation. In 1972-73 the “million program” and the associated megablock developments (see below) stopped and one-family housing remained a viable and increasingly popular housing scheme (Jonsson 1985:21-31).

During the same time period, demand for housing for workers in the steel, iron, sawmill and paper industries clearly outweighed supply. Industrial housing, built and administered by representatives from the world of industry were common before 1947. Industries either constructed housing or subsidized their workers’ living costs in “own your own homes”. From 1947, however, with the Housing Supply Act (*bostadsförsörjningslagen*), the municipalities were given greater responsibility for supplying housing for workers. During the 1950s and the early 1960s, industrial housing companies were slowly being dismantled as the municipalities directed housing into the megablock developments of the “million program” and industrial administrative costs could be cut, by not having to supply workers with housing or help for housing (Jonsson 1985:41-52).

During the mid-1960s, then, the multiple plot one-family house development or estate roared into the housing arena. The acceptance of the one-family house within the city borders together with the banks’ adjustments to the increased purchasing powers of blue-collar workers gave rise to an unprecedented demand for the one-family house (Jonsson 1985:72-91).

A wide variety of submorphs could be surveyed in future research projects. One-storey houses without a basement from the 1960s were soon replaced with a variety of forms during the breakthrough period for the multiple plot villa in the early 1970s (Jonsson 1985:170-184).

This morph remains influential today, although plot efficiency favors the post-modern row house spatial morph. Rådberg classifies this morph as small house blocks, free-standing houses (*småhuskvarter, friliggande hus*) or sparse small house blocks (*glesa småhusområden*) or even as dense-low (*tätt-lågt*). Rådberg’s typology fails to point out criteria for distinguishing between the different sorts of one-family housing (Rådberg & Friberg 1996:87-90; 103-104; 113-116). I believe that by following Jonsson, such criteria could be further developed than is done in this survey.

### Spatial Morph IV:3: Row house blocks (ca. 1930- 1975)

This morph defines one-family housing attached to other similar housing even if it is only one other house (e.g. side by side two-family houses). In this morph every dwelling has its own entrance from outside. The most paradigmatic case of the row house block is the terraced house as described by Arén (1980). This morph also includes multiple residence houses and houses linked with a garage to adjacent houses. Sometimes the row houses are individually owned by the residents, sometimes they are tenant-owned apartments in tenant owner's associations and sometimes they are rented. The earliest form of the row house – the long, low working class building – (*arbetarlängan*) is agricultural workers' housing, where the dwellings are separated by storeys in two storey buildings and are from before 1930. These buildings have main partition walls and load-bearing outer walls. The abundance of this type in agricultural southern Sweden could be a reason for the impopularity of the terraced house in Malmö among the working class. Another, perhaps more plausible, reason is the relative purchasing power of the middle class that has dominated the terraced housing market in Sweden. The multiple residence house is a small free-standing building with one or two storeys, a shared stairwell and a maximum of eight dwellings. Lighting conditions are good and the load-bearing system is normally outer walls and main partition wall. This type was very common in the 1931-45 period in Sweden.

The 1930s rowhouses were often built in a strictly orthogonal grid. Buildings were placed along the street directly and one block's gardens are directed towards the other block's gardens thus making it possible for intimate house-line streets to alternate with thin sanded walking pathways. The 1928-32 stylistic elements were 1½ storeys, plastered facades, steep saddle-back roof, classic and rustic work socles. The 1930-33 stylistic elements were two storey buildings with white-plastered or yellow brick facades, thin light saddle-back roofs, visible eaves and light colors. Entrances were white-painted and glazed, windows non-partitioned and the general form was light and modernistic. Row houses after 1933 and the City of Stockholm's competition for cheap housing where the row house was prominent are often of the type with transversal load-bearing gables and free-bearing outer walls. The 1943-48 row house block 'Friluftsstaden' in Malmö – an archetype or prototype – was inspired by the neighborhood movement in Chicago, with its philanthropic idea of the common good. Fences were banned. During the 1960s rowhouses increased notably in numbers. 1960s rowhouses can be one storey atrium houses or flat-roofed facades in yellow brick or white plastered brick and dark brown woodwork. 1960s rowhouses can also be one storey brick buildings with flat roofs. Facades are often brick and woodwork (Vidén, Schönning & Nöre 1985:73-77).

Rådberg uses several relevant classifications. The multiple residence house included in this category he calls *flerbostadsvillor* or two storey row line housing (*tvåvånings radstående hus*). Row houses are part of what Rådberg calls mixed open garden city. The long, low working-class building is a separate type in Rådberg's terminology. He calls the terraced house (*radhuset*) submorph row house group (*radhusgrupp*), and what he includes in the term dense-low also refers to this group (Rådberg 1996:91-116). Compared to Rådberg's terminology, mine delves less into submorphs. The decision to group houses linked to each other with a garage and terraced housing into the same group may seem radical, but I believe it is warranted in order to foreground the distinction between separate and attached houses.

### Spatial Morph IV:4: Post-modern rowhouses (1980-)

This morph is defined by post-1980 block types with variations in building rules and plot placement to achieve a more varied row house area. The late 20<sup>th</sup> century development of multiple plot housing tends to optimize plot use in order to densify the city. So I have put row houses and mass produced industrial suburban one-family housing into the same morph. Variations in form and color are common. Wood, plaster and brick are commonly used. Rådberg does not distinguish between post-modern rowhouses and one-family housing before 1975, in spite of the fact that this distinction is important to him in discussing grid blocks. (He uses post-modern reform blocks to specifically denote grid block housing after 1975).

## SUPER MORPH V: The Lamellar Building in the Grid (~1930-1960)

(Surveyed as 6.2 % of Malmö area and 13.2 % of the estimated population of Malmö in this study)

This morph includes the narrow free-standing 1930s lamellar buildings, the free-standing tower block, both low and high, and the lamellar yard shape block of the 1940s and early 1950s.

This morph originated in progressive city planning in Sweden from the 1850s and on, with its real breakthrough in the 1930s. In the 1850s, Swedish urban planning was influenced by the situation in the U.K., as described by socialists like Engels. Industrialism had created worker's slums in the U.K. and progressive, utopian, philanthropic city planning ideals permeated intellectual life in London. The ideas, especially the philanthropic ideas espoused by Chadwick and others, were imported to Sweden and influenced the Gothenburg plan of 1861 and the Stockholm plan of 1866 (Paulsson 1950:220-236). The same ideas were present in Georg Gustafson's plan for Rörståden, Malmö in 1872.

The plans, and intellectual activity, in their turn influenced the 1874 Building Regulation with distinct ideas on how fire regulation, hygiene and sanitation should be used preventively in a Swedish setting. Paulsson points out both that the ideas came from an industrial society (the U.K.) at a time when Sweden wasn't industrialized, and that the ideas were based on the situations in Stockholm and Gothenburg and then generalized to a pan-Swedish level. Thus the ideas were flawed in two ways. One, they addressed a problem (workers' housing in the U. K.) that wasn't a problem (in Sweden). Two, the solution proposed wasn't appropriate for the setting it was suggested to improve (i.e. the solution was appropriate for Stockholm and Gothenburg but the majority of the towns and population in Sweden were also affected by it) (Paulsson 1950:236-242).

The effects of the 1874 regulation were also limited. The grid plan did have a tremendous effect on city planning in the late 19<sup>th</sup> century in Sweden, but more by eradicating earlier housing than institutionalizing hygienic and sanitary living conditions. The reason was that although the grid plan took effect, the squares in the grid were mercilessly developed into densely built plots, powered by economic incentives borne from the now industrializing and urbanizing Sweden (Paulsson 1950:489-493).

Meanwhile, hygiene had an increased intellectual influence due to the late 19<sup>th</sup> century progress in medicine and science, and ideas about sanitation were now combined with notions of fresh air and lighting as means of a healthy and proper life. Coupled with an aesthetic moralism that sprang from a critique of modern life and an embrace of modern constructive methods, aesthetic moral hygiene foreboded functionalism (Paulsson 1953:3-33).

So when Walter Gropius invented the lamellar rental block in 1928-1929, it was introduced in Sweden very fast via the Stockholm exhibition in 1930. The need and demands for hygienic, well-lit, sunny regulated blocks went hand in hand with industrially oriented architects' ambitions to type-cast the housing block into a machine for living in. The lamellar block was born. However, studying the hygienic and intellectual demands for a clean life, this ambition also led to the closed grid block without yard buildings and the garden city. It was the addition of an aesthetic moralism, honed through years of co-operation between industry and artists-architects (through for example the Deutsche Werkbund), that had the curious effect of transforming the closed grid block into the lamellar grid block. Still, this development kept within the borders set in the grid plan. Buildings and streets still were not separate entities as they would become in the megablock developments later.

Legally a new building regulation in 1931 allowed for higher buildings in Sweden, and the demands of exploitation could be met (cf. Rådberg 1988:253-255).<sup>16</sup>

In Malmö the fashionable early functionalism of Stockholm never became popular and only during the late 1930s did the style win ground, albeit in a slightly improved version using for example yellow brick instead of plaster. Malmö builders were the main proponents of the wide house (ca 12 m) and its economical advantages over the narrow house. The exception is Ribershus in Ribersborg where Eric Sigfrid Persson used the stylistic repertoire of functionalism fully.

## Spatial morph V:1: Free-standing lamellar (including tower blocks) (1930s)

This morph is defined by straight free-standing lamellar units placed in city block street grids that are not arranged around a courtyard. A lamellar building contains at least two repeated and identical stairwell units. I reserve the term for buildings with one straight unit. L-shaped, angular shaped and more than one unit of lamellar shapes I refer to the lamellar yard shape category below. The main types are the narrow lamellar building and the wide lamellar building. The narrow one (approximately 7-9m) has only two apartments on each storey associated with each stairwell while the wide one has at least three. The narrow lamellar building doesn't have elevators and is limited to three or four storeys while the wide one often has elevators and can generally be taller. The wide one has more small apartments and bathrooms without windows. Stairwells generally have good lighting, often being built to the facade. During the modern megaform period, lamellars used dark stairwells, but these buildings have been placed in the relevant morph below. Load-bearing main partition and outer walls were the norm during the period. Basements are common, though attics are uncommon. The state owns a disproportionate number of lamellar buildings (Vidén, Schönning & Nöre 1985:67-70, 70-73). 1930s buildings can also be identified by the functionalist style, with light colored plastered facades, flat roofs and large windows with white or green woodwork. Other popular colors are light ochre or green-grey with green-grey or white woodwork details. Buildings have flat roofs and are built according to an ascetic aesthetics. Entrance doors are glazed and painted. Open courtyards are conventionally grass lawns with shrubs and trees and outdoor furniture as well as carpet-beating racks. The lamellar could be placed in the border of the property. Common for Malmö's functionalism is the abundance of saddle-back roofs (Tykesson et al. 2002a:17, 20). With three apartments per stairwell, the dominating apartment was two rooms and a kitchen with windows facing one direction only.

Place-making (the careful planning of spaces) and square-loving (the careful planning of small public spaces) is part of the functionalist repertoire. Low exploitation and gardens and green areas are an important motif. No clear differentiation between the front and the back of the building is another theme. Parallel placement of several lamellar buildings is common. Other common features include flat roofs and spartan aesthetics. Balconies with plated detailing are common, as are windows with one, two or three partitions.

This morph also includes the *tower block* which is a category that applies to tower blocks in city block street grid. Characteristically, the tower block has only one centrally located (and dark) stairwell. In its simplest form it has four corner apartments and one stairwell. A more complex form adds small apartments with windows facing only one direction. One of the advantages with the tower block is its possible placement in hilly or mountainous terrain – an advantage which is completely wasted in Malmö, which is flat. Tower blocks are seldom placed in the plot border, along the street. The earliest tower blocks are from three to six storeys. Later tower blocks are more like the modern megaforms below. Basements are common and attics are uncommon. The tower block can historically be seen as a parallel development to the lamellar building. Where the lamellar building was an abstraction with free-placement of the grid-block line buildings, the tower block was an abstraction with free-placement of the single town-house with one stairwell, a style that preceded the line buildings that became the norm in the 1920s. The landmark tower block with mixed uses of office and housing during the 1950s was a common practice in Malmö.

Rådberg uses the types urban highrise blocks (*urbana höghusvarter*) and urban lamellar blocks (*urbana lamellhusvarter*) to denote this morph, as well as another three-part classification that includes free-standing two storey lamellar building (*friliggande tvåvånings lamellhus*) and free-standing lamellar (*friliggande lamellhus*) Three to four storeys, as well as low tower blocks (*låga punkthusgrupper*). Basically Rådberg distinguishes between the heights of the buildings while I had no need to do so. Initially I used a separate classification for low tower blocks, similar to Rådberg's, but since there were very few such buildings in Malmö, I lumped them together with the *free-standing lamellar buildings* into one morph (Rådberg & Friberg 1996:63-70; 117-132).

## Spatial morph V:2: *Lamellar yard shape* (in orthogonal street grid) (1940-1960)

This morph is defined by lamellar buildings in city block street grid that are arranged around some sort of courtyard. Orthogonal angles are prevalent in both the street grid and the buildings. Usual forms are the U-shape and the L-shape. Star-shaped buildings are included in this morph as well. Characteristically the star-shaped building is built around one stairwell with three wings where each apartment gets lighting from three directions. Normally the star-shaped building is built adjacent to another star-shaped building and many star-shaped buildings together form long chains whereby a lamellar yard shape can be said to occur. Star-shaped buildings are rarely more than three storeys high. Basements are common, and attics are uncommon. Often a whole area of star-shaped buildings have the same owner, making them a preliminary morph of the modern megaform. The lamellar yard shape as a whole can be seen as a transition between street grid building block forms and the modern megaform. Materials used in Malmö are yellow or red brick or plaster with relatively flat roofs. Stylistic elements are soft functionalism, broken saddle roofs and yellow or red facade brick. White woodwork windows and glazed entrances are common. Bay windows on the gables are common as well. Stylistic elements from the 1940s can be simple facades, yellow brick, and marked entrances. This period had noticeably smaller scale, carrying functionalistic ideals, with plastered facades in light colors. Orthodox functionalism is rejected in Malmö and facade decoration and saddle roofs are common. Lamellars in the yard shape often have a clear division between the front and the back. Buildings from the late 1950s have concrete elements in material, soft modeling, window emplacements, bay windows or simple decorative elements. They are on a larger scale and built in red brick with various materials: plaster, yellow and red brick. Four storeys are more common during this period than three which are more common later in the megablock period. Tiled saddle roofs are common. Construction is based on builder's craftsmanship rather than industrial mass production. In Malmö 1942, the plan for Pildammstaden clearly shows the popularity of the yard shape, preferably north-south, east-west direction. Rådberg uses the type lamellar building, half-closed yard (*lamellbus, halvslutna gårdar*) to denote this morph. The difference between Rådbergs classification and mine is that in my morphology this morph is more important. It is the only one warranting a separate morph, while Rådberg classifies lamellar building into no less than six types (Rådberg & Friberg 1996:125-128).

## SUPERMORPH VI: The modern megablock (late 1950s to early 1970s, 1980s onwards) (Surveyed as 22.6 % of Malmö area and 38.6 % of the population of Malmö in this study)

The modern megablock is rooted in the neighborhood unit as initially conceived by Perry 1924 with the principle arrangement of a planned unit for housing of a number of families manageably within a certain amount of space, wherein services and infrastructure supports the unit. This contrasts most with a street grid individualized system where families relate to public space primarily through the street. In the modern megaform, the street is abolished as public space and is merely transportation to and from the unit, which is intended to support community public life. Work is excluded from public life, which is incorporated into the housing unit. One difference between Perry's vision and Swedish planning is that commercial use is located within the housing areas in Sweden, and outside of them in Perry's vision (Franzén & Sandstedt 1981:149-176).

The constituent intention for this supermorph is the will to realize a sense of community or a *gemeinschaft* within a geographically enclosed and isolated area. The reasons have to do with a critique of capitalism and economic growth as well as a negative view of liberalism and individualism, originating in the field of sociology, especially the works of Marx and Tönnies, with a utopian, progressive flavor (Franzén & Sandstedt 1981:15-85).



I use the term neighborhood unit (*grannskapsenhet*) to denote anything that resembles such a neighborhood unit, and thus I include everything built within the “million program” as well as its precursors from the late 1940s and the 1950s until the end of the “million program” around 1972.

The morph applies to post-WWII block types which ignore the street grid and have a larger property scale, monotonous buildings, undecorated facades and non-partitioned windows.

The modern megaform in Sweden also grew out of a symbiotic relationship between the State and corporate capitalism, which directed the building of large areas of housing units for workers during this period. The lamellar building was already developed and industrial mass production applied it to instances of producing neighborhood units very efficiently during the “million program”.

## Spatial morph VI:1: Early modern megablock (with central green area)

Late 1950s neighborhood units have uniform scale, similar proportions, are made of yellow brick and have large free spaces. The units are arranged adjacent or in proximity to generous free form parks, often with the gables parallel to the border of the plot, along the street and linked together with walls of brick or one storey commercial buildings, giving more connection to the street than later eras. A variation is the freely grouped three storey lamellar yard shape where the yards have grown into parks. Schools and services are often located within the area. Materials are prominent, with variation in brickwork and plaster with detailing in balcony fences, stairwell entrances and gable windows. One variation is the area based on four storey and twelve storey buildings arranged around an open grass lawn with the higher buildings centrally located and the lower peripherally located. Another variation is the three and eight storey unit with facades of white siporex elements, similarly arranged. Very large lawns often with playgrounds are common. There is parking adjacent to traffic systems separate from housing or between housing areas. Financial reasons emphasizing fire security and elevator needs are the main reasons for the building heights. The specificity of this earlier form as a transition from the lamellar yard shape is based on including the green areas within the housing arrangement. The form focuses on arranging the buildings around a centrally located green area. Parallel placement of the higher buildings centrally and lower buildings outside the orthogonal yard shape is common. Examples in Malmö are Segevång and Nydala. Stylistically, the period often uses the contrast between low and high buildings in materials. The period abandons the low tower blocks and star-shaped buildings. In Malmö the practice has three apartments for each stairwell and very wide buildings sometimes up to 14 m. Fully 90% of the Malmö buildings from this period are brick, 2/3 of them yellow brick. Some concrete elements and asbestos cement sheeting can be found. Windowsills, bay windows, socles and entrances are sometimes decorated with mosaic tiles or colored glazing. One common window type is equal size rectangular windows with no partitions. Almost all windows have white woodwork. Larger coherent balcony sections in the façade, along with flat brick parts and regularly placed windows are seen. After 1955, balcony sections built freely on the facades become less usual. Paper-clad shed roofs or very flat saddle back roofs are common. Another frequent theme is flat facades with extremely long buildings. Yellow and red brick are most common; asbestos cement sheeting and concrete are used as well. Commerce is limited to a central square and constructed as a separate unit. There was no initial commerce in the lamellar loaves. Other variations are the placement of buildings with gables towards the street, and eight storey high buildings facing the surrounding traffic, while three storey buildings tend to be at the center of the blocks. Landmark buildings of 16-17 storeys, relating to the larger scale of the city, are another common development based on the tower block of the previous era. Light grey concrete elements or yellow brick in socle can be found, as well as grey or pink with crushed mosaic tiles. Large parking areas and large green recreational areas are related to the housing units.

Functionalist features that have now been abandoned include the corner windows and the free asymmetrical facades and volume compositions. These buildings were built in larger series (five-six). There were few actors in the building process (Tykesson et al. 2002b:24-25).

Rådberg uses highrise tower blocks (*höga punkthusgrupper*), slab building blocks (*skivhusgrupper*) and combinations of highrise and low buildings (*kombinationer av höghus och låghus*) to classify megablocks, and does not distinguish between early and later megablocks (Rådberg & Friberg 1996:135-145).

### Spatial morph VI:2: Late modern megablock (built adjacent to green area)

These buildings were built in the late 1960s and the early 1970s and are characterized by larger scale in yellow, red, or brown brick. Free-standing housing blocks, often with eight or three storeys, are the norm, orthogonally arranged, each building being one part of a square arranged around a central commercial and service unit. More or less strict traffic separation with separated pedestrian and car networks are present. Industrial building technology with long rails between the buildings where construction cranes were placed. The buildings either look like boxes, or are sometimes L-shaped. Stylistic elements are: undecorated facades dressed in concrete elements mixed with crushed stone or brick. Some facades are dominated by balconies. Most gables are built without windows. Parallell placement of buildings with no displacement, i.e. the ends of the buildings aligned, is common. Standardized measurements such as 40 meters between the eight storey buildings and 18 meters between the three storey buildings are common. Compared with Stockholm and Gothenburg, these modern megablocks in Malmö are more centrally located (i.e. they are not satellite towns), and in Stockholm and Gothenburg there is collective railbound traffic which is not the case here (there is no 'Subway City' in Malmö). In addition to those differences, in Stockholm and Göteborg suburban one-family housing was erected at the same time and adjacent to the large scale housing areas, which was not the case in Malmö. The plan was often strictly orthogonal with long sightlines. There are some high tower blocks, although this is less usual than during the early modern megaform era. Yellow brick is the commonest material, together with concrete elements or asbestos cement sheeting-like material. Almost all asbestos cement sheeting material has been replaced with brick or metal siding. Surface concrete elements with uncovered ballast often of light natural stone, which made the buildings look white, were also common. Balconies were always located on one of the long sides, while the other long side was flat. Repetitive facades were common. Horizontally connected ribbon windows sometimes occurred. Concrete element front balconies disappeared, and were replaced by corrugated metal. Low quality equal-sized rectangular windows were common. Entrances were either consistently facing the same direction or were facing courtyards. Flat roofs or shed roofs were the norm. Transversal inner walls were load bearing and supplemented by free bearing outer walls. Brick facades from the 1960s onwards were only sheltering, not load-bearing. The 1968 SCAFT plan for traffic was implemented (Tykesson et al. 2002c:28-29)

As in the previous morph, Rådberg uses highrise tower blocks (*höga punkthusgrupper*), slab building blocks (*skivhusgrupper*) and combinations of highrise and low buildings (*kombinationer av höghus och låghus*) to classify megablocks, and does not distinguish between early and later megablocks (Rådberg & Friberg 1996:135-145).

### Spatial morph VI:3: Post-modern Reform Block (1980s onward)

In the 1980s, renovation of modern megablocks in response to criticism for monotony, too long sightlines, orthogonality, and the grey color scale resulted in this morph. The large scale, however, remained. Improvements were made by changing windows, glazing balconies, changing facade materials, and adding bay windows and entrances. Variations in form and color were made. The yards were especially improved with new walks, flower beds, fences, pergolas and playgrounds. Previously infinite perspectives were broken down into smaller perspective units. Another morph included here is the post-modern yard shape from the 1980s and later. Infill buildings, i.e. buildings built on small sites within blocks, in inner city street grids, generally take an open lamellar yard shape form rather than the closed grid. The differences in scale, plot placement, and regulations are, however, significant enough from the earlier eras to warrant a separate category. In some cases, the post-modern reform block morph has been used instead, and the borders between these two types are often blurry.

Rådberg uses the type post-modern reform blocks (*post-moderna reformkvarter*) and his classification may be more narrow than mine, in the sense that he characterizes them in a way I am not sure applies to all of them. My distinction is based exclusively on the historical period, but I have also used the term *slum clearance block* in some cases in a way that may overlap with Rådbergs use of the post-modern reform block type (Rådberg & Friberg 1996:71-74).

## Morphological Survey following the logic of the social types (A-Q)

The second part of this chapter identifies and determines the extent of use of these 18 morphs in the context of the 17 social types previously defined, thus associating spatial morphs with social types. This part of the chapter follows the logic of the social types from A to Q, not of spatial morphs, because one of the objectives of the survey is to consider the spatial morphs in light of the social types, not only the social types in light of the spatial morphs. The structure of the account is such that I account for the survey results for *spatial morph association* for the areas included in each social type (The reader may wish to refresh his or her knowledge of social values by re-reading the type characteristics in chapter 3 or the spatial values in chapter 4). Aside from the type, I have also listed the most typical area for each type as a reference.



## Social type A morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE A	17%	8%	I:3, II:1, II:2, V:1, V:2	I, II, V
Hästhagen	0.6%	0.2%	II:2, V:2	II, V

Table 5:3 Social type A (morphological)

(I use the abbreviation MCA (Malmö City Area) for percentage of property area in Malmö and EPOP (Estimated Population) for estimation of percentage of population of Malmö)

Social type A consists primarily of the four spatial morphs *closed grid blocks with open yards* (MCA 19%, EPOP 23%), *free-standing lamellar buildings* (MCA 20%, EPOP 18%), *lamellar yard shapes* (MCA 18%, EPOP 18%), *closed grid blocks with yard buildings* (MCA 15%, EPOP 18%) and secondarily of the spatial morphs *largely industrialized or commercialized ground floor plots* (MCA 15%, EPOP 7%) and *slum clearance blocks* (MCA 8%, EPOP 8%). The remaining morphs only occur to a negligible extent.

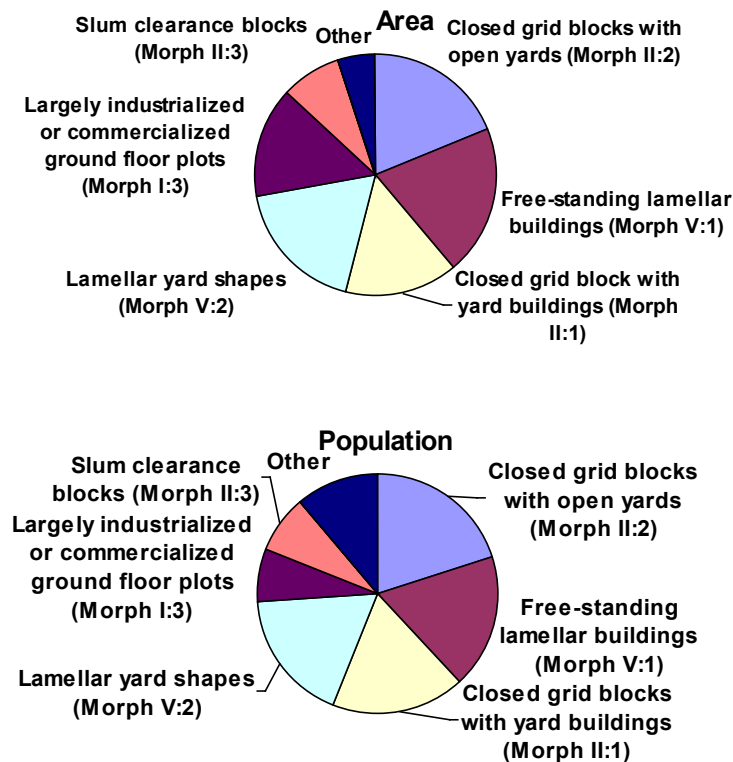


Figure 5:1 Summary morphological figure for social type A.

## Social type B morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE B	8%	3%	I:3, II:1, II:2, II:3, VI:1	I, II, VI
Möllevången	4%	1%	I:2, I:3, II:1, II:2, II:3, VI:1	I, II, VI

Table 5:4 Social type B (morphological)

Social type B consists primarily of the four spatial morphs *closed grid blocks with open yards* (MCA 31%, EPOP 25%), *closed grid blocks with yard buildings* (MCA 21%, EPOP 22%), *Early modern megablocks* (MCA 17%, EPOP 20%) and *slum clearance blocks* (MCA 12%, EPOP 11%).

Of the remaining 19% of the area and 22% of the estimated population, 7% of MCA and 6% of EPOP are in *largely commercialized or industrialized ground floor plots* while the rest are spread out among *liberal routescapes*, *lamellar yard shapes*, *free-standing lamellars* and *post-modern row houses*.

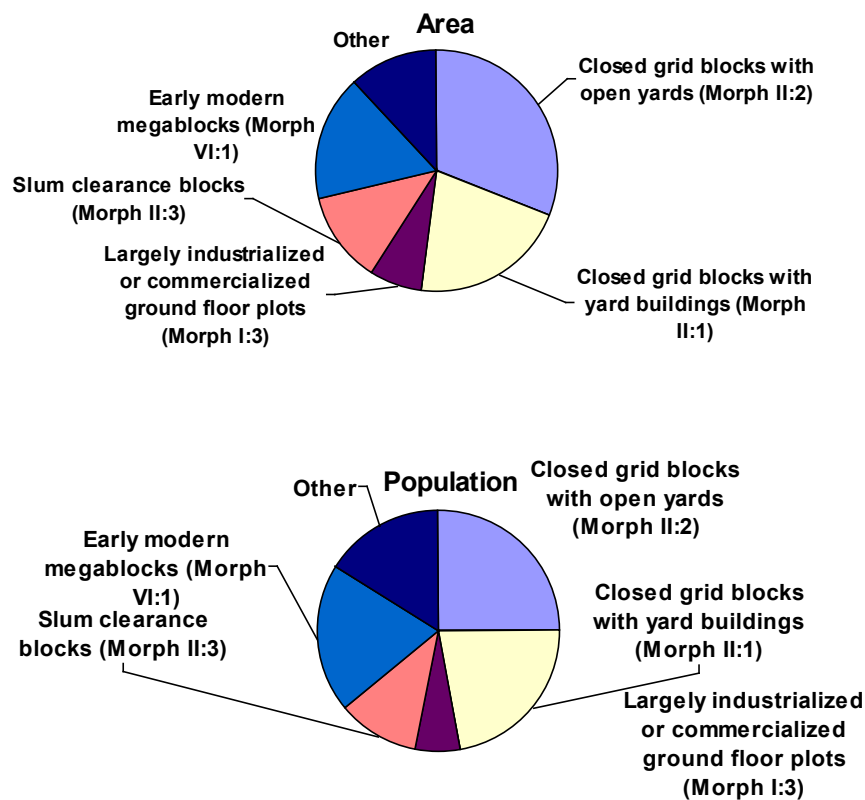


Figure 5:2 Summary morphological figure for social type B.

## Social type C morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE C	6%	3%	I:2, V:1, V:2	I, V
Kirsebergsstaden	2%	1%	I:2, II:3, IV:3, V:1, V:2	I, II, IV, V

Table 5:5 Social type C (morphological)

Social type C consists primarily of *free-standing lamellar buildings* (31% MCA, 38% EPOP) and *lamellar yard shapes* (38% MCA, 27% EPOP). The large amount of *liberal routescapes* (7% MCA and 9 % EPOP) is due to the inclusion of Kirsebergsstaden in this group, though in Kirsebergsstaden the lamellar building in the grid dominates the morphology. The other types only occur to a negligible extent, even though *slum clearance blocks* and *early modern megablocks* are present to some degree.

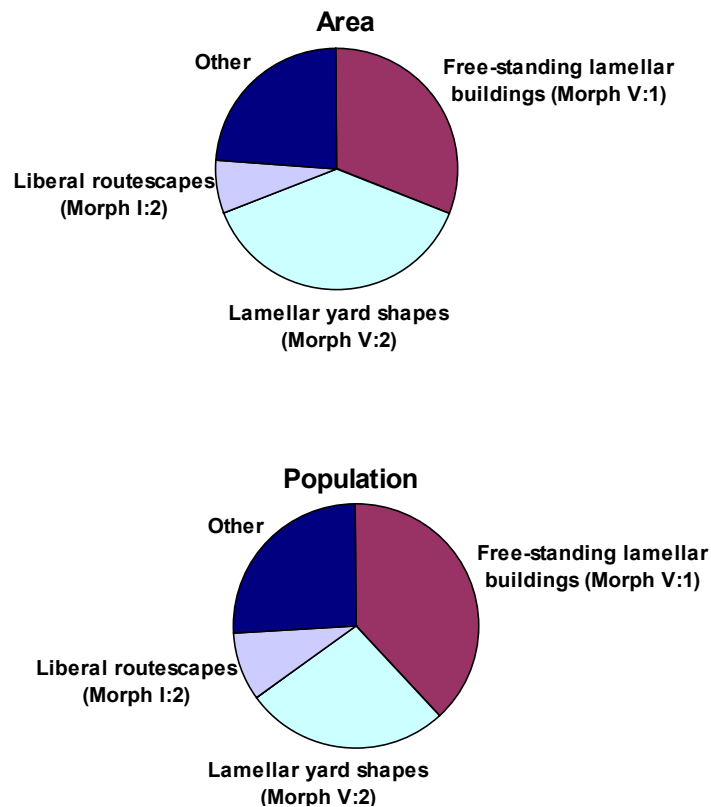


Figure 5:3 Summary morphological figure for social type C.

## Social type D morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE D	5%	14%	III:1, III:2, III:3, IV:1, IV:2, IV:3	III, IV
Västervång	0.5%	1%	III:2, IV:1, IV:3	III, IV

Table 5:6 Social type D (morphological)

Social type D consists primarily of: *bourgeois large one-family houses* (34% MCA, 19% EPOP), *row house blocks* (21% MCA, 21% EPOP), *more regulated "own your own homes"* (15% MCA, 16% EPOP), *Converted summer cottages* (10% MCA, 7% EPOP), *less regulated "own your own homes"* (8% MCA, 8% EPOP), *massproduced industrial suburban one-family houses* (7% MCA, 8% EPOP). The "Other" morphs only occur to a negligible extent.

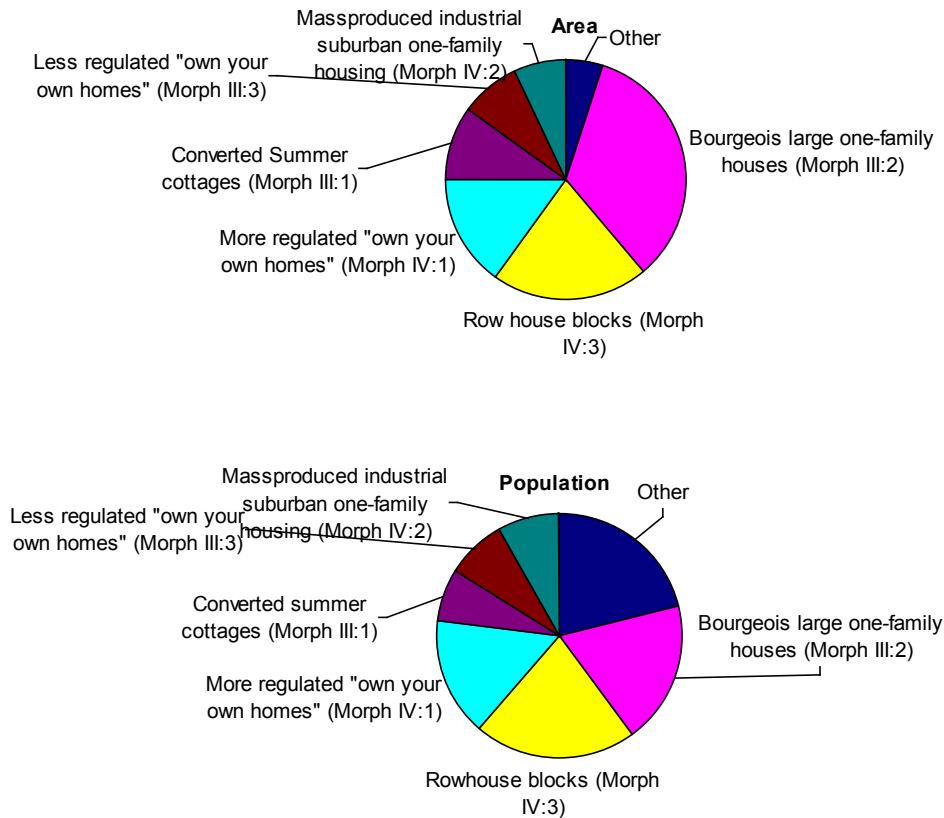


Figure 5:4 Summary morphological figure for social type D.

## Social type E morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE E	9%	10%	I:2, I:3, III:3, IV:2, V:2, VI:1, VI:2, VI:3	I, III, IV, V, VI
Gamla Limhamn	2%	3%	I:2, I:3, II:2, II:3, IV:1, IV:3, V:2	I, II, III, IV, V

Table 5:7 Social type E (morphological)

Social type E consists primarily of nine morphs. In terms of area they are accounted as follows: *less regulated "own your own homes"* (35% MCA, 8% EPOP), *early modern megablocks* (15% MCA, 30% EPOP), *row house blocks* (7% MCA, 5% EPOP), *liberal routescapes* (7% MCA, 6% EPOP), *lamellar yard shapes* (6% MCA, 18% EPOP), *massproduced industrial suburban one-family houses* (5% MCA, 5% EPOP), *largely industrialized or commercialized ground floor plots* (4% MCA, 2% EPOP), *post-modern reform blocks* (3% MCA, 7% EPOP), *late modern megablocks* (2% MCA, 5% EPOP). The "Other" morphs only occur to a negligible extent.

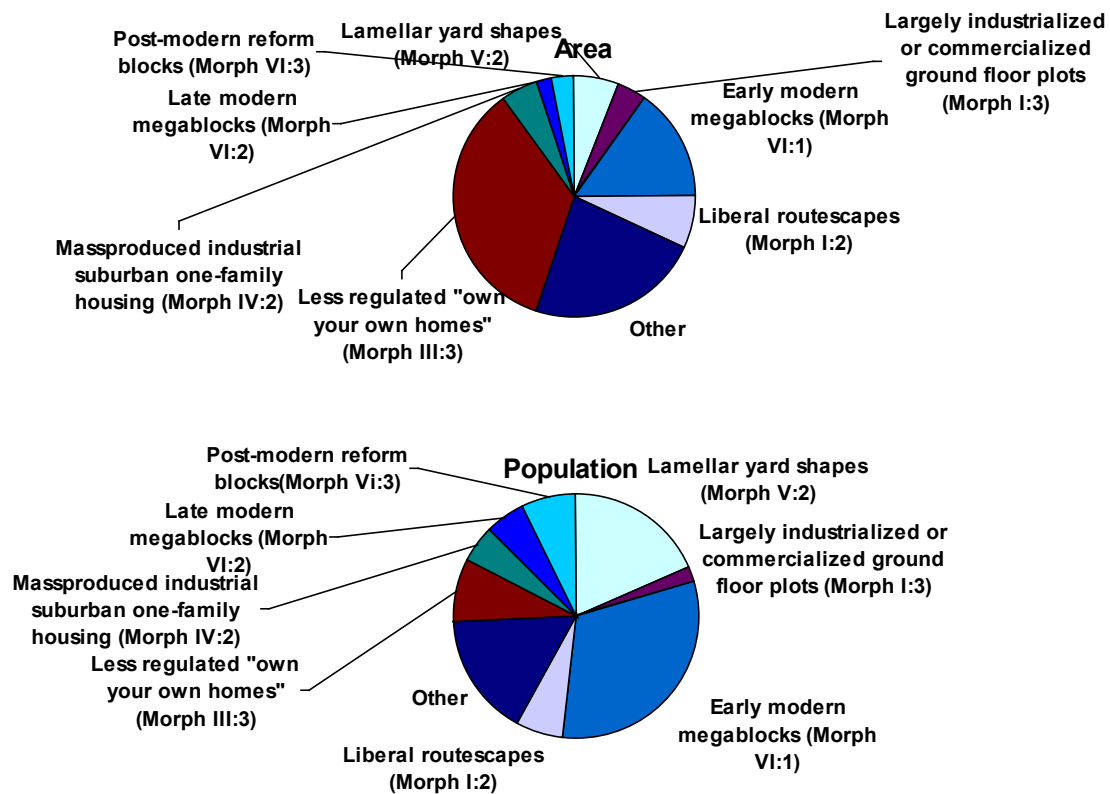


Figure 5:5 Summary morphological figure for social type E

## Social type F morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE F	1%	3%	I:1, I:2, IV:2, IV:3, IV:4	I, IV
Klagshamn	0.5%	1%	I:2, IV:2, IV:4	I, IV

Table 5:8 Social type F (morphological)

Social type F consists primarily of *liberal routescapes* (65% MCA, 38% EPOP), *pre-industrial village streets* (2% MCA, 1% EPOP), *post-modern row house blocks* (15% MCA, 29% EPOP) and *massproduced industrial suburban one-family housing* (8% MCA, 13% EPOP). A large portion of the “Other” category is agricultural land.

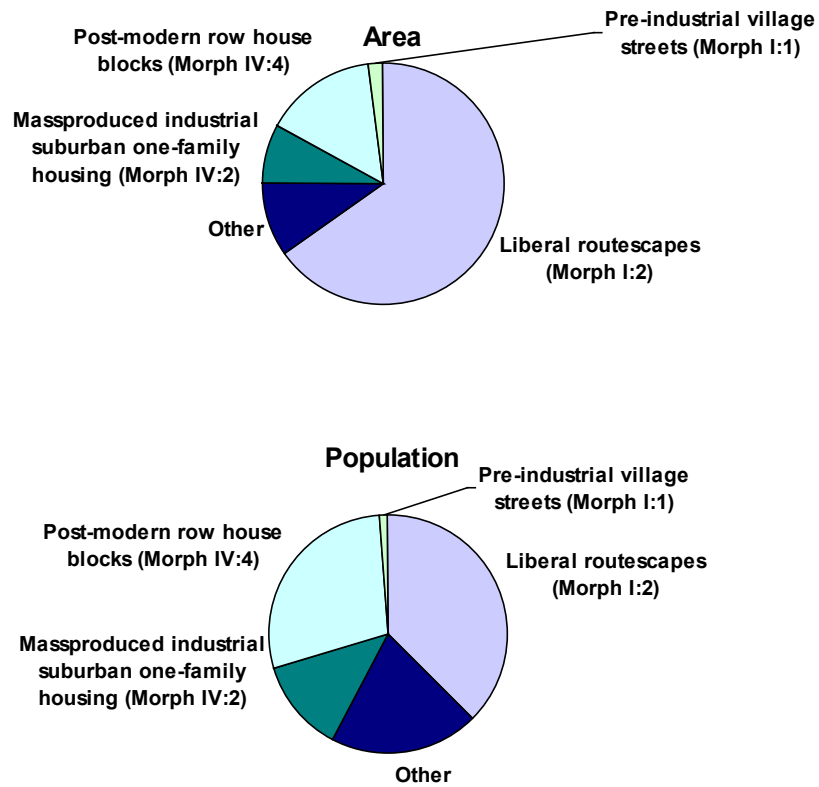


Figure 5:6 Summary morphological figure for social type F

## Social type G morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE G	3%	3%	I:1, I:2, Iv:2, IV:3, IV:4, VI:1	I, IV, VI
Lorensborg	1.5%	1%	VI:1	VI

Table 5:9 Social type G (morphological).

Social type G consists primarily of two morphs which, together, account for 74% of the type G population and cover 67% of the area. The largest of these is the *early modern megablocks*, mainly represented by Lorensborg and Håkanstorp (42% MCA, 50% EPOP). The second largest is the *late modern megablocks* represented by Södertorp and large parts of Gröndal (25% MCA, 24% EPOP). The third largest category in terms of population is the *largely commercialized or industrialized ground floor plots* (6% MCA, 12% EPOP), represented by the Kronprinsen area. In terms of area, the *less regulated "own your own homes"* (13% MCA, 3% EPOP) is the third largest category. "Other" morphs only occur to a negligible extent.

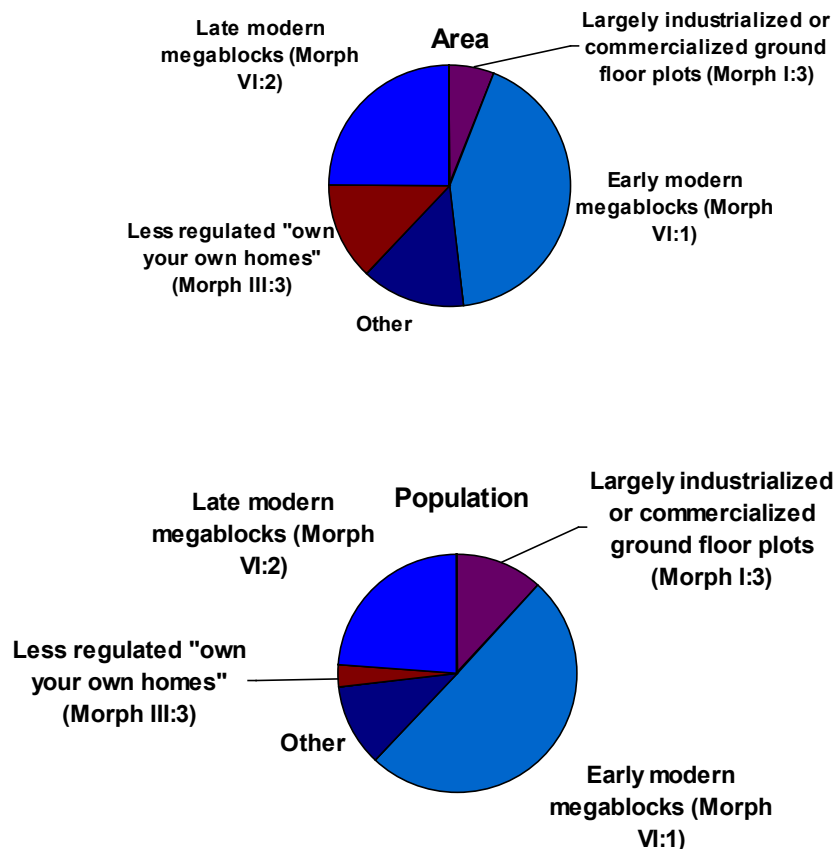


Figure 5:7 Summary morphological figure for social type G

## Social type H morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE H	3%	4%	III:3, IV:1, IV:2, IV:3, VI:1, VI:2	III, IV, VI
Kroksbäck	2%	2%	III:3, IV:2, IV:3, VI:2	III, IV, VI

Table 5:10 Social type H (morphological).

Social type H does not have morphological consistency: it is highly varied morphologically while being coherent socially. The largest morph in terms of area is the *row house block* (27% MCA, 20% EPOP). Thereafter *massproduced industrial suburban one-family housing* (14% MCA, 7% EPOP), *more regulated "own your own homes"* (26% MCA, 10% EPOP), *less regulated "own your own homes"* (8% MCA, 5% EPOP). At the same time 46% of the population live in *late modern megablocks* (16% MCA, 38% EPOP), and *early modern megablocks* (3% MCA, 8% EPOP). The megablocks are concentrated in Kroksbäck and Hindby. *Lamellar yard shapes* only accounts for 3% of the population, except for Rostorp where it accounts for one third of the population. It is classified under "Other".

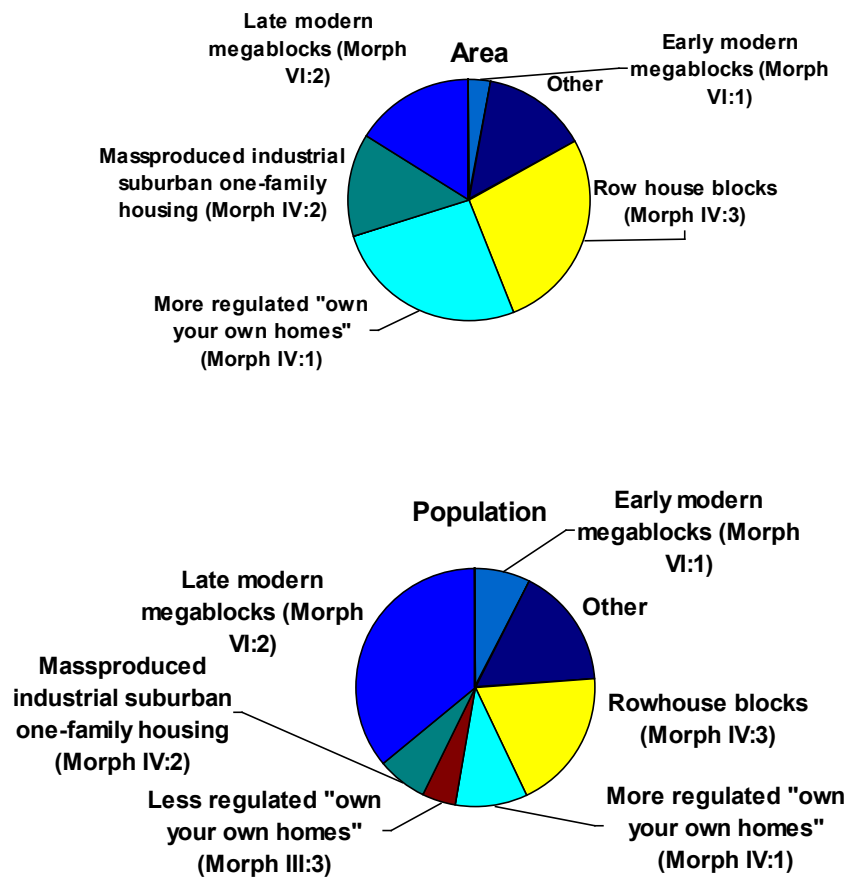


Figure 5:8 Summary morphological figure for social type H



## Social type I morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE I	7%	7%	III:3, IV:2, IV:3, VI:2, VI:3	III, IV, VI
Västra Söderkulla	1.5%	1%	I:3, III:3, IV:3, VI:2, VI:3	I, III, IV, VI

Table 5:11 Social type I (morphological)

Social type I is dominated by late modern megablocks (63% MCA, 82% EPOP). Post-modern reform block is also present (10% MCA, 11% EPOP). In terms of area the less regulated “own your own homes” are important (8% MCA, 2% EPOP) as are row house blocks (8% MCA, 2% EPOP) and massproduced industrial suburban one-family housing (6% MCA, 2% EPOP). The “Other” morphs only occur to a negligible extent.

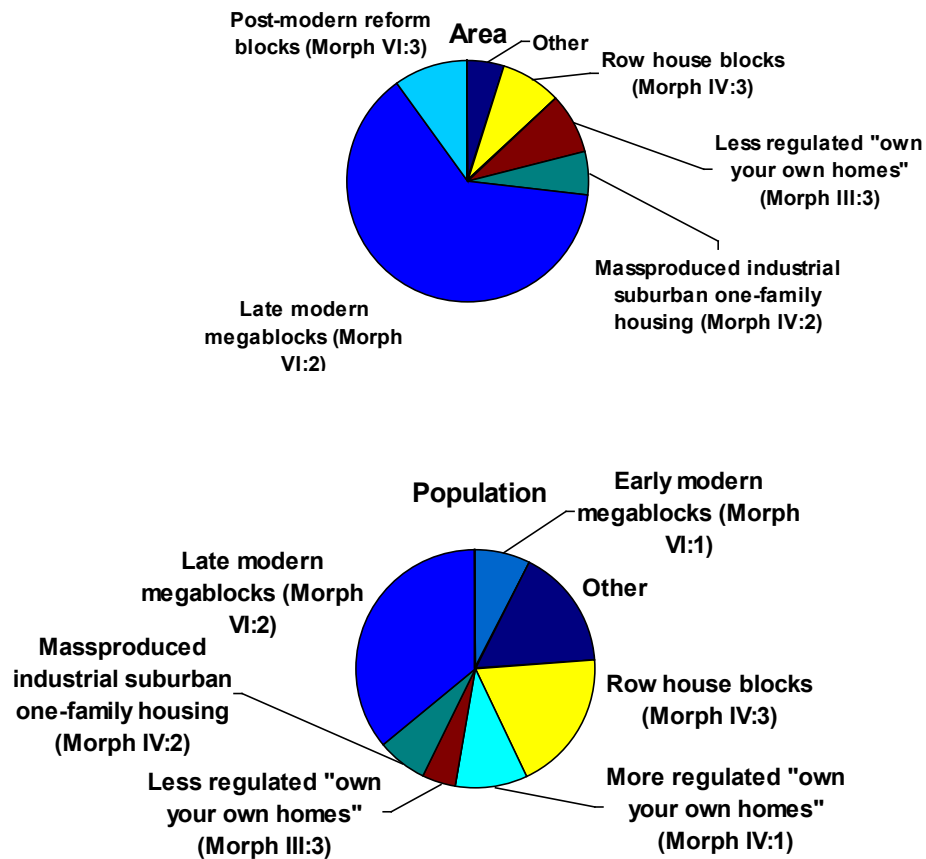


Figure 5:9 Summary morphological figure for social type I

## Social type J morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE J	4%	12%	III:3, IV:2, IV:3, IV:4	III, IV
Oxie Kyrkby	1.5%	3%	I:1, III:3, IV:1, IV:2, IV:3	I, III, IV

Table 5:12 Social type J (morphological)

In social type J four morphs account for 80% of the area and 75% of the population. *Less regulated "own your own homes"* (27% MCA, 10% EPOP), *massproduced industrial suburban one-family housing* (22% MCA, 22% EPOP), *post-modern row house blocks* (15% MCA, 20% EPOP), *row house blocks* (16% MCA, 23% EPOP). The remaining 20-25 % of the type consists of *pre-industrial village streets*, *early and late modern megablocks*, *largely industrialized or commercialized ground floor plots*, *post-modern reform blocks* and more regulated *"own your own homes"*. All these are classified under "Other".

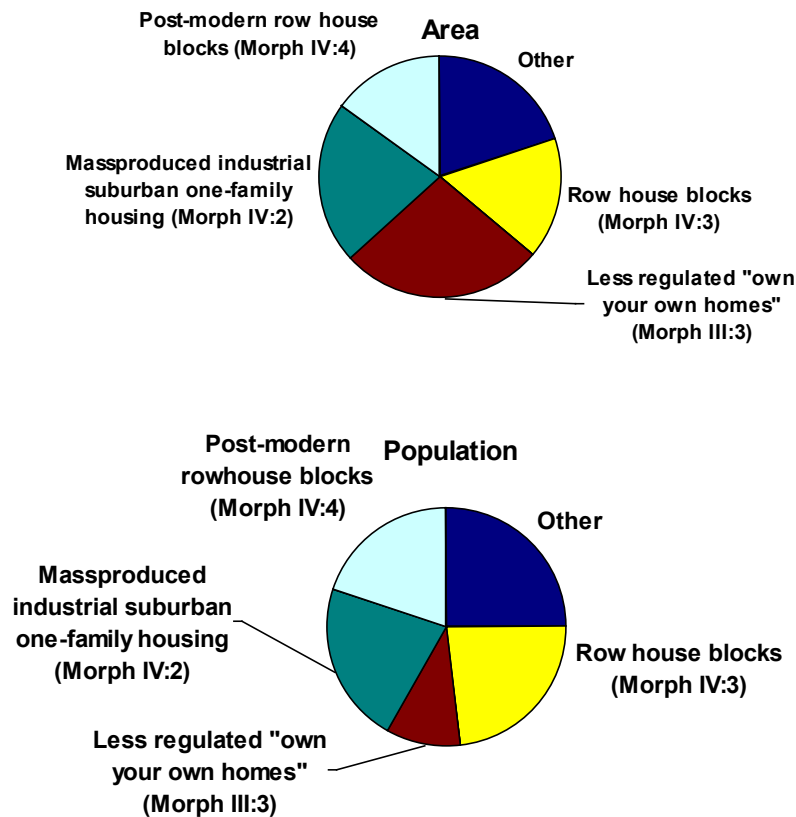


Figure 5:10 Summary morphological figure for social type J

## Social type K morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE K	5%	10%	III:1, III:3, IV:1, IV:2, IV:3, IV:4	III, IV
Bunkeflostrand	2%	4%	III:1, III:3, IV:2, IV:3, IV:4	III, IV

Table 5:13 Social type K (morphological)

In social type K *less regulated "own your own homes"* (26% MCA, 20% EPOP), *Converted summer cottages* (19% MCA, 7% EPOP), *massproduced industrial suburban one-family housing* (17% MCA, 16% EPOP), *row house blocks* (18% MCA, 18% EPOP), *post-modern row house blocks* (18% MCA, 21% EPOP) and *more regulated "own your own homes"* (8% MCA, 5% EPOP) account for the area and population. The "Other" morphs only occur to a negligible extent.

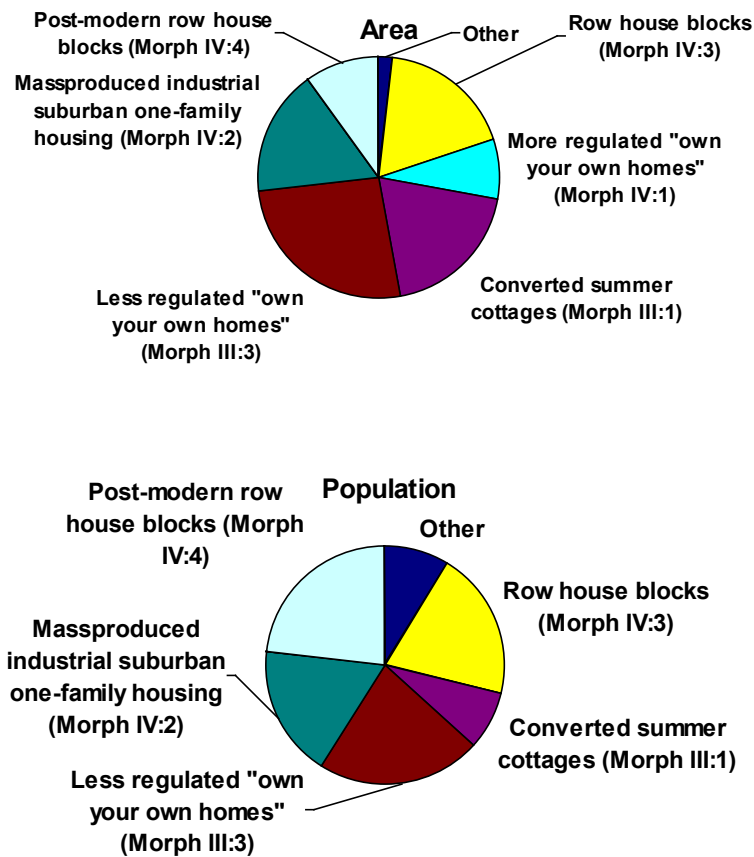


Figure 5:11 Summary morphological figure for social type K.

## Social type L morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE L	4%	10%	III:3, IV:2, IV:3	III, IV
Virentofta	1%	3%	III:3, IV:1, IV:3	III, IV

Table 5:14 Social type L (morphological)

In social type L three morphs account for approximately 80% of the area and population. The three morphs are: *less regulated "own your own homes"* (31% MCA, 17% EPOP), *row house blocks* (24% MCA, 34% EPOP) and *mass produced industrial suburban one-family housing* (26% MCA, 26% EPOP). The remaining 20% (classified as "Other") is shared among *pre-industrial village streets*, *post-modern row house blocks*, *more regulated "own your own homes"*, *liberal routescapes* and *one late modern megablock*.

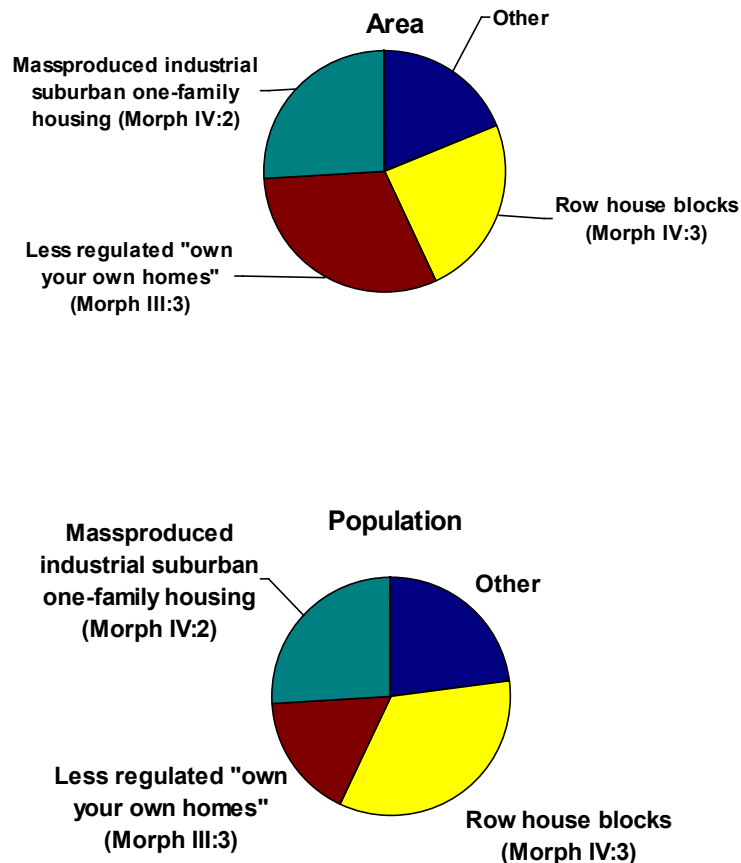


Figure 5:12 Summary morphological figure for social type L

## Social type M morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE M	1%	3%	IV:1, IV:2, IV:3	IV
Kristineberg	0.5%	1%	IV:1, IV:2, IV:3	IV

Table 5:15 Social type M (morphological)

Social type M consists largely of *massproduced industrial suburban one-family housing* (24% MCA, 24% EPOP), *row house block* (18% MCA, 23% EPOP) and *more regulated "own your own homes"* (41% MCA, 32% EPOP). The remaining "Other" 17% of the area and 20% of the population consists of *lamellar yard shapes*, *bourgeois large one-family housing* and *less regulated "own your own homes"*. There is a small percentage of *pre-industrial village streets* as well.

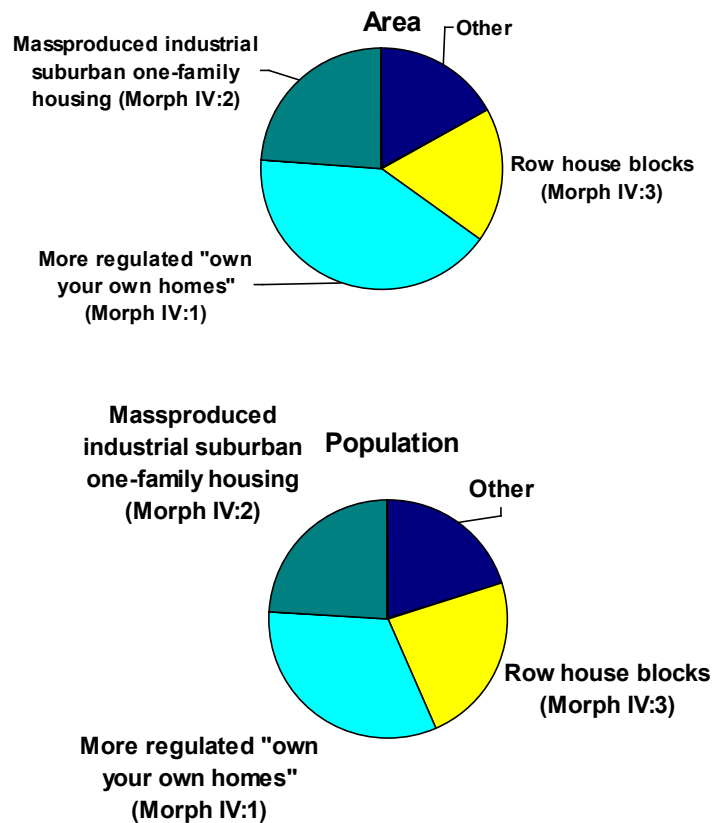


Figure 5:13 Summary morphological figure for social type M

## Social type N morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE N	2%	1%	I:2, II:2, IV:2, VI:1	I, II, IV, VI
Södra Sofielund	1.5%	1%	I:2, II:2, IV:4, V:2, VI:1	I, II, IV, V, VI

Table 5:16 Social type N (morphological)

Social type N consists of *early modern megablocks* (40% MCA, 58% EPOP), *closed grid blocks with open yard* (24% MCA, 24% EPOP) and *liberal routescapes* (21% MCA, 6% EPOP). The remaining *approximately 15 percent*, “Other”, is divided into *largely industrialized or commercialized ground floor plots*, a few *post-modern row houses* and a few *lamellar yard shapes* with the bulk of the population and area in *lamellar yard shapes* and *largely commercialized ground floor plots*.

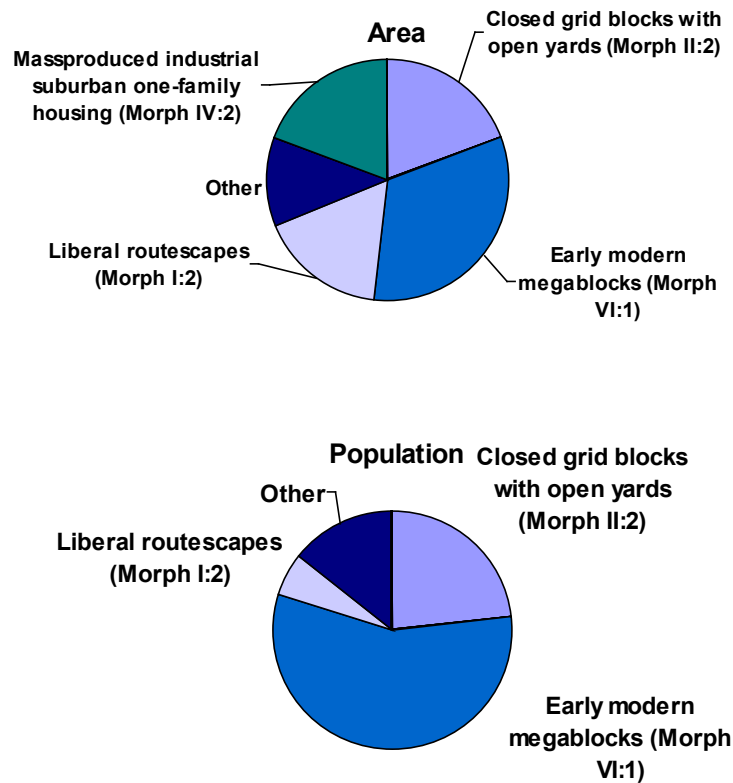


Figure 5:14 Summary morphological figure for social type N.

## Social type O morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE O	5%	3%	IV:4, VI:1, VI:2	IV, VI
Almgården	0.5%	0.5%	VI:2	VI

Table 5:17 Social type O (morphological).

Social type O consists of *late modern megablocks* (69% MCA, 70% EPOP), *early modern megablocks* (20% MCA, 22% EPOP), and *post-modern row house blocks* (11% MCA, 7% EPOP). The “Other” morphs only occur to a negligible extent.

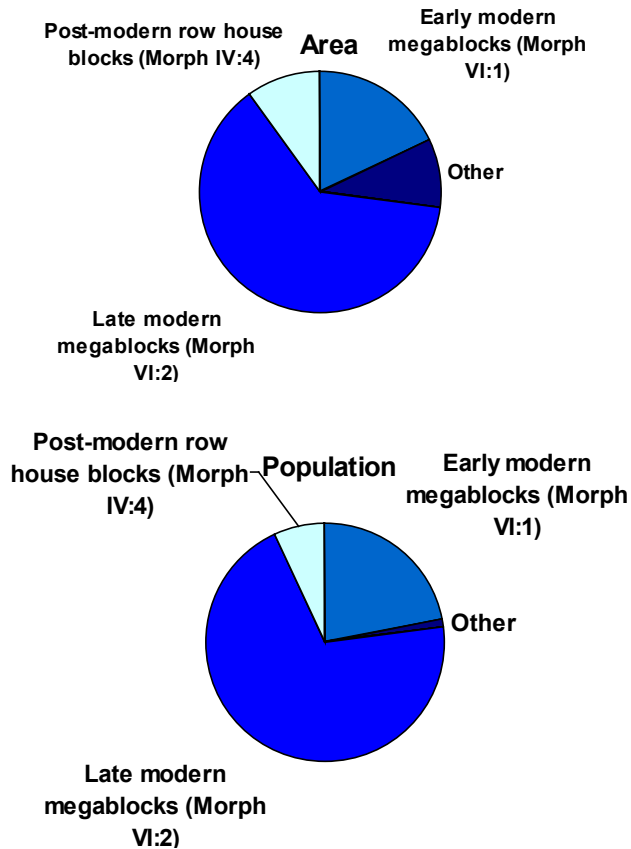


Figure 5:15 Summary morphological figure for social type O.

## Social type P morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE P	9%	5%	VI:1, VI:2	VI
Holma	1.5%	0.5%	VI:2	VI

Table 5:18 Social type P (morphological).

Social type P consists of *early modern megablocks* (61% MCA, 79% EPOP) and *late modern megablocks* (13% MCA, 16% EPOP) while the “Other” morphs only occur to a negligible extent.

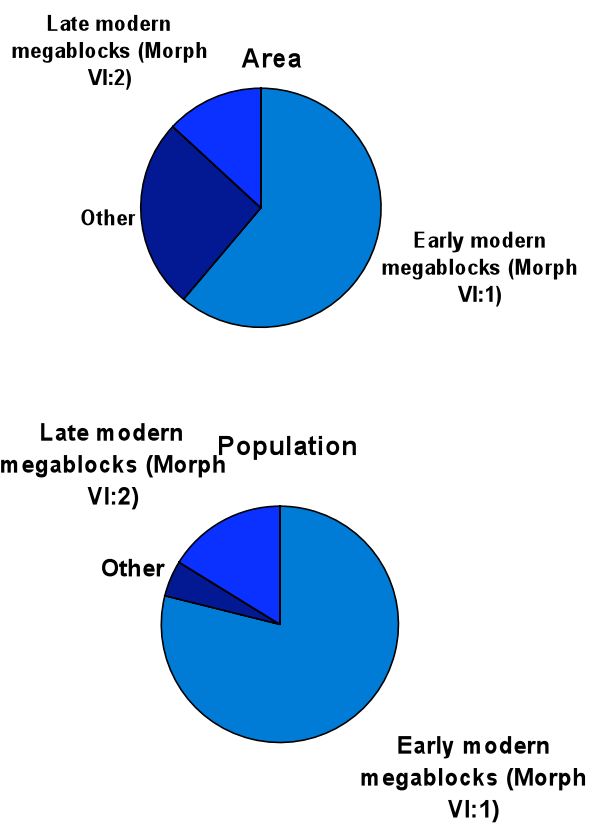


Figure 5:16 Summary morphological figure for social type P.



## Social type Q morph association

	POP	AREA	MORPH	SUPERMORPH
SOCIAL TYPE Q	6%	3%	VI:1, VI:2	VI
Örtagården	2%	1%	VI:1	VI

Table 5:19 Social type Q (morphological).

Social type Q consists of *early modern megablocks* (72% MCA, 85% EPOP), and *late modern megablocks* (Kryddgården) (28 % MCA, 15 % EPOP). Two large buildings, converted from housing to offices, explain the large area of Kryddgården in relationship to the population.

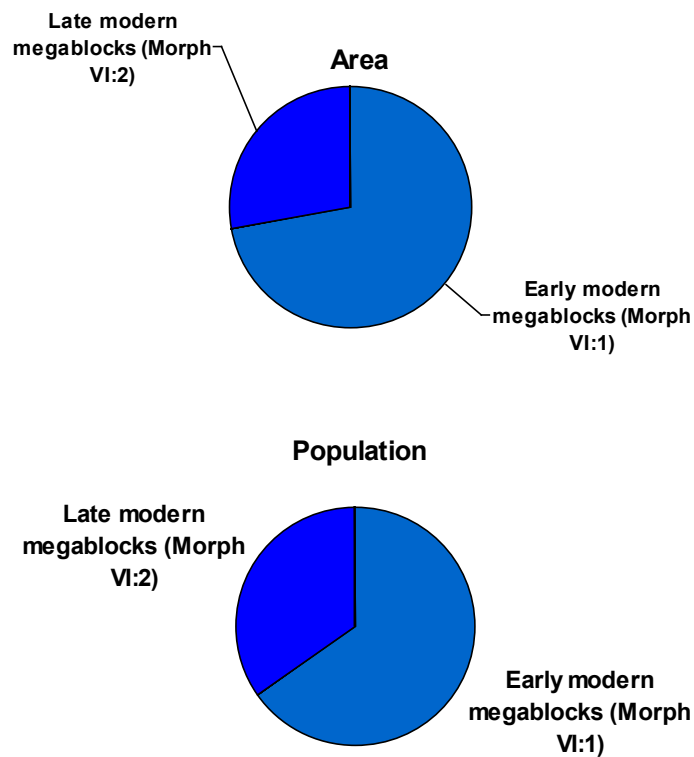


Figure 5:17 Summary morphological figure for social type Q.

This also means that people with the lowest social resource levels will most likely be found in early modern megablock areas. The opposite is not true (i.e. people living in early modern megablock areas do not necessarily have the lowest social resource levels).

Conclusions to chapter 5: Analyzing the associations of spatial morphs and social types synchronically

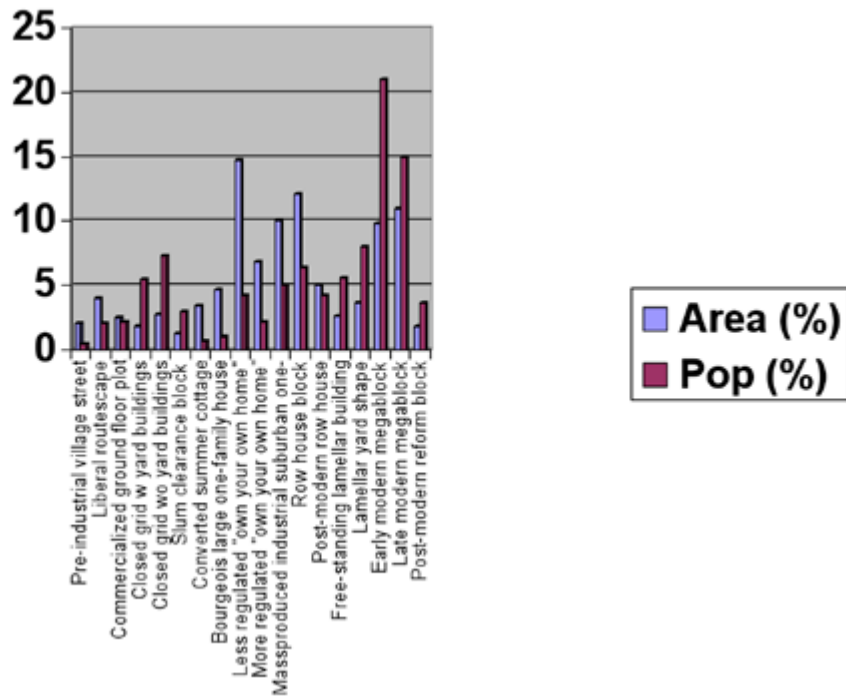


Figure 5:18 Distribution of area and population by morph for the city of Malmö

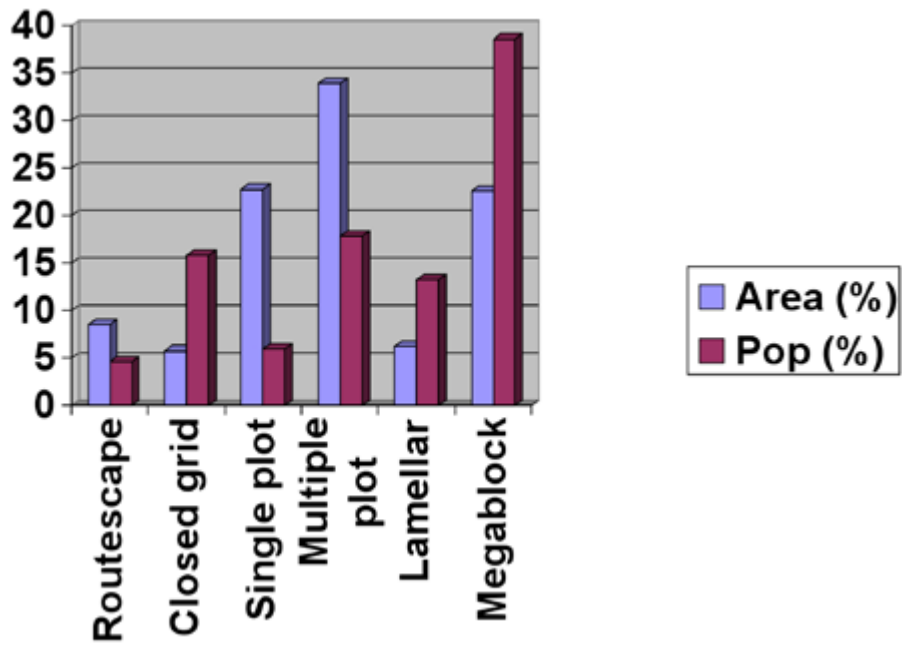


Figure 5:19 Distribution of area and population over the supermorphs in the city of Malmö

## Analyzing the spatial morphs for social association patterns (Part One: through the spatial eye)

### Spatial morph I:1: Pre-industrial village street.

2% of the area and 0.4% of the population of Malmö

This morph appears in social types F, J, L and M although it does not dominate any of them. These types also contain morphs including liberal routescapes, less regulated “own your own homes”, more regulated “own your own homes”, massproduced industrial suburban one-family housing, row house blocks and post-modern row house blocks. It is not spatially associated with either the closed grid/lamellar building found in the grid social types (types A, B, C), or the modern megablock social types (types E, G, H, I, N, O, P, Q). Spatial morph I:1 is thus socially associated with supermorphs III (Single plot one-family houses) and IV (Multiple plot one-family houses). The common denominator for this social grouping is high income levels, while educational levels vary widely. More research is needed in order to determine the social associations of this morph. It would have to be on a different scale level, since the margin of error for the low percentage of the statistics in this morph is probably high. On the subarea level Västra Klagstorp, Lockarp and Vintrie are good examples of this morph. Those particular areas share the common denominators of higher levels of “Swedishness”, the highest levels of employment and overrepresentation of the age group 0-18. It seems unlikely that there is a strong association between the spatial characteristics of pre-industrial village streets and the educational levels of their inhabitants.

### Spatial morph I:2: Liberal routescape

4 % of the area and 2 % of the population of Malmö.

This morph appears in social types B, C, D, E, F, G, K, N, P, with the largest representation in type F. It is spatially primarily associated with closed grid blocks with yard buildings, pre-industrial village streets, and largely commercialized or industrialized ground floor plots, although it is also secondarily associated with virtually all the other morphs to some extent making analysis on the social type level more or less impossible if I wish to show the full scope of this morph. The possibility that remains is to analyze social type F as an instance of this morph, in which case the analysis would be limited to the four areas Klagshamn, Vintrie, Skumparp and Toarp and excludes the more centrally located highway routes. This might, however, be a good idea, since 75% of the area and 58% of the population in this social type can be classified as belonging to the liberal routescape morph. One caveat is that much of the remainder consists of post-modern (post-1980s) housing. The common denominators for these areas are that the age group that is overrepresented is group 0-18, that educational levels are extremely varied. “Swedishness” is high, employment is the highest, and mean income levels are high. There are thus values that suggest a primary association between a specific part of the liberal routescape morph and certain educational levels. However, this would require development of some sort of submorph and surveying on a different scale. As the definition of the morph stands now, a primary association between the liberal routescape and educational levels cannot be established on the basis of this data. On the subarea level Skumparp and parts of Toarp are good examples of this morph, following the above reasoning.

### Spatial morph I:3: Largely industrialized or commercialized ground floor plot.

2.5 % of the area and 2.2 % of the population of Malmö

This morph appears in types A, B, D, E, G, and N, and does not occupy the majority of any type's area or contain the majority of its population. This morph is associated with the closed grid block and the lamellar building in the grid supermorphs, and to a lesser extent the modern megablock. No associations can be established on social type level, as the largely industrialized or commercialized ground floor plots occupy the social types to a too small extent. The scale does not work for this spatial morph. On the subarea level, Kronprinsen and parts of Flensburg are good examples of this morph. Common denominators for Kronprinsen and Flensburg are educational levels and mobility. There is thus an indication that educational levels could be associated with morph 3.

### Spatial morph II:1: Closed grid block with yard buildings.

1.8 % of the area and 5.5 % of the population of Malmö.

This morph appears in types A, B, C, E, with the best examples in types A and B. It is almost exclusively spatially associated with the closed grid block and the lamellar building in the grid supermorphs. There is some association with Early modern megablocks. In order to separate the Closed grid block with yard buildings from its morph association, studies on a different scale would be needed. High educational levels are common to all the social types and, with the exception of type E, high levels of mobility, political radicalness and an overrepresentation of the age group 25-44. On the subarea level parts of Rör sjö staden are good examples of this morph. Looking only at Rör sjö staden, the highest level of income per capita is notable in addition to the above characteristics.

### Spatial morph II:2: Closed grid block with open yard.

2.7 % of the area and 7.3 % of the population of Malmö

This morph appears in types A, B, C, E and N. It is spatially associated with closed grid blocks and lamellar buildings, and to a lesser extent with Early modern megablocks. Again, in order to disassociate other spatial morphs for social analysis it would be necessary to move to a different scale. Common denominators for social types A, B and C are high educational levels, high levels of mobility, a political radicalness and overrepresentation of the age group 25-44. On the subarea level, Södervärn, parts of Rör sjö staden, and parts of Hästhagen are good examples of this morph. Beyond the characteristics mentioned above, however, they seem to have nothing in common.

### Spatial morph II:3: *Slum clearance block*

1.2 % of the area and 3 % of the population of Malmö

This morph appears in types A, B, C, and E, and is best represented in type B. There is a large problem in relation to disassociating it from its spatial associations since the percentage of slum clearance blocks is lower in relation to the other two morphs included in the closed grid block supermorph. Again, analysis on a different scale level would be needed.

### Spatial morph III:1: Converted summer cottage.

3.4 % of the area and 0.7 % of the population of Malmö

This morph appears in types D and K, although it is not significant enough in either to warrant deeper analysis on the social type level. Some parts of Bunkeflostrand might be possible to analyze on the subarea level in relation to this morph, but would still be difficult.

Through spatial association, the type is associated with the bourgeois large one-family house, the more regulated “own your own homes”, the row house blocks, the post-modern row houses, and the massproduced industrial suburban one-family house. Common social denominators for the social type are: high income levels, the lowest levels of mobility, the highest levels of “Swedishness”, overrepresentation of the age group 0-18, high levels of employment, dark blue political affiliation. The two social types are, however, significantly different in relation to educational levels. It is difficult to know whether this holds true on a larger scale, since the morph is only related to a small part both of the social types and the areas in question.

### Spatial morph III:2: *Bourgeois large one-family house*

4.7 % of the area and 1 % of the population of Malmö

This morph appears in types A, D and M, most significantly in type D. It is spatially associated with more regulated “own your own homes” and row house blocks. It is significantly socially associated with the highest educational levels, the highest income levels both in terms of mean income levels and income per capita, the lowest mobility, the highest level of “Swedishness”, the highest levels of employment and overrepresentation of the age group 0-18. Again the numbers are based on a particular case, that of Nya Bellevue as the bourgeois large one-family houses in type D are not in the majority there and social numbers at that level needs to take other morphs into account.

### Spatial morph III:3 Less regulated “own your own home” block.

14.7 % of the area and 4.2 % of the population of Malmö.

This morph appears in types D, E, G, H, I, J, K, L, M, P. It does not dominate any of the types, and deeper analysis would be dependent on a shift in scale. This morph is spatially associated with virtually all the other morphs except closed grid blocks, and most of the lamellar buildings in the grid. Parts of Hindby (the “own your own home” area Egen Hård), parts of Höja, parts of Käglinge, parts of Kulladal, parts of Gullvik, parts of Riseberga, parts of Eriksfält, parts of Stenkällan, parts of Virentofta, parts of Nydala, and parts of Gullviksborg are included. The difficulty of analyzing this morph on the subarea level is one of the findings of this survey, since there appears to be no way to separate the social statistics from the spatial associations.

### Spatial morph IV:1: More regulated “own your own home” block.

6.8 % of the area and 2.2 % of the population of Malmö.

This morph appears in types C, D, E, G, H, J, K, L, M, N and P, with the largest representation in type N. It does not, however, account for the majority of any type, and deeper analysis would have to be on a different scale level. On the subarea level parts of Rostorp, parts of Västra Kattarp, parts of Valdemarsro, and parts of Johanneslust might be possible to analyze further. Socially, these areas have very little in common on the subarea level. Whether this is the effect of there being so few “own your own homes” or whether there really is no social connection between the “own your own homes” is a question for further research.

## Spatial morph IV:2: Mass produced industrial suburban one-family housing

10 % of the area and 5 % of the population of Malmö.

This morph appears in types D, E, F, G, H, I, J, K, L, M, and P although it does not dominate any of them and deeper analysis would have to be made on a different level. On the subarea level, Jägersro Villastad and parts of Kastanjegården are good examples of this morph. These two areas have a great deal in common socially. They are dominated by people with upper secondary school only, the highest incomes, both regarding mean incomes and incomes per capita, and the lowest mobility. "Swedishness" is medium and the overrepresented age group is 65-79. If this pattern is sustained by further research, there seems to be a fairly strong social association with the morph.

## Spatial morph IV:3: *Row house block*

12.1 % of the area of Malmö and 6.4 % of the population of Malmö

This morph appears in types C, D, E, H, I, J, K, L, M, P but does not dominate any type, making deeper analysis require a different scale. On the subarea level parts of Valdemarsro, parts of Kastanjegården, and parts of Johanneslust might be possible to analyze. These areas all have the highest levels of mean income.

## Spatial morph IV:4: Post-modern rowhouses

5 % of the area and 4.2 % of the population of Malmö.

This morph appears in types B, D, E, F, H, I, J, K, L, N, O, P, but does not dominate any type thus making deeper analysis require a different scale. On the subarea scale level Bulltofta and parts of Toarp are good examples of this morph. These two areas all have the highest levels of employment and high income levels as well as overrepresentation of the age group 0-18.

## Spatial Morph V:1: Free-standing lamellar

2.6 % of the area and 5.6 % of the population of Malmö.

This morph appears in types A, B, C, D, E, H, M, N, P. It is best represented in type C, although it does not dominate this type, making deeper analysis require a different scale. On the subarea level Lönngården, parts of Kronborg, parts of Ellstorp, parts of Rostorp, and parts of Västra Kattarp are good examples of this morph. These do not have much in common socially.

## Spatial morph V:2: Lamellar yard shape

3.6 % of the area and 8 % of the population of Malmö.

This morph appears in types A, B, C, D, E, H, M, N, and P. Although it is most prominent in type C, it does not dominate that type, thus requiring a different scale for deeper analysis. On the subarea level Annelund, Teatern, parts of Dammfri, parts of Hästhagen, parts of Kronborg, parts of Allmänna are good examples of this morph. If these areas have anything in common it is the absence of people with compulsory school only.

## Spatial morph VI:1: Early modern megablock

9.8 % of the area and 21 % of the population of Malmö.

This morph appears in types A, B, C, D, E, G, H, J, N, O, P, Q, and is most relevant in types G, N, P and Q. It is not the sole morph in any of the types, so deeper analysis would have to be done on a different scale. On the subarea level Katrinelund, Borgmästaregården, Lorensborg, Heleneholm, Augustenborg, Persborg, Hermodsdal, Örtagården, Herrgården and Västra Söderkulla are good examples of this morph. There may be two groups of social associations. In one group, the inhabitants mainly have the lowest educational levels, lowest incomes, lowest levels of “Swedishness”, lowest levels of employment, lowest levels of mobility and there is overrepresentation of age group 0-18. In the other group, there are more even distributions of education, incomes, mobility, employment, and “Swedishness”, with overrepresentation of the age group 65+. Politically, most of the areas are red although possibly darker red in the second group, and tending towards reactionary. Katrinelund is an exception with a very different profile (dominated by high education levels, radical and age group 19-24).

## Spatial morph VI:2: Late modern megablock

11 % of the area and 15 % of the population of Malmö.

This morph appears in types E, G, H, I, J, L, O, P, Q. It dominates type I and O, where the population has the lowest extent of university level educations, the highest extent of upper secondary school level educations, and high extent of compulsory school education only. Low to medium mean income levels. Low to medium income per capita. Age groups 45-79 and 6-18 are overrepresented. On the subarea level Södertorp, Kryddgården, Apelgården, Lindängen, Almgården and Holma are all good examples of this morph. Common associations for these areas, with the exception of Södertorp, are the lowest extents of high educational levels, low levels of income per capita, and dark red political color. Most of the areas are reactionary as well.

## Spatial morph VI:3: Post-modern reform block

1.8 % the area and 3.6 % of the population of Malmö.

This morph appears in types A, D, E, I, Q, although it does not dominate any of these types thus requiring a different scale for a deeper analysis. On the subarea level Västra Hamnen and Limhamns hamnområde are good examples of this morph. Common associations for these areas are high levels of people with university education, lowest levels of people with upper secondary school only and the lowest levels of people with compulsory school only, high levels of mean income, and the highest levels of income per capita.



## Analyzing the social types for spatial associations (Part two: through the social eye)

For social type A, the dominant type of housing is a combination of closed grid blocks with or without open yards and lamellar buildings. The only other social types with significant percentages of closed grid blocks are types B and N. Type B combines the grid blocks with early modern megablocks and type N has a lower percentage of grid blocks overall. Comparing types A to C, the type with the most lamellar buildings, type A, has significantly lower percentages of lamellar buildings overall, and type C lacks significant percentages of closed grid blocks buildings. The morphological combination in type A is unique, and together with types B and N it could form the basis for an analysis of closed grid buildings, while together with type C it could form the basis for an analysis of lamellar buildings in the grid.

Social type B is a combination of closed grid blocks with or without open yards, early modern megablocks and slum clearance blocks. The other two types that contain closed grid blocks to any significant extent are types A and N. In contrast to type A, which combines closed grid block buildings with lamellar buildings, the closed grid blocks in type B account for a slightly larger percentage of the overall area and population than type A and is combined with modern megablocks and slum clearance blocks rather than lamellar buildings. Type N has a significantly larger proportion of its area and population in modern megablocks. Early modern megablocks are significant in types E, G, O, P and Q as well, but in the case of types O, P and Q, the modern megablocks dominate the morphology, and in the cases of type E and G the megablocks are combined with one-family housing. None of these combinations apply to type B, which is thus morphologically unique.

Social type C is the best example of lamellar buildings in the grid. The morphs free-standing lamellar buildings and lamellar yard shape dominate this type. The only other types with significant numbers of lamellar buildings are types A and E. Type A is a combination of lamellar buildings and closed grid blocks while type E has a significantly lower percentage of lamellar building overall. Type C is thus morphologically unique.

Social type D is dominated by one-family housing of the more affluent variety – bourgeois large one-family housing, more regulated “own your own homes” and row house blocks account for most of this type’s morphology. Types E, F, H, J, K, L and M also have significant percentages of one-family housing. Type E has significantly less one-family housing overall, combined with lamellar buildings and megablocks. This is also the case, although to a lesser extent in type H. Type F differs primarily in its historical attachment to liberal routescapes. Types J, K, and L differ through their emphasis on the less regulated forms of one-family housing – less regulated “own your own homes”, and the absence of large areas of bourgeois large one-family housing. Social type M is the most similar, the main difference being the larger percentages of massproduced industrial suburban one-family housing and lesser percentages of bourgeois large one-family housing. Thus type D is morphologically unique.

Social type E is a combination of less regulated “own your own homes”, lamellar yard shapes and early modern megablocks. Compared with types A and C, which also have significant percentages of lamellar buildings in the grid, the percentages of lamellar buildings is much smaller in type E than in types J, K and L. As concerns types J, K and L which have significant percentages of less regulated “own your own homes”, these types lack any significant percentages of either lamellar buildings or megablocks. The most similar type in comparison is probably type H, which is dominated by later modern megablocks in combination with one-family housing. Type E focuses on the earlier megablocks and lamellar buildings in the grid. Type E is thus morphologically unique.

Social type F is unique in its connections to historic liberal routescapes. It has significant percentages of post-modern row houses and massproduced industrial suburban one-family housing and as such is akin to types H, J, K, L, M and O. None of these types have significant percentages of liberal routescapes, however, making type F morphologically unique.

Social type G is dominated by the early and late modern megablocks. Types B, E, H, I, N, O, P and Q also have significant percentages of modern megablocks. Type B combines megablocks with closed grid block buildings, while type E contains a significant percentage of less regulated “own your own homes”. Type H combines megablocks with significant percentages of one-family housing as well, while type I is dominated by late modern megablocks and post-modern reform blocks, showing building from a later period than than type G. Type N has a large percentage of grid block buildings while types O, P, and Q are very similar to type G. Type O has, like type I buildings from a later period, showing larger percentages of late modern megablocks, while type Q has a significant percentage of post-modern reform blocks. Type P, however, is very similar to type G. Type G is not morphologically unique, and would need to be analyzed socio-morphologically together with several other types.

Social type H is a combination of one-family housing and modern megablocks. This particular combination is unique, although the statistics must be taken with caution, since a large proportion of the area statistics refer to the one-family housing while a large proportion of the population statistics refer to the megablocks. Types D, E, F, J, K, L, and M also contain significant percentages of one-family housing, although none of those types have significant percentages of megablocks. Types B, G, N, O, P and Q have significant percentages of megablocks, but no significant percentages of one-family housing or row houses. Type E is the most similar to type H, but with some significant differences in the sorts of one-family housing within the types. Type E is dominated by the less regulated “own your own homes” while type H has more variation in the types of one-family housing and row houses present. Type H is thus morphologically unique but this uniqueness is based on a very particular mix of buildings.

Social type I is dominated by late modern megablocks and also contains significant percentages of post-modern reform blocks. Types B, E, and H have significant percentages of modern megablocks though it is not a dominant morph in any of these types. Type G has an equally dominant percentage of modern megablocks, but of the earlier variety, rather than the late modern megablock in type I. Type I is most similar to types N, O, P and Q, especially type O that is also dominated by late modern megablocks. It differs in that in type I there are both late modern megablocks and post-modern reform blocks, while in type O there are late and early modern megablocks. Type I is thus unique morphologically but can be considered morphologically together with type O for studies of the late modern megablock.

Social type J is dominated by one-family housing, having roughly equal parts of less regulated “own your own homes”, massproduced industrial suburban one-family housing, row house blocks and post-modern row house blocks. Whereas there are significant percentages of one-family housing in types D, E, F and H and even O, one-family housing does not dominate any of those types. Types K, L and M are, however, dominated by one-family housing and are actually quite similar to type J. Type L has very few post-modern buildings while type M contains more regulated “own your own homes” than the other types. Type J is thus not unique morphologically but must be analyzed together with at least type K in a morphological survey.

Social type K is dominated by one-family housing, holding roughly equal parts of less regulated “own your own homes”, massproduced industrial suburban one-family housing, row house blocks and post-modern row house blocks. Although there are also significant percentages of one-family housing in types D, E, F and H

and even O, one-family housing does not dominate those types. Types J, L and M, however, are dominated by one-family housing and are actually quite similar to type K. Type L has very few post-modern buildings while type M has a large percentage of more regulated “own your own homes”, in contrast to the other types. Type K is thus not unique but must be analyzed together with at least type J in a morphological survey.

Social type L is dominated by one-family housing, having roughly equal proportions of less regulated “own your own homes”, massproduced industrial suburban one-family housing, and row house blocks. Although there are significant percentages of one-family housing in types D, E, F and H and even O one-family housing does not dominate those types. Types J, K and M, however, are dominated by one-family housing and are quite similar to type L. Type L has very few post-modern buildings which makes it stand out from the other types so that may be considered morphologically unique.

Social type M is dominated by one-family housing, especially of the more regulated “own your own homes”. Although there are significant percentages of one-family housing in types D, E, F and H and even O, one-family housing does not dominate those types. Types J, K and L, however, are dominated by one-family housing and are quite similar to type M. Type M, however, has a larger percentage of more regulated “own your own homes” than the other types and can thus be considered morphologically unique in this respect.

Social type N is primarily a combination of closed grid blocks with open yards and early modern megablocks. Type B also combines these morphs but in type N the modern megablock dominates while in type B the closed grid blocks dominate. Although grid blocks are also significant in numbers in type A, there they are combined with lamellar buildings in the grid. Types E and G has significant percentages of early modern megablocks, but in combination with less regulated “own your own homes” and late modern megablocks, respectively. The combination in type N is thus morphologically unique.

Social type O is dominated by late modern megablocks with a smaller percentage of early modern megablocks and some post-modern row houses as well. The late modern megablock is significant in types G and H as well, although not dominant. In type G, the early modern megablock is the main morph, while in type H one-family housing accounts for more than 50% of the area. Types N, P and Q are dominated by modern megablocks but in all three cases early rather than late modern megablocks. Type I, however, is very similar to type O, the main difference being that type I has some post-modern reform blocks while in type O the difference is made up by early modern megablocks and some post-modern row houses. Type O is then morphologically unique.

Social type P is dominated by the modern megablock, specifically early modern megablocks. While the modern megablock is significant in types B, E, G, H, I, N, O and Q, it is not the dominant morph in types B, E and H. In types I and O late modern megablocks is more significant than early modern megablocks. Type N has a large proportion of closed grid blocks. Types G and Q, however, are very similar to type P, with type Q primarily differing in that it has a large amount of post-modern reform blocks. Thus type P is not morphologically unique but must be analyzed morphologically with at least type G, and preferably several other types as well.

Social type Q is dominated by modern megablocks, specifically early modern megablocks. While modern megablocks are significant in types B, E, G, H, I, N, O and P, they are not the dominant morph in types B, E and H. In types I and O late modern megablocks are more significant than early modern megablocks. Type N has a proportion of grid blocks. Types G and P, however, are very similar to type Q. Thus type Q is not morphologically unique but must be analyzed morphologically with several other types.

## Correlation analysis

Social variable	Morph association	Dir	Value
"Swedishness"	I:1 Pre-industrial village streets	+	0.326
Mean income	I:1 Pre-industrial village streets	+	0.595
Employed	I:1 Pre-industrial village streets	+	0.344
Reactionariness	II:1 Closed grid blocks with yard buildings	-	0.331
Mobility	II:1 Closed grid blocks with yard buildings	+	0.333
Reactionariness	II:2 Closed grid blocks with open yards	-	0.601
Mobility	II:2 Closed grid blocks with open yards	+	0.635
Reactionariness	II:3 Slum clearance blocks	-	0.331
Mobility	II:3 Slum clearance blocks	+	0.333
Political blueness	III:1 Converted summer cottages	+	0.353
Reactionariness	III:3 Less regulated "own your own homes"	+	0.341
Mobility	III:3 Less regulated "own your own homes"	-	0.569
Reactionariness	IV:2 Massproduced industrial suburban one-family housing	+	0.376
"Swedishness"	IV:2 Massproduced industrial suburban one-family housing	+	0.373
Mean income	IV:2 Massproduced industrial suburban one-family housing	+	0.505
Employed	IV:2 Massproduced industrial suburban one-family housing	+	0.481
Mobility	IV:2 Massproduced industrial suburban one-family housing	-	0.636
Mean income	IV:3 Row house blocks	+	0.325
Employed	IV:3 Row house blocks	+	0.302
Mobility	IV:3 Row house blocks	-	0.343
Reactionariness	V:2 Lamellar yard shapes	-	0.493
"Swedishness"	VI:1 Early modern megablocks	-	0.39
Mean income	VI:1 Early modern megablocks	-	0.482
Employed	VI:1 Early modern megablocks	-	0.519
Income per capita	VI:1 Early modern megablocks	-	0.467
Upper secondary school only	VI:2 Late modern megablocks	+	0.331

Table 5:20 Table of significant regression r-square values for morphs, relating to social types (larger than 0.3).

The two strongest social indicators in relation to a morphology based on estimated population (EPOP values) are reactionariness and mobility. The third and fourth are employment and mean income. The fifth is "Swedishness". The sixth to eighth are people with upper secondary school only, income per capita and political blueness or redness. People with university education and people with compulsory school only are the two weakest indicators.

Reactionariness indicates morphs III:3 : Less regulated "own your own homes" and IV:2 : Massproduced industrial suburban one-family housing and not II:1 : Closed grid blocks with yard buildings, not II:2 : Closed grid blocks with open yards, not II:3 Slum clearance blocks, not IV:2 Lamellar yard shapes.

Mobility indicates II:1 Closed grid blocks with yard buildings, II:2 Closed grid blocks with open yards, II:3 Slum clearance blocks and not III:3 Less regulated "own your own homes", not IV:3 Row house blocks.

Employment indicates I:1 Pre-industrial village streets, IV:2 Massproduced industrial suburban one-family housing and IV:3 Row house blocks and not VI:1 Early modern megablocks.

Mean income indicates I:1 Pre-industrial village streets, IV:2 Massproduced industrial suburban one-family housing, IV:3 Row house blocks and not VI:1 Early modern megablocks.

“Swedishness” indicates I:1 Pre-industrial village streets, IV:2 Massproduced industrial suburban one-family housing and not VI:1 Early modern megablocks.

Political blueness indicates III:1 Converted summer cottages.

Medium education indicates VI:2 Late modern megablocks.

Income per capita indicates not VI:1 Early modern megablocks.

The strongest spatial indicator is IV:2 Massproduced industrial suburban one-family housing. The second strongest is VI:1 Early modern megablocks, The third to fourth are IV:3 Row house blocks and I:1 Pre-industrial village streets. The fifth to eighth are II:1 Closed grid blocks with yard buildings, II:2 Closed grid blocks with open yards, II:3 Slum clearance blocks and III:3 Less regulated “own your own homes”. The ninth to eleventh are VI:2 Late modern megablocks, V:2 Lamellar yard shapes, and III:1 Converted summer cottages. The material does not enable conclusions to be drawn about the indicative strength of the remaining morphs.

IV:2 Massproduced industrial suburban one-family housing indicates reactionariness, “Swedishness”, high mean income and employed.

VI:1 Early modern megablocks indicate not “Swedishness”, not high mean income, not employed and not high income per capita.

IV:3 Row house blocks indicate high mean income and employed and not mobility.

I:1 Pre-industrial village streets indicate “Swedishness”, high mean income and employed.

II:1 Closed grid blocks with yard buildings, II:2 Closed grid blocks with open yards and II:3 Slum clearance blocks indicate mobility and not reactionariness.

III:3 Less regulated “own your own homes” indicate reactionariness and not mobility.

V:2 Lamellar yard shapes indicate not reactionariness i.e. radicalness.

VI:2 Late modern megablocks indicate people with upper secondary school only.

III:1 Converted summer cottages indicate political blueness.

Type	Liberal routescape	Closed grid block with yard buildings	Closed grid block with open yard	Slum clearance block	Bourgeois large one- family house	More regulated “own your own home”	Less regulated “own your own home”	Massproduced industrial suburban one-family housing	Row house	Post- modern row house	Free- standing lamellar	Lamellar yard shape	Early modern megablock	Late modern megablock	Post- modern reform block
A		15/18	19/23								20/18	18/18			
B		21/22	31/25	12/11									17/20		
C											31/38	38/27			
D					34/19	15/16			21/21			6/18	15/30		
E						35				15/29					
F	75/58							8/13							
G													46/51	26/24	
H						26/	8/	14/	27/				/8	/38	
I														63/82	10/11
J							27/10	22/22	16/23	15/20					
K							26/20	17/16	18/18	10/31					
L							31/17	26/26	24/34						
M						41/		24/	18/						
N			24/24										40/58		
O										11/5			20/25	69/70	
P													55/65	20/30	
Q													53/65	28/15	19/20

Table 5:21 Relationship between social types and spatial morphs. This table shows the presence of the most relevant morphs in relation to the spatial types. The numbers are in the format population/area. The numbers indicate percentages.

1. When I studied the area based statistics, it became apparent that there was an abundance of social variables which covered a variety of social circumstances and situations. Variables such as education, economy, gender, ethnicity, employment and age are powerful indicators of social positions. Spatially, however, variables are less flexible and powerful. Granted, building age and rental structure are useful indicators but basic spatial variables such as centrality, space accessibility and density were not in the area based statistics. I wished to take this further, claiming that these variables (centrality, space accessibility and density) indicate less than what is potentially possible when working with spatial variables. Therefore, in this chapter I used the association with block morphology as an indicator in itself. What I remain critical of is that variables such as ownership structure and building age in themselves cannot be sufficient reduction of spatiality to serve as indicative of it.
2. Research into submorphs is currently being developed at the Department of Architecture at Lund University. See for example Kärholm's forthcoming work on commercial public spaces: Spaces of consumption
3. Caniggia uses the term pertinent strip (2001:125) to my eyes identically.
4. Nothing excludes the possibility of examining the intention/extension distinction in relation to street networks rather than to buildings. Such work has been suggested in the (forthcoming) paper "Big Box Landscapes" by Kärholm, M. and Persson, R.. See also the work of Mattias Kärholm on commercial public space (2008 forthcoming).
5. One of the main problems with associating spatial routescapes with social data is that unless I have access to individual data on a building or property level the data is constructed to fit area categories that do not translate well into routescape thinking. Therefore the slightly disappointing results of associating spatial route data with social data can be seen as a problem with the data. This difficulty will have to be solved in future research by gaining access to better data. I still remain optimistic on the possibilities of associating social housing data with routes. Associating functional data (i.e. shopping use) with routes was tried in the AGORA project and the results were promising. Associating housing data however, was proven to be difficult in the AGORA project as well, hinting that the problem will resurface whenever route based data is wanted.
6. Such submorphs were furthered investigated by the Department of Architecture at Lund University in cooperation with several other institutions during the period 2002-2006 primarily in the AGORA-project. The causes and effects of routes (stråk) in Malmö city planning have, largely as a result of the project, been reexamined and strategies have been revised in a number of projects led by the City of Malmö. The understanding of routes and their historical and actual importance have, likewise, been improved in the work of the Department of Architecture. Several other researchers at the department have been involved with the project and their work has had an impact on the thinking on routes presented here, notably Dr. Tomas Wikström, Dr. Mattias Kärholm, Emma Nilsson, Ph. D. student, and Jenny Carlstedt, GIS co-ordinator. Project partners included Space Syntax Limited, London whose space syntax thinking à la Hillier in sightlines and accessibility were very important and Central Saint Martins, London whose thinking on urban choreography and assemblages relate to the commercial uses of routes, Elisava Barcelona with work on wayfinding and pathfinding and HDK, Utrecht with thinking on urban rooms and of course the City of Malmö planners whose practical considerations challenged theoretical route thinking to apply to the specific circumstances of the City of Malmö (AGORA – Cities for people, deliverables D2, D3, D4, D6, D7, Persson (2004), Nilsson (2006), Kärholm (2006), Wikström (2006), Hillier (1997), Karimi (1999), Fontana Giusti (2005))



7. Here and at most instances I use the term spatially to refer to such objects as are constructed with terms like area, property area, building age, centrality level or number of floors while socially will mean related to individual based statistics like age, gender, employment or ethnicity. That doesn't mean that this division is not possible to question. It means that I am not questioning it in relation to my quantitative data. Now, saying that a morph has greater impact spatially than socially also means that I hold the belief that this could indicate that spatial sciences (architecture, geography, archeology) could traditionally have placed a greater emphasis on this morph than social sciences (sociology, anthropology, political science, ethnology).
8. Gregor Paulsson demonstrates the change from the agrarian town to the capital trade city through the increase of percentage of traders among the town populace. He also problematizes my statement that these changes were the result of the liberal reforms in 1846 by pointing out that already in 1840 the change in the populace was apparent in Gävle. Apparently, in reality the process between legislation and actual change is not a one-way process (Paulsson 1950:172-174)
9. One of the most interesting aspects of the closed grid block is its symbolic value for architects. Gamla Staden in Malmö, as well as Rörstaden and Möllvången are often described as being mainly constituted of the closed grid block although in reality a much smaller percentage, not even half of the areas, are built in this morphology any more. The reason is the historical representation of the industrial city and its pervasive symbolic value in city planning. For examples of literature representing the inner city as a city of the closed city grid block (kvarterstad) see Malmö ÖP 2001:270
10. These numbers are a bit conservative for reasons of difficulty of surveying. A number of slum clearance blocks have been placed in the lamellar or early modern megablock morphs due to surveying difficulties.
11. On the whole, I'd like to point out the prominence of less regulated "own your own homes" as a finding of the research as the type as such does not seem to have received recognition in contemporary literature. The garden cities, well described by Johan Rådberg, are representative of the more regulated forms, which I have called more regulated "own your own homes", but there are large parts of Malmö that are covered by more irregular forms of housing. These could possibly be a bit underresearched.
12. Bourgeois should by no means be thought of as a derogatory term. It simply refers to a historical period when the morph was conceived and that context, emphasising the morphogenetical character of the morphology herein.
13. In Rådberg's terminology it is type. In my terminology it is morph. Both of the terminologies describe similar spatial phenomena. I outlined the differences between his and my terminology as I classified phenomena. I have not, however, tried to deconstruct Rådberg's terminology in order to analyze how it was constructed, but have concentrated on outlining mine, while relating it to Rådberg's, the most influential building block typology in Sweden today. One might wonder why I did not use Rådberg's typology directly and relate it to the social variables, and the short answer is that Rådberg's typology is not comprehensive.
14. A comprehensive study of small farm "own your own homes" is Germundsson 1993. See also Edling 1996. A comprehensive study of dwelling "own your own homes" is being developed at the Department of Architecture, Lund University, as this area seems to have been overlooked by architectural and geographical research.
15. When considering this, I speculate that the curtailing of self-expression in the city applied only to the working class, while the bourgeoisie were free to express themselves in their large one-family homes, i.e. that the rules, regulations and type drawings were class means of restricting the free expression (in building) of the working class and part of class ideology.
16. Looking at facades from the 1920s the lamellar building seems curiously enough to be only an abstraction away from the closed grid building once the yard buildings had been removed. By removing the the corner buildings from the 'line buildings' of the 1920s and repeating the stairwell the lamellar building is already invented.



# Discussion and conclusions

## CHAPTER SIX

### A short summary and a few tables

I begin by repeating a few of the most important tables from chapters two, three, four and five.

**Chapter two** contains a map of the social world of the subareas of Malmö:

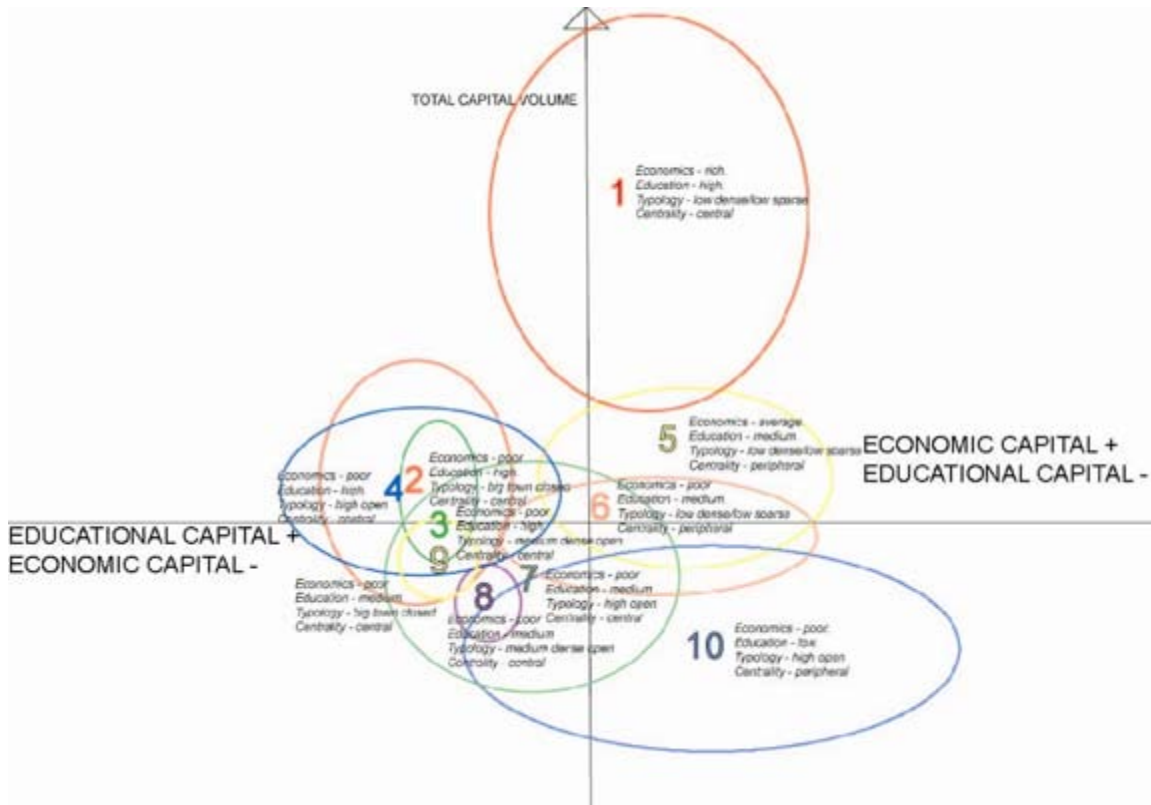


Figure 6:1 Map of the social world of Malmö.

This diagram shows a picture of the social world of Malmö where two types of capital contribute to the resource level – educational capital and economic capital. The ten different classes can roughly be translated into indicators of ten types of habitus. How these ten classes relate to the 17 social types is detailed below.

In **chapter three** this transformation was deepened and modified and 17 social types were said to represent the residential field of Malmö. These 17 social types indicate 17 forms of habitus in Malmö:

Areas (del-områden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Social Type A	46,859	++/--/--	0/++	+	++	25-44	+/0	DK BLU	RAD
Social Type B	23,476	+/-/-	--/-	++	-	25-44	-/0	DK RED	RAD
Social Type C	15,642	0/+/-	-/0	+	-	19-24	0/0	DK RED	rad
Social Type D	13,619	++/--/--	++/++	--	++	6-18	++/0 <sup>1</sup>	DK BLU	EQ <sup>2</sup>
Social Type E	23,359	+/0/-	+/+	0	++	80+	+/F	LT BLU	reac
Social Type F	2,361	+/0/--	++/+	-	++	0-5	++/0	N/A	N/A
Social Type G	9,209	0/+/0	0/+ <sup>3</sup>	-	+	65+	0/0	LT RED	reac <sup>4</sup>
Social Type H	8,595	0/0/+	0/- <sup>5</sup>	0	-	6-18 <sup>6</sup>	0/0 <sup>7</sup>	EQ	EQ <sup>8</sup>
Social Type I	19,096	-/++/+	0/0	--	0	65-79	+/0	DK RED	REAC
Social Type J	16,186	-/++/0	++/+ <sup>9</sup>	-- <sup>10</sup>	+	6-18	++/0 <sup>11</sup>	LT BLU	REAC <sup>12</sup>
Social Type K	12,636	+/+/-	++/+ <sup>13</sup>	--	++ <sup>14</sup>	6-18	++/0	DK BLU	reac <sup>15</sup>
Social Type L	10,910	0/++/-	++/+	--	++	65-79	++/0	N/A	N/A
Social Type M	3,300	0/+/+	++/++	-	++	45-64	++/0	N/A	N/A
Social Type N	6,595	0/-/++	--/--	++	--	19-24	--/0	DK RED	RAD
Social Type O	14,830	--/++/++	-/-	0	-	65-79	-/0	DK RED	REAC
Social Type P	23,190	--/++/++	-/--	-	--	0-5	0/0	DK RED	reac
Social Type Q	14,917	--/++/++	-/--	-	--	0-5	--/0	DK RED	reac

Table 6:1 The social types (social values).

In **chapters four and five** the social types were supplemented with spatial and morphological variables, showing how the social types also are (or not are) socio-spatial types. Below (question two) is a discussion on how the social types relate to the spatial types.

	POP	AREA	-1940	1940-1960	1960-1980	1980+	RENTAL	CO-OP	OWN	MORPH	SUPERMORPH	IND	OUT	LOC
Social Type A	17 %	8 %	+	++	0	--	++	+	--	3-5, 14-15	I, II, V	++	-	++
Social Type B	8 %	3 %	++	--	0	--	++	0	--	3-6, 16	I, II, VI	-	--	+
Social Type C	6 %	3 %	++	+	-	--	0	++	--	2, 14-15	I, V	+ <sup>17</sup>	-	++ <sup>18</sup>
Social Type D	5 %	14 %	0	+	0	-	-	-	++	7-12	III, IV	- <sup>19</sup>	++	0
Social Type E	9 %	10 %	0	+	-	-	0	++	--	2-3, 9, 11, 15-18	I, III, IV, V, VI	+	0	-
Social Type F	1 %	3 %	++	-	--	++	-	0	+	1-2, 11-13	I, IV	--	++	--
Social Type G	3 %	3 %	--	++	--	--	+	++	--	1-2, 11-13, 16	I, IV, VI	++	0	0
Social Type H	3 %	4 %	+	+	+	--	0	0	0	9-12, 16-17	III, IV, VI	0	0	-
Social Type I	7 %	7 %	-	--	++	+	--	++	-	9, 11-12, 17-18	III, IV, VI	+	0	-
Social Type J	4 %	12 %	0	--	0	++	-	++	0	9, 11-13	III, IV	0	+	--
Social Type K	5 %	10 %	0	0	--	+	-	--	++	7, 9-13	III, IV	- <sup>20</sup>	++	-
Social Type L	4 %	10 %	0	--	+	-	-	0	+	9, 11-12	III, IV	0	++	--
Social Type M	1 %	3 %	+	-	--	--	--	--	++	10-12	IV	-	+	--
Social Type N	2 %	1 %	+	+	-	--	+	0	--	2, 5, 11, 16	I, II, IV, VI	--	-	++
Social Type O	5 %	3 %	--	-	+	--	+	++	--	13, 16-17	IV, VI	0	-	-
Social Type P	9 %	5 %	-	--	++	--	+	+	--	16-17	VI	--	-	-
Social Type Q	6 %	3 %	--	--	++	--	++	--	--	16-17	VI	--	--	0

Table 6:2 The social types (spatial and morphological values).

## Discussion of the methods

The methods used should fulfill three criteria according to Bourdieu (as expounded upon by Broady; see chapter three)

- a) They should be tools to break down spontaneous assessments,
- b) They should do service in the work of constructing systems of relations,
- c) They should contribute to creating hypotheses.

Below, I show how I have used these research criteria. First, I discuss how the (more or less) spontaneous assessment I made in chapter two was modified through the course of the study, as performed in chapter three.

In **chapter two**, ten types of city environment were tentatively designated. In **chapter three**, with the social types I re-arranged these into 17 social types thus breaking down the more or less spontaneous assessment made in chapter two. I relate how I initially thought of the classification of the work in chapter three. I go through the ten initial classifications and discuss how the social types relate to each. I also mention such social types as were omitted in chapter two, because my spontaneous assessment did not pick them out of the material. I follow the criteria a, b and c above while doing this.

1. *Centrally located areas inhabited by the wealthy.* These people are wealthy and well educated. The areas have low height buildings, sometimes dense and sometimes sparse. Central location (Bellevue, Fridhem, etc.). These are the most affluent areas in Malmö. Situated on the waterfront, historically centrally located between the city centers of Malmö and Limhamn. Highly syno-morphological (this has been the most affluent part in Malmö since it was built during the 19<sup>th</sup> century). Approximately 12,000 inhabitants.

This category 1 corresponds most closely to social type D (Västervång):

Areas (delområden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Social Type D	13,619	++/--/--	++/++	--	++	6-18	++/0 <sup>20</sup>	DK BLU	EQ <sup>21</sup>

Table 6:3 Social type D (social values).

	POP	AREA	-1940	1940-1960	1960-1980	1980+	RENTAL	CO-OP	OWN	MORPH	SUPER-MORPH	IND	OUT	LOC
Social Type D	5 %	14 %	0	+	0	-	-	-	++	7-12	III, IV	- <sup>22</sup>	++	0

Table 6:4 Social type D (spatial and morphological values)

- a) Spontaneously I thought of social type D as having a central location, which is wrong. The area is central in relation to historical development of the two towns of Malmö and Limhamn, but it is not central in relation to the contemporary topology of Malmö. Besides centrality, the addition of the additional variables through the social type adds depth to the description without contradicting the initial assessment.
- b) In the system of relations, social type D plays an important role, especially considered in relation to education. Social type D has a number of subareas with the highest numbers of people with university educations while at the same time having the highest income levels.

- c) The subareas of western Malmö where social type D exist have historical and morphological significance, and a seemingly continuous position as powerful subareas in Malmö. One hypothesis is that this position can be confirmed through a diachronic study of the subareas. These subareas should also be included in an ethnographic study, owing to its extreme levels. A study might show an abundance of signs (in the sense of Bourdieu; i.e. signs of symbolic capital) in the building environment that are used exclusively in these areas.
2. *Centrally located areas inhabited by the well-educated I.* The people are of less means and well educated. The areas are built in an urban closed grid system. Central location (Hästhagen, Davidshall, Rörsjöstaden, Möllevången, etc.). Most of the centrally located well-educated residents live in the 19<sup>th</sup> century grid. Approximately 34,000 inhabitants
  3. *Centrally located areas inhabited by the well-educated II.* The people are of less means and well educated. The areas are built in a medium dense grid system. Central location (Fågelbacken, Kronborg, Rönneholm, Dammfri). Some of the centrally located well-educated residents live in apartments with an open block structure. Approximately 15,000 inhabitants.
  4. *Centrally located areas inhabited by the well-educated III.* The people are of less means and well educated. The areas have highrise buildings. Central location (Ribersborg, Katrinelund, Lugnet, Mellanheden). Some of the centrally located well-educated residents live in highrise buildings. Approximately 14,000 inhabitants.

I reorganized these three categories into social type A (Hästhagen), social type B (Möllevången) and social type E (Gamla Limhamn), moving several areas into new groupings.

Areas (del-områden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Social Type A	46,859	++/--/--	0/++	+	++	25-44	+/0	DK BLU	RAD
Social Type B	23,476	+/-/-	--/-	++	-	25-44	-/0	DK RED	RAD
Social Type E	23,359	+/0/-	+/+	0	++	80+	+/F	LT BLU	reac

Table 6:5 Social types A, B and E (social values).

	POP	AREA	-1940	1940-1960	1960-1980	1980+	RENTAL	CO-OP	OWN	MORPH	SUPER-MORPH	IND	OUT	LOC
Social Type A	17 %	8 %	+	++	0	--	++	+	--	3-5, 14-15	I, II, V	++	-	++
Social Type B	8 %	3 %	++	--	0	--	++	0	--	3-6, 16	I, II, VI	-	--	+
Social Type E	9%	10 %	0	+	-	-	0	++	--	2-3, 9, 11, 15-18	I, III, IV, V, VI	+	0	-

Table 6:6 Social types A, B and E (spatial and morphological values).

- a) My spontaneous assessment that all these areas had people with less means and high percentages of people with university educations only held for the subareas that ended up in social type B. Both social type A and social type E have wealthier people. Morphologically, social type A and social type B differ in that the lamellar buildings with a medium dense grid are associated with social type A while social type B has more closed grid blocks built before 1940. Social type E differs more significantly from social types A and B, which I neglected in my initial assessment in chapter two. The initial hypothesis in which I associated this social type with the presence of more highrise buildings did not hold. Instead, social type E seems more associated with an older age group (65+) than social types A and B, as well as with more tenant-owned apartments.
- b) Social types A and B together cover most of the traditional inner city and occupy significant positions within the system of relations that is Malmö's social field of subareas. Social type E has a more peripheral position topologically, but is closer to the historical center between Malmö and Limhamn.
- c) The similarity in radicalness together with the difference on the red-blue scale of political inclinations is a very interesting sub field to study, especially when comparing social types A and B. How have political inclinations helped to form these areas over a historical period and how are these inclinations linked to the economic history of the city? It would also be interesting to study the age group 25-44 in relation to these two areas. Social type E appears to be more closely linked to the age group 65+ than to the younger age group.

5. *Peripherally located areas inhabited by the wealthy.* The people have average wealth and medium numbers of people with university educations. The areas have detached housing and are located at commuting distance from workplaces. Peripheral locations (Riseberga, Bunkeflostrand, Jägersro Villastad, etc.). Approximately 29,000 inhabitants.

This category corresponds most closely to social types K and L.

Areas (Del-Områden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Social Type K	12,636	+/+/-	++/+ <sup>23</sup>	--	++ <sup>24</sup>	6-18	++/0	DK BLU	reac <sup>25</sup>
Social Type L	10,910	0/++/-	++/+	--	++	65-79	++/0	N/A	N/A

Table 6:7 Social types K and L (social values).

	POP	AREA	-1940	1940-1960	1960-1980	1980+	RENTAL	CO-OP	OWN	MORPH	SUPER-MORPH	IND	OUT	LOC
Social Type K	5%	10 %	0	0	--	+	-	--	++	7, 9-13	III, IV	<sup>-26</sup>	++	-
Social Type L	4%	10 %	0	--	+	-	-	0	+	9, 11-12	III, IV	0	++	--

Table 6:8 Social types K and L (spatial and morphological values).

- a) Spontaneously, I assessed these subareas as having people with average means and with medium numbers of people with university educations, but when I examined them separately, only social type K has an abundance of people with upper secondary school level education. Both types are economically strong. The suburban/peripheral location holds.
- b) With 20% of the property area of Malmö and 9% of the population, these two types should not be ignored in an account of Malmö.
- c) The differences in educational levels might correspond to the difference in age groups and would make for an interesting study.

6. *Centrally/peripherally located areas inhabited by the less well-to-do.* The people are of less means and have medium numbers of people with university educations. The areas have low, dense or low, sparse buildings. Peripheral location (Kvarnby, Hindby, Rostorp, Valdemarsro, Håkanstorp). These areas mostly consist of detached housing located closer to the center than the wealthier peripheral areas. Concentrated in the northeast (egnahemsområden). A smaller group of approximately 6,000 inhabitants.

This category corresponds most closely to social type H.

Areas (Del-Områden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Social Type H	8,595	0/0/+	0/- <sup>27</sup>	0	-	6-18 <sup>28</sup>	0/0 <sup>29</sup>	EQ	EQ <sup>30</sup>

Table 6:9 Social type H (social values).

	POP	AREA	-1940	1940-1960	1960-1980	1980+	RENTAL	CO-OP	OWN	MORPH	SUPER-MORPH	IND	OUT	LOC
Social Type H	3%	4 %	+	+	+	--	0	0	0	9-12, 16-17	III, IV, VI	0	0	-

Table 6:10 Social type H (spatial and morphological values).

- a) Spontaneously I assessed these areas fairly correctly
- b) A large number of medium values in this group makes it interesting as the center point in a social field study. What is interesting as well is the relatively small number of people who live here.
- c) These areas, with a large portion being “own your own homes” could be the starting point for studies of the “own your own home” areas of Malmö.



7. *More central highrise areas inhabited by medium numbers of people with university educations.* The people are of less means and have medium numbers of people with university educations (Ellstorp, Kronprinsen, Lorensborg, etc.). Approximately 22,000 inhabitants.
8. *Open block highrise subset of the more central areas inhabited by medium numbers of people with university educations.* The people are of less means and have medium numbers of people with university educations. (Annelund, Lönngården). Approximately 3,000 inhabitants.

These categories corresponds most closely with social type C and social type G.

Areas (Del-Områden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Social Type C	15,642	0/+/-	-/0	+	-	19-24	0/0	DK RED	rad
Social Type G	9,209	0/+/0	0/+ <sup>31</sup>	-	+	65+	0/0	LT RED	reac <sup>32</sup>

Table 6:11 Social types C and G (social values).

	POP	AREA	-1940	1940-1960	1960-1980	1980+	RENTAL	CO-OP	OWN	MORPH	SUPER-MORPH	IND	OUT	LOC
Social Type C	6 %	3 %	++	+	-	--	0	++	--	2, 14-15	I, V	+ <sup>33</sup>	-	++ <sup>34</sup>
Social Type G	3%	3 %	--	++	--	--	+	++	--	1-2, 11-13, 16	I, IV, VI	++	0	0

Table 6:12 Social types C and G (spatial and morphological values).

- a) Spontaneously I did not distinguish between the age group and the different morphologies these two social types occupy.
- b) I still view these types as interesting in-between positions in the field of Malmö's subareas. They occupy slots in the social field occupied by no other types.
- c) Both areas have a high degree of tenant-owned apartments, but social type C is associated with buildings before 1940 and social type G to buildings in the 1940 to 1960 period. This corresponds to my initial analysis of there being an open block subset of a larger group. The types of buildings are also relevant to a possible study of these two groups.

9. *Centrally located areas inhabited medium numbers of people with university educations.* The people are of less means and have medium numbers of people with university educations. The areas are built in a large town closed grid system (19<sup>th</sup> century grid). (Värnhem, Östervärn, Norra Sofielund). Approximately 8,000 inhabitants.

I have now merged this group with other subareas into social type B.

10. *Peripheral areas inhabited by people of less means and low numbers of people with university educations.*

The people are of less means and have low numbers of people with university educations. Buildings are highrise. Peripheral locations ( Törnrosen, Örtagården, Herrgårdens, Persborg, Heleneholm, Hermodsdal, Almgården, etc.). Approximately 63,000 inhabitants.

This group was the one I reorganized completely, breaking it down into several social types.

Areas (del-områden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Social Type I	19,096	-/++/+	0/0	--	0	65-79	+/0	DK RED	REAC
Social Type O	14,830	--/++/++	-/-	0	-	65-79	-/0	DK RED	REAC
Social Type P	23,190	--/+/++	-/--	-	--	0-5	0/0	DK RED	reac
Social Type Q	14,917	--/+/++	-/--	-	--	0-5	--/0	DK RED	reac

Table 6:13 Social types I, O, P and Q (social values).

	POP	AREA	-1940	1940-1960	1960-1980	1980+	RENTAL	CO-OP	OWN	MORPH	SUPER-MORPH	IND	OUT	LOC
Social Type I	7%	7 %	-	--	++	+	--	++	-	9, 11-12, 17-18	III, IV, VI	+	0	-
Social Type O	5%	3 %	--	--	+	--	+	++	--	13, 16-17	IV, VI	0	-	-
Social Type P	9%	5 %	-	--	++	--	+	+	--	16-17	VI	--	-	-
Social Type Q	6%	3 %	--	--	++	--	++	--	--	16-17	VI	--	--	0

Table 6:14 Social types I, O, P and Q (spatial and morphological values).

- a) These social types are actually similar, but not as similar to warrant grouping them all into one social type. First, the dominant age groups differ between types I and O, where the 65-79 age group is overrepresented, and types P and Q where the 0-5 age group is overrepresented. Types I, O and P have a strong representation of upper secondary school level educated while type Q is more dominated by people with compulsory school education only.
- b) The position at the lower end of the social field of Malmö is very important for these types. In my spontaneous observation I erroneously grouped all the people together.
- c) Interestingly, the spatial factors seem more similar than the social factors for these four types. This could provide material for a substudy. A study of social positions in relation to modern megablocks might also make an interesting future study.

Finally, a number of social types had “slipped through the net” in my initial assessment. I list them below:

Areas (del-områden)	POP	EDU	INC	MOB	SWE	AGE	WOR	POL	RAD
Social Type F	2,361	+/0/--	++/+	-	++	0-5	++/0	N/A	N/A
Social Type J	16,186	-/++/0	++/+ <sup>35</sup>	-- <sup>36</sup>	+	6-18	++/0 <sup>37</sup>	LT BLU	REAC <sup>38</sup>
Social Type M	3,300	0/+/+	++/++	-	++	45-64	++/0	N/A	N/A
Social Type N	6,595	0/-/++	--/--	++	--	19-24	--/0	DK RED	RAD

Table 6:15 Social types F, J, M and N (social values).

	POP	AREA	-1940	1940-1960	1960-1980	1980+	RENTAL	CO-OP	OWN	MORPH	SUPER-MORPH	IND	OUT	LOC
Social Type F	1%	3 %	++	-	--	++	-	0	+	1-2, 11-13	I, IV	--	++	--
Social Type J	4%	12 %	0	--	0	++	-	++	0	9, 11-13	III, IV	0	+	--
Social Type M	1%	3 %	+	--	--	--	--	--	++	10-12	IV	-	+	--
Social Type N	2%	1 %	+	+	-	--	+	0	--	2, 5, 11, 16	I, II, IV, VI	--	-	++

Table 6:16 Social types F, J, M and N (spatial and morphological values).

- a) Social type F relates to four villages on the outskirts in Malmö where, in some cases, additional residential estates have been built since 1980. I rejected them initially, but later realized their socio-spatiality differs enough to put them into a type of their own. Social type J encompasses most parts of Oxie, on the outskirts of Malmö and a few other subareas, that are different enough to be put into a category of their own. Social type M also contains (other) parts of Oxie as well as a few other suburban one-family housing areas. Finally social type N includes the Södra Sofielund area with its combination of many people with university educations and many people with compulsory school only coupled with low numbers of people with upper secondary school.
- b) Each of the four areas has interesting traits which fill gaps in the social structure of Malmö and which I overlooked in my spontaneous observations.
- c) Social type F is interesting in its historical spatial differences from all other subareas. Social types J and M are very interesting when considering Oxie as an entity, and social type J includes the extreme combination of high numbers of people with university education coupled with high numbers of people with compulsory school only, while having low numbers of people with upper secondary school.

## Conclusions:

In these conclusions I address my two basic questions, outlined in the introduction:

- 1) Which social variables best describe segregation? Is examining segregation in terms of education a fruitful tool for analyzing segregation in general? How does educational segregation relate to segregation by income, ethnicity or age?
- 2) If, how, and in what ways does segregation relate to spatiality? Is segregation better described using spatial variables like building age or ownership structure than through a typo-morphological classification? How can segregation research enhance architectural research and vice versa?

### 1. Which social variables best describe segregation?

Below, I offer what in my opinion are the strongest and clearest co-variations found in my survey between social, spatial and morphological variables as, as part of the answer to the question.

#### Concluding covariation 1 (income segregation):

The following social variables are found to covary: People with high mean incomes, no mobility, high levels of “Swedishness”, who are employed and live peripherally in massproduced industrial suburban one-family owner-occupied (not rental) houses built after 1980 with lots of outdoor space. There are probably more families living in these houses than in the city in general (families have lower income per capita, lower indoor space).

These social variables are also often, although not always, associated with living in pre-industrial village streets and row house blocks. They are also associated with the social variables high income per capita, political blueness, reactionariness, and an absence of people with compulsory school only as well as having low numbers of people with low incomes per capita. People with this covariation do not live in early modern megablocks.<sup>39</sup>

To be more precise (non/not indicates a negative correlation):

The social variables *high mean income*, “*Swedishness*” and *employment*<sup>40</sup> covary, and each of them indicates living with high degrees of **outdoor space, buildings built after 1980, and ownership**. They also indicate living in a peripheral location (**non-central**) and **non-rental**. These social variables indicate the morphs I:1 pre-industrial village street, IV:2 massproduced industrial suburban detached housing and not VI:1 early modern megablock.

Some of these spatial variables and morphs also indicate *non-mobility* (**ownership, high degree of outdoor space, IV:2 massproduced industrial suburban detached housing**), *high income per capita* (**building built after 1980, high degree of outdoor space**), *political blueness* (**building built after 1980, high degree of outdoor space**) and *low numbers of people with compulsory school only* (**building built after 1980**). Some of these morphs and spatial variables also indicate *reactionariness* (IV:2 massproduced industrial suburban detached housing, non-central, non-rental) and *low numbers of people with low incomes per capita* (not VI:1 early modern megablocks).

*High mean income, non-mobility and employment* indicate morph IV:3 Row house blocks though here “Swedishness” does not seem to covary.

The difference between showing this type of segregation in terms of education rather than income is further illustrated in the following maps:



*Figure 6:2 Socioeconomic segregation shown in terms of mean income levels (high socioeconomic status areas). The areas include social types D (Fridhem, Hyllieby, Djupadal, Nya Bellevue, Rosenvång, Bellevue, Västervång, Solbacken and Teatern), F (Klagsbamn, Vintrie, Skumparp and Toarp), J (Käglinge, Oxievång, Oxie Kyrkby, Östra Skrävlinge, Lockarp, Kulladal and Gullvik), K (Södra Sallerup, Bunkeflostrand, Riseberga, Bulltofta, Johanneslust and Eriksfält), L (Tygelsjö by, Kvarnby, Stenkällan, Virentofta, Jägersro Villastad, Västra Klagstorp and Videdal), and M (Västra Kattarp, Kastanjegården, Tygelsjö vång and Kristineberg).*

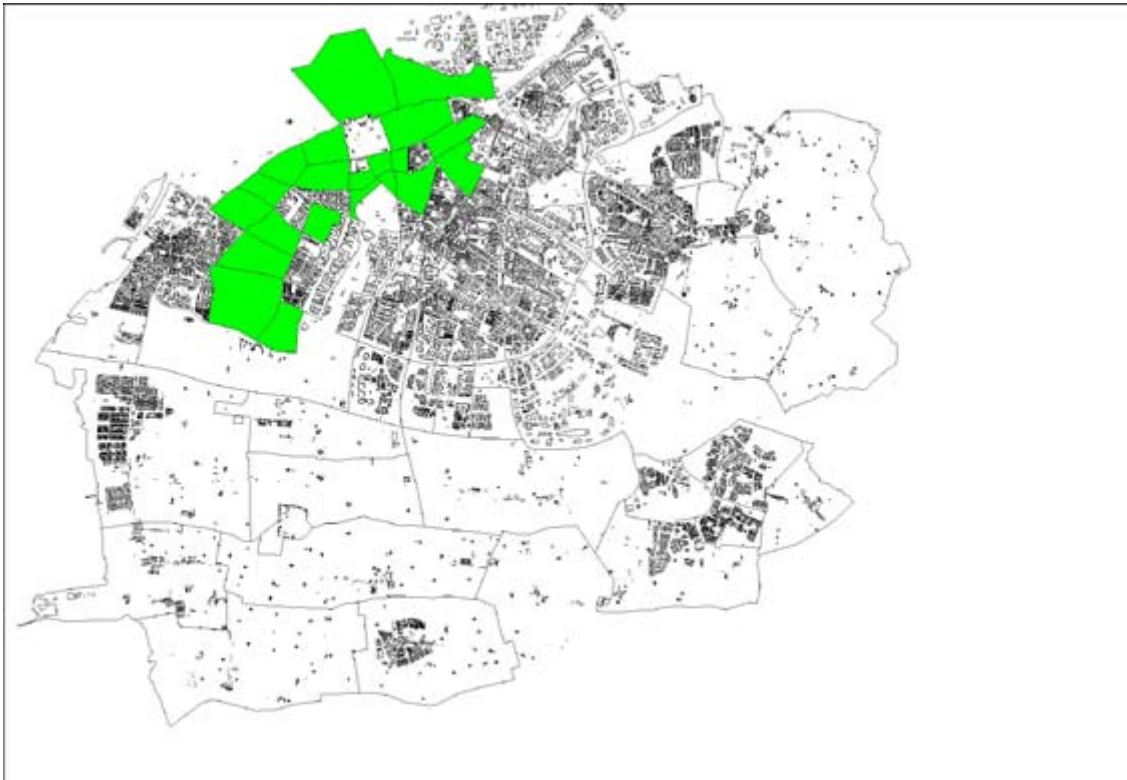
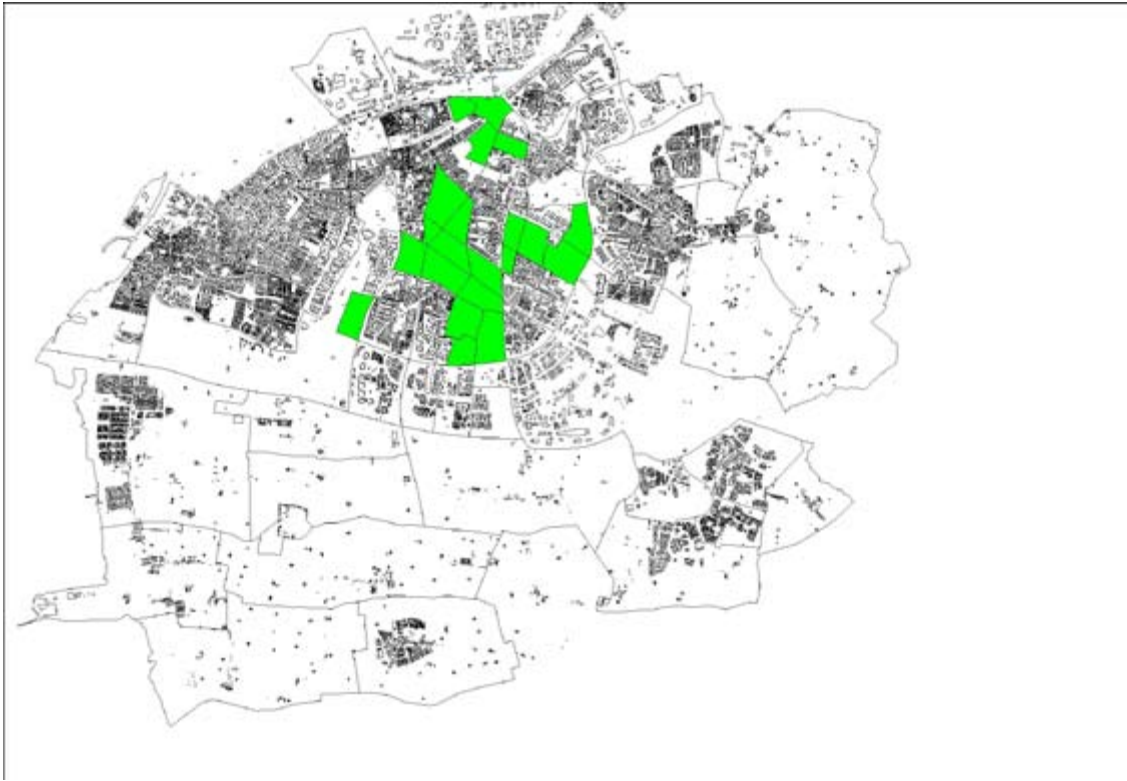
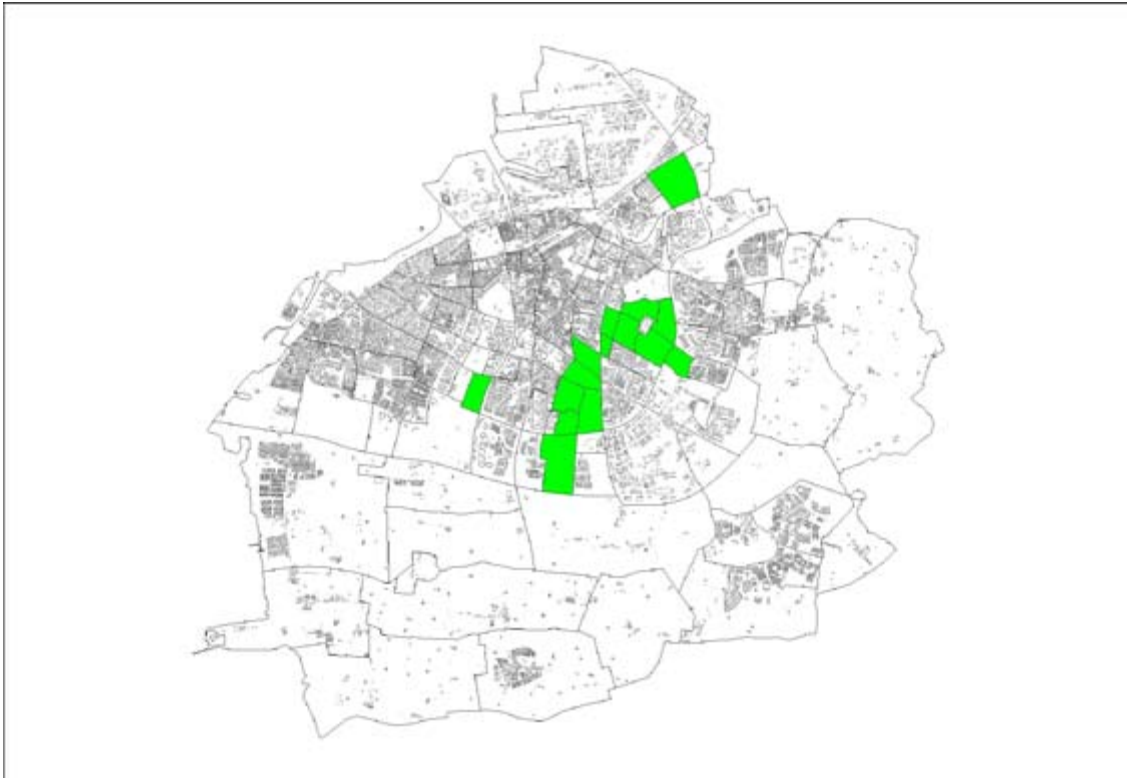


Figure 6:3 Socioeconomic segregation shown as related to the educational variable.) (High socioeconomic status). The areas include social types D and A (Västra Hamnen, Inre Hamnen, Davidshall, Hästbagen, Rörsjöstaden, Fågelbacken, Rönneholm, Gamla Staden, Ribersborg, Kronborg, Rådmansvången and Västa Sorgenfri).



*Figure 6:4 Socioeconomic segregation shown in terms of mean income levels (low socioeconomic status). The areas include social types B (Slussen, Östervärn, Värnhem, Katrinelund, Möllenvången, Södervärn and Norra Sofielund), N (Södra Sofielund, Flensburg, Heleneholm), P (Nydala, Gullviksborg, Holma, Almhög, Augustenborg, Persborg and Hermodsdal) and Q (Kryddgården, Törnrosen, Örtagården and Herrgården).*



*Figure 6:5 Socioeconomic segregation shown as a function of educational segregation (low socioeconomic status groups). The areas include social types O (Apelgården, Almgården, Segevång and Lindängen) and the aforementioned social types P and Q.*

There are some differences between the maps of the most powerful groups and the maps of deprived areas, potentially leading to a re-evaluation of needs for intervention by policy measures. Socioeconomic segregation cannot be equated with income segregation by saying that income and education basically show the same results. This is especially clear when looking at the differences between the areas with low socioeconomic status as a basis for area-based interventions. However, both the maps of high socioeconomic status and low socioeconomic status have some overlap between the different categories, which is probably part of the reason decision makers often equate education and income. Using both variables gives a more precise instrument for describing socioeconomic status.



## Concluding covariation 2: (political segregation)

There is covariation between having little educational background, being politically reactionary and living in non-rented owner-occupied homes built between 1960 and 1980.

The social variables reactionariness and high numbers of people with compulsory school only indicate living in buildings built between 1960 and 1980. There is also a negative correlation to living with buildings built before 1940.

These variables also covary in the following ways. There is a negative correlation between buildings built after 1980 and people with compulsory school only. There is also a negative correlation between people with university educations and buildings built between 1960 and 1980. Reactionariness correlates negatively with central locations and rental housing as well as to supermorph II (Closed grid blocks with or without open yards and slum clearance blocks) and with less regulated “own your own homes” and lamellar yard shapes.

The interesting thing about political segregation is its independence from income variables. When it comes to reactionariness/radicalness, examining educational variables seem a more fruitful way than using income variables to explain segregation.

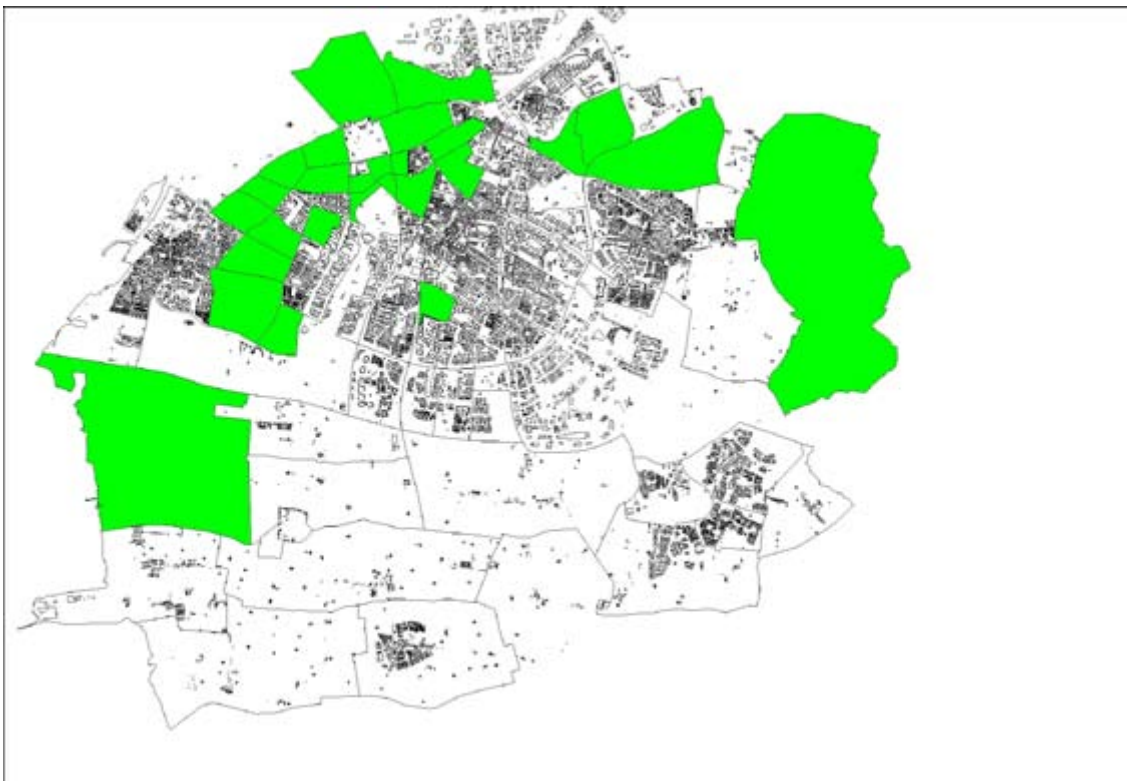


Figure 6:6 Dark blue (high numbers of votes for m+fp+c+kd) areas in Malmö. The areas include social types A (Västra Hamnen, Inre Hamnen, Davidshall, Hästhagen, Rörsjöstaden, Fågelbacken, Rönneholm, Gamla Staden, Ribersborg, Kronborg, Rådmansvången and Västra Sorgenfri), D (Fridhem, Hyllieby, Djupadal, Nya Bellevue, Rosenvång, Bellevue, Västervång, Solbacken and Teatern), and K (Södra Sallerup, Bunkeflostrand, Riseberg, Bulltofta, Johanneslust and Eriksfält).

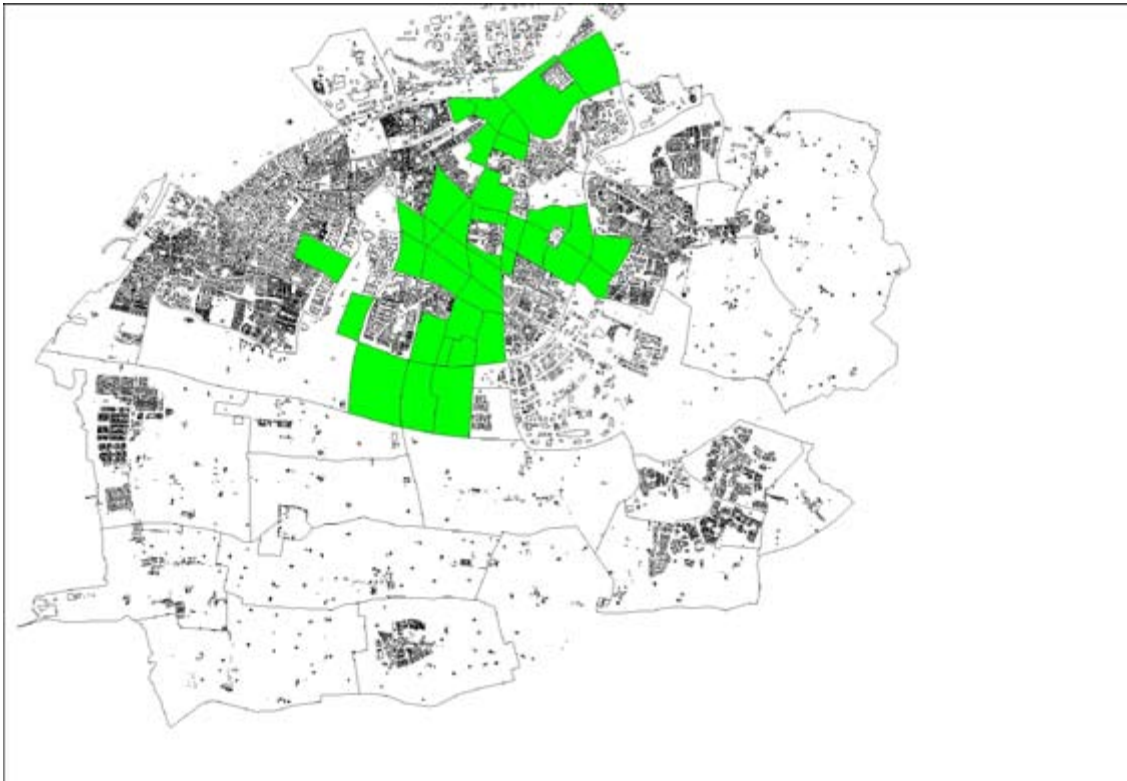


Figure 6:7 Dark red (high numbers of votes for s+v+mp) areas in Malmö. The areas include social types B (Slussen, Östervärn, Värnhem, Katrinelund, Möllevången, Södervärn and Norra Sofielund), C (Östra Sorgenfri, Ellstorp, Allmänna Sjukhuset, Annelund, Lönngården and Kirsebergsstaden), I (Höja, Östra Söderkulla, Bellevuegården, Västra Söderkulla, Lindeborg and Almvik), N (Södra Sofielund, Flensburg and Heleneholm), O (Apelgården, Almgården, Segevång and Lindängen), P (Nydala, Gullviksborg, Holma, Almhög, Augustenborg, Persborg and Hermodsdal) and Q (Kryddgården, Törnrosen, Örtagården and Herrgården).

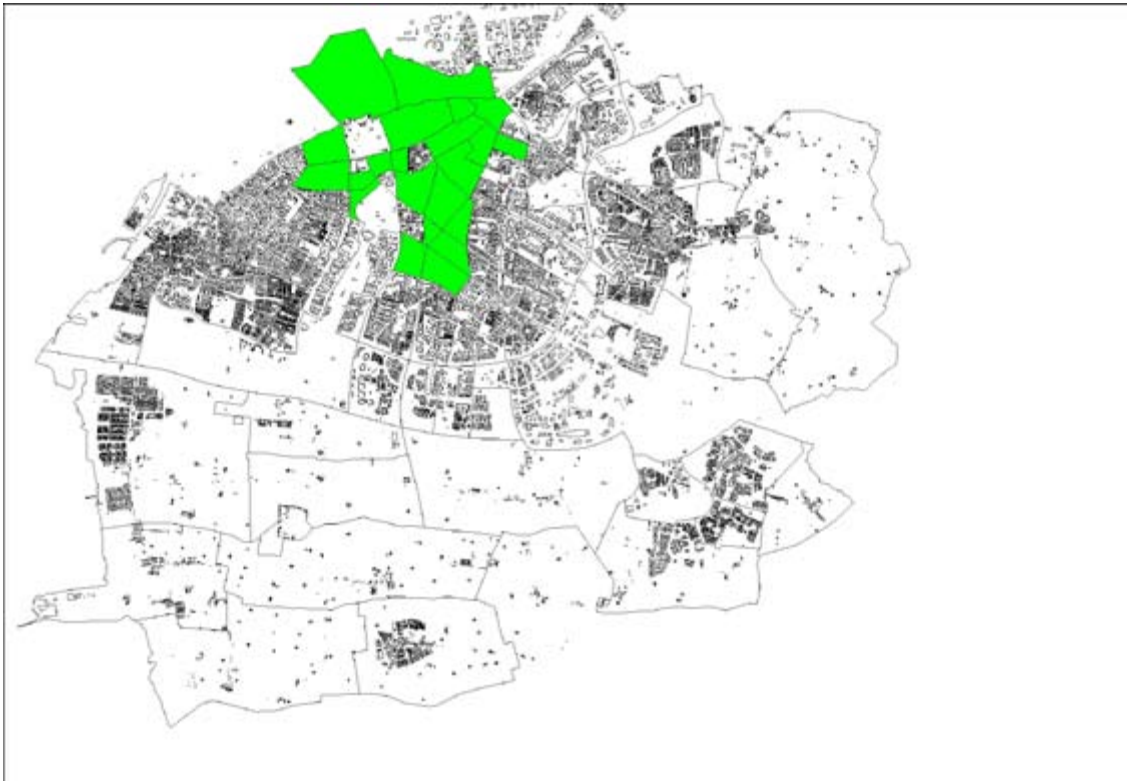


Figure 6:8 Strongly radical (high numbers of votes for FI) areas in Malmö. The areas include social types A (Västra Hamnen, Inre Hamnen, Davidsball, Hästhagen, Rörsjöstaden, Fågelbacken, Rönneholm, Gamla Staden, Ribersborg, Kronborg, Rådman svängen and Västra Sorgenfri), B (Slussen, Östervärn, Värnhem, Katrinelund, Möllervången, Södervärn, Norra Sofielund) and N (Flensburg, Heleneholm and Södra Sofielund).

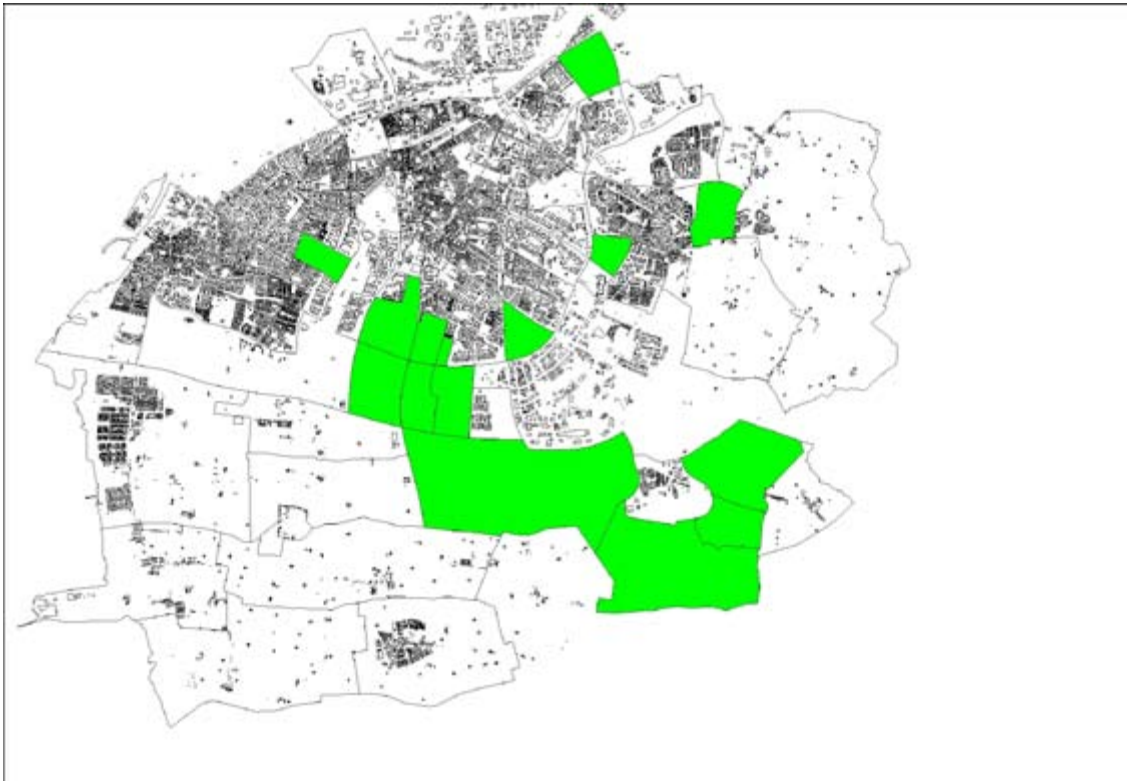


Figure 6:9 Strongly reactionary (high numbers of votes for the Sweden Democrats) areas in Malmö. The areas include social types I (Höja, Östra Söderkulla, Bellevuegården, Västra Söderkulla, Lindeborg and Almvik), J (Käglinge, Oxievång, Oxie Kyrkby, Östra Skrävlinge, Lockarp, Kulladal and Gullvik) and O (Apelgården, Almgården, Segevång and Lindängen).

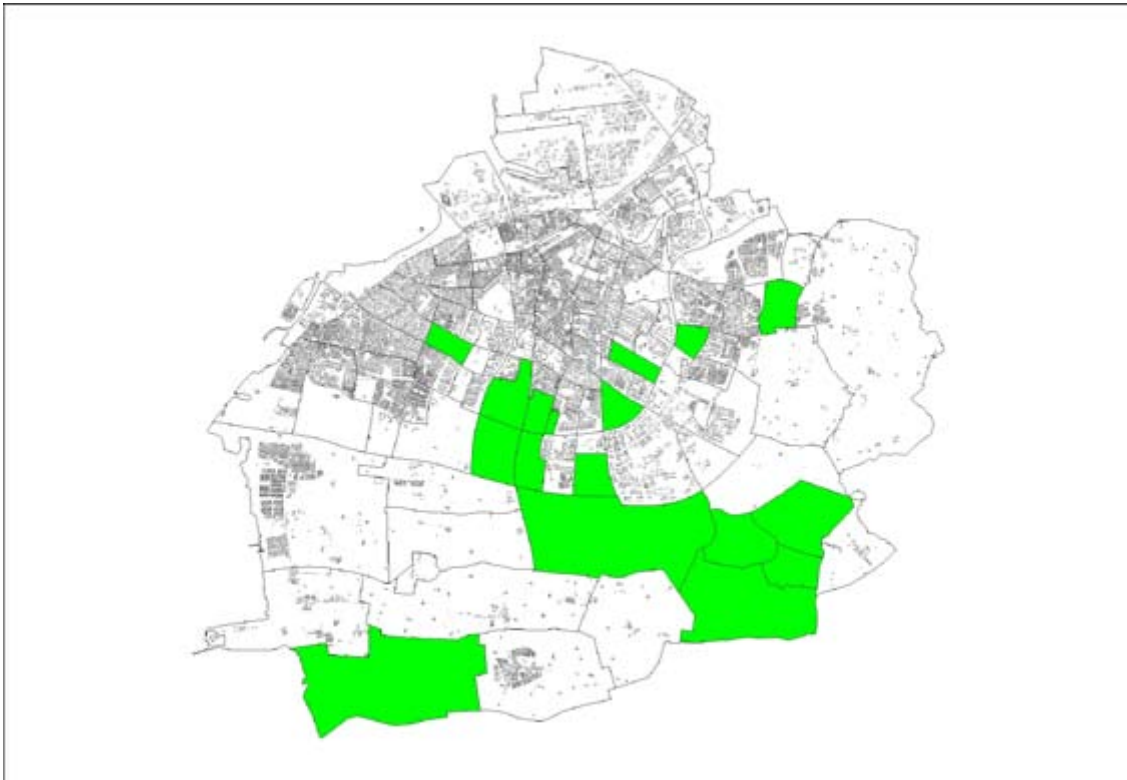


Figure 6:10 Comparing the map in figure 6:9 in terms of reactionariness with this map, where the defining properties are the high to the highest numbers of people with upper secondary school and medium-high numbers of people with compulsory school only, it is clear that educational segregation is more closely linked to political segregation than to segregation by income. The areas include social type I (Höja, Östra Söderkulla, Bellevuegården, Västra Söderkulla, Lindeborg and Almvik), J (Käglinge, Oxievång, Oxie Kyrkby, Östra Skrävlinge, Lockarp, Kulladal and Gullvik), and M (Västra Kattarp, Kastanjegården, Tygelsjö vång and Kristineberg).

The relationship between radical and reactionary seems to cut straight through the economic layers, which are more like the red/blue division. This indicates that radical/reactionary is of a more discursive nature and therefore more bound to the educational than the economic variables.

### Concluding covariation 3 (education segregation):

There is covariation between people with university educations, radicalness, and living in buildings built before 1940. There is a negative correlation with people with upper secondary school and with people with compulsory school only.

High education also correlates negatively with living in buildings built between 1960 and 1980.

People who live centrally tend to be mobile and not to have high mean incomes. They are radical, and often not employed. There is a negative correlation to “Swedishness” and to people with upper secondary school. The high mobility indicates that they live in supermorph II: closed grid blocks. There is a negative correlation with massproduced industrial suburban one-family housing, row house blocks and less regulated “own your homes”.

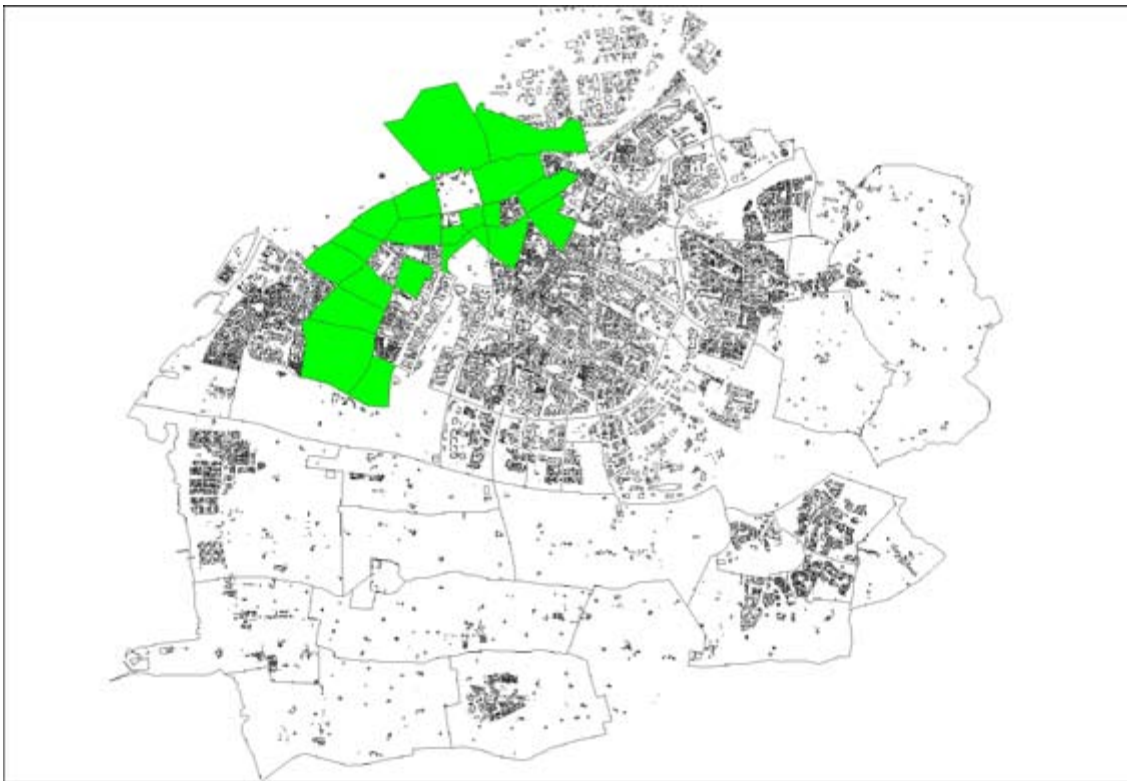
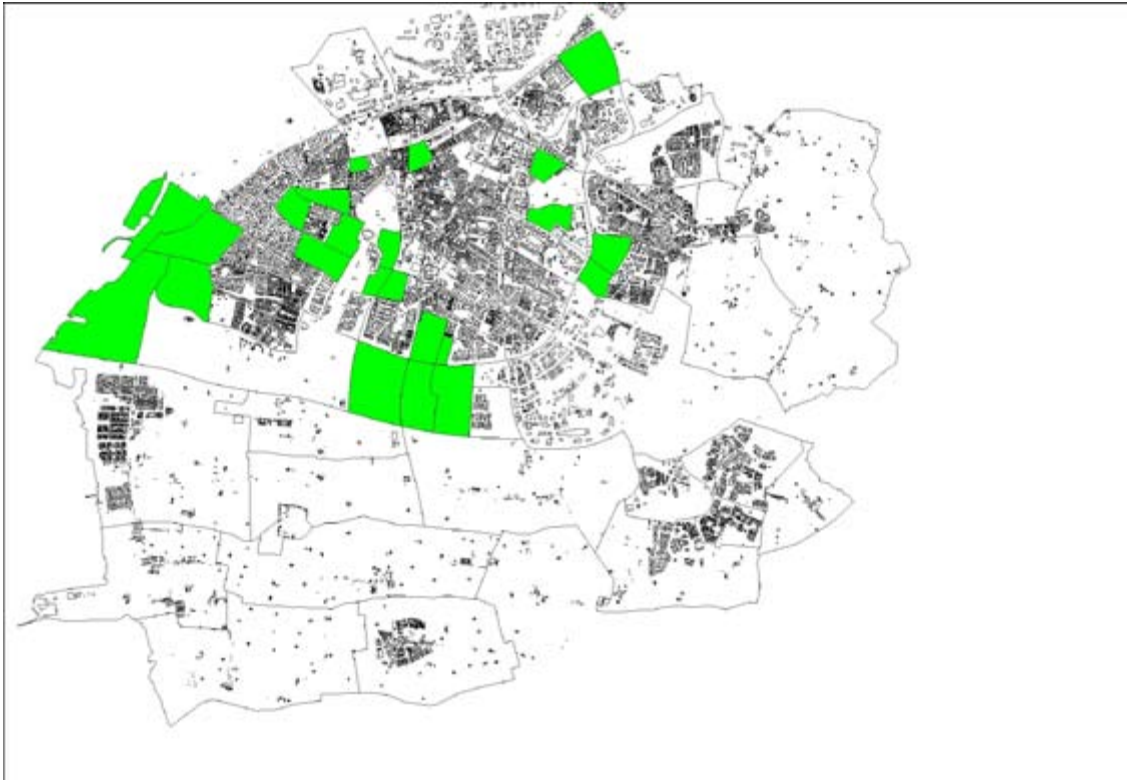


Figure 6:11 Educational segregation. (same illustration as above) Notice how the areas cut across two different income groups and also how the eastern part relates to the radical/reactionary maps above. Clockwise from north to south: Västra Hamnen, Inre Hamnen, Gamla Staden, Rörsjöstaden, Västra Sorgenfri, Rådmanstvangen, Davidshall, Hästbagen, Teatern, Kronborg, Fågelbacken, Rönneholm, Solbacken, Hyllieby, Djupadal, Rosenvång, Nya Bellevue, Bellevue, Västervång, Fridhem, Ribersborg.



## Concluding co-variation 4 (age segregation):

Older age indicates tenant-owned apartments. It is clear from the map below how the pattern of tenant-owned apartments and overrepresentation of older age groups covary.



*Figure 6:12 Age segregation. Areas with overrepresentation of older age groups and large percentages of tenant-owned apartments. Roughly from west to east: Sibbarp, Limhamns hamnområde, Gamla Limhamn, Annetorp, Dammfri, Mellanheden, Borgmästaregården, Bellevuegården, Kronprinsen, Lorensborg, Södertorp, Gröndal, Västra Söderkulla, Östra Söderkulla, Lindeborg, Almvik, Lindängen, Lugnet, Segevång, Häkanstorp, Apelgården, Almgården, Höja.*

### Mobility and the age group 19-44

The other significant type of age segregation covariation is associated with mobile people living in the inner city. Social types A, B, C and N all display the demographic characteristics of the age group 19-44 coupled with high to the highest levels of mobility. The areas also all have high levels of people with university educations, although they differ greatly in terms of income.

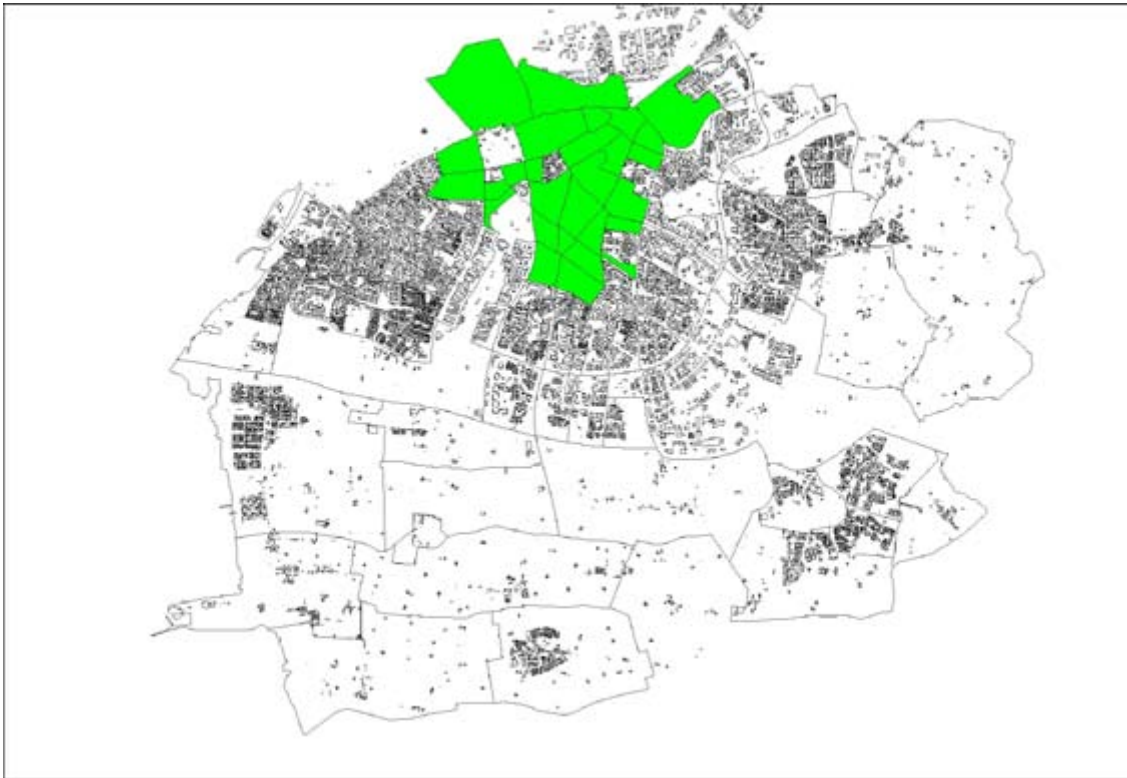


Figure 6:13 Age segregation. Areas with overrepresentation of the age group 19-44 and high to the highest levels of mobility. Roughly, from north to south, west to east: Västra Hamnen, Inre Hamnen, Kirsebergsstaden, Ribersborg, Gamla Staden, Slussen, Östervärn, Ellstorp, Rönneholm, Fågelbacken, Hästhagen, Davidshall, Rörsjöstaden, Värnhem, Katrinelund, Kronborg, Rådman svängen, Möllévången, Västra Sorgenfri, Östra Sorgenfri, Allmänna Sjukhuset, Södervärn, Norra Sofielund, Annelund, Flensburg, Södra Sofielund, Lönngården, Heleneholm.

## 2. If, how, and in what ways does segregation relate to spatiality?

Segregation relates to spatiality both through the spatial variables and through a morphological classification. Segregation also relates to spatiality through the initial classification of subareas that was one of the starting points of this dissertation. There are, of course, a number of problems inherent in such a rough classification as subareas wherein qualities of space or closeness to resources are of different kinds, including for example a view of the sea or closeness to the beach. These qualities are not treated in this thesis. The socioeconomic indicators income, reactionariness, “Swedishness” and employment are all powerfully associated with spatial values and morphological indicators. If my research focused on architecture it would begin in with morphology i.e. with a given type of morphology wherein social factors are to be examined. It is quite possible to relate segregation to types of residences. This was block morphology. The task however, differs depending on which social indicators are chosen. The indicators chosen depend on which types of morphologies are being examined. Question one above thus either becomes dependent on question two and what type of segregation interest the researcher, or it becomes dependent on which morphologies are examined. The question thus has to be re-defined as what type of segregation is present in morphology X. In my opinion, it is useful to pose this question before examining social variables in relation to a given block morphology. For example, if the subject of research is an area with massproduced industrial suburban one-family housing, the researcher in Malmö could look into the effects of political segregation (and the radical/reactionary ratio), ethnic segregation, employment segregation and socioeconomic segregation as indicated by mean income; all of which are indicated statistically as possible avenues of investigation of social values. On the other hand



if the researcher had a closed grid block as his/her object of research it would be better to examine the social world of mobility and political segregation, as per the findings in chapter five.

The researcher is not limited, of course, to block morphology, but could also start from spatial variables, especially the percentage of outdoor space available and from building age. If the object of research is an area with buildings built before 1940, the researcher, as per the findings in chapter four, could look into educational segregation and political segregation (and the radical/reactionary ratio). The answer to question two is that spatial values and morphological values tend to give slightly different starting points for which types of segregation the researcher might look into. It is not an either/or, but a both/and. Segregation has spatiality through indications of segregation as per the spatial and morphological values, as defined above in the findings and segregation research would do well to analyze its inherent spatiality in more complex terms.

However, it might also be useful to rate the indicators, even if my research does not look for the strongest indicators, but for covariations. I found the strongest social predictor of spatial values is mean income. The second to fourth strongest predictors are reactionariness, "Swedishness" and employment. The fifth to ninth predictors are high educational levels (people with university educations), income per capita, political blueness, low educational levels (compulsory school only) and mobility. Age only seems to predict one spatial factor (tenant-owned apartments), and high levels of people with upper secondary school educations only two (not central and not before 1940).

Of the spatial indicators outdoor space seems to be the most powerful indicator of social variables. The second most important seems to be building built after 1980. The third to fifth seem to be rental, building built before 1940 and ownership. The sixth to seventh are centrality and building built between 1960 and 1980. Tenant-owned apartments and high levels of indoor space indicate one social variable each. These ratings are on a general level. For each subarea it seems prudent to check all the indicators since what is strong generally is not necessarily strong for a specific subarea.

Among the clearest covariations is that high mean income, high levels of "Swedishness" and employment levels clearly indicate high levels of outdoor space (larger property areas), new buildings (built after 1980), owner-occupancy and avoidance of central locations. This indicates that Malmö's economic elite is suburbanized to a large extent. Ethnic and economic indicators seem to covary much more than education covaries either with ethnic or economic factors. Education covaries better with age demographics than with ethnic or economic factors.

The two strongest social indicators in relation to a morphology based on estimate population (EPOP values) are reactionariness and mobility. The third and fourth are employment and mean income. The fifth is "Swedishness". The sixth to eighth are high levels of people with upper secondary school, income per capita and political blue/redness. Higher levels of people with university educations and higher levels of people with compulsory school only are the two weakest indicators in relation to residential block morphology.

The strongest spatial indicator (morph) is IV:2 massproduced industrial suburban one-family housing. The second strongest is VI:1 early modern megablock, The third to fourth are IV:3 row house block and I:1 pre-industrial village street. The fifth to eighth are II:1 closed grid block with yard buildings, II:2 closed grid block with open yard, II:3 slum clearance block and III:3 less regulated "own your own home". The ninth to eleventh are VI:2 late modern megablock, V:2 lamellar yard shape, and III:1 converted summer cottage. The material does not support a statement regarding the indicative strength of the remaining morphs.

Among the clearest social indicators in relation to block morphology is the political indicator of reactionariness. People who are reactionary avoid the centrally located grid block buildings and instead choose "own your own homes" and suburban one-family housing. We also have indications that the age group 25-44, with high mobility, is present in central and rental locations.

Overall these findings lead me to state that housing type is a very relevant category for issues relating to segregation. The socio-spatial pattern created by social indicators, spatial indicators and morphological indicators is a complex one. There is also the question of syno-morphological processes, i.e. where areas generate forms of buildings that represent the dominant culture in these areas. Areas, so to speak, grow.

In chapter four the social types E, H, J, K, L and P were deemed not to qualify as socio-spatial types, i. .e. they were not segregated in the spatial sense of the word. However, when it comes to block morphology the results are inconclusive. Social types J, K, and L look segregated in terms of residential type on the supermorph level, although there are differences on the morph level. Social type P looks equally segregated. Therefore the results are inconclusive as to which types are both socio-spatial as well as social types. There are no strictly socio-spatial types, where one simply can equate a social type with a spatial type. Complexity is the rule. Segregation, as manifested in spatial environments, does not come into play on the subarea level to a sufficient extent to warrant any conclusion regarding residential morphological segregation in relation to the social types. There are several indications of future research paths, as discussed above, but there is no overall final conclusion from the material. Finding such strictly socio-spatial types would have been quite contradictory to the complexity of the situation on the block morphology level.

## Concluding remarks

1. Is poor defined more by income or education? There is a correlation between poverty, not being Swedish, being unemployed and having a low mean income as well as living in early modern megablocks with rental and central location. But, being in a central location indicates mobility and higher levels of education than living in the early modern megablocks. Poor is different, depending on whether we mean poor in income resources or in educational resources.
2. Education does not co-vary with mean income, "Swedishness" and employment, thus supporting Bourdieu's idea of education as a separate field of power from that of economic capital. What education indicates is difficult to see from this data, as it is not as clear as the case of high mean income, employed, and Swedish, but high education seems to be indicative of mobility, closed grid block housing and a radical political inclination. The picture is, however, complicated by the fact that higher education *does* covary with income per capita, supporting the gentrification theory claim that the highly educated mobile closed grid block radicals belong to the quite affluent middle class,
3. Tenant-owned apartments are related to older people. Age segregation has been generally undervalued by research and decision-makers. This study shows that it does have an impact on the spatial pattern of the city. Age segregation is also relevant to studies of well-educated mobile people who live in the closed grid (the age group 25-44 dominates in these areas) as well as the suburban group (where the age group 45-64 is more represented).
4. Swedish, employed, high mean income people live in suburban Malmö as is often indicated in the statistical material. These indicators covary greatly, leading me to construct an affluent middle class out of them.
5. Segregation can mean educational segregation, income segregation, age segregation, racial segregation, mobility segregation, political segregation, etc. Each one has its own logic. This enumeration goes one step further than saying that demographic segregation (meaning age, gender and household type segregation), socioeconomic segregation (where income plays the most important role in a class view of society) and ethnic segregation (meaning ethnic, race and religious segregation) are the main types of segregation (as described by Andersson, Bråmås and Hogdal 2007:16-17).

6. When comparing different types of segregation in order to form an overall picture of segregation, each one of these types of segregation should be taken into account.
7. In this dissertation I have shown the specifics of educational segregation. To sum up: people with university educations live in highly segregated areas, and segregation by education is among prominent segregation indicated by statistics. The goal of this research was not to compare and find the most prominent form of segregation but to show segregation as a complex rather than a simple phenomenon. It is therefore important to note that segregation by income and by ethnicity are very prominent, in addition to educational segregation. Nevertheless, in certain types of environments, e.g. among people living in buildings built before 1940, segregation by education is very strong.
8. The existence of several other forms of segregation than educational segregation were indicated in this research. Ethnic segregation and political segregation were the most prominent in Malmö. These subjects warrant further research.
9. Malmö could be described as suburbanized, in that income segregation is associated with non-centrally located groups. Malmö is not unlike American cities where extensive suburbanization has taken place (cf. Yang & Jargowsky for an account of suburban development and income segregation in the U.S.).
10. Socio-spatial segregation is manifested on different levels than that of the subarea level. This study measured income and education segregation. It also ruled out a number of paths where segregation is not manifested. The indicators point to almost endless possible configurations of segregations present in the city of Malmö, but they are inconclusive in that the study was unable to point out truly socio-spatially segregated areas. Pointing out truly socio-spatially segregated areas, however, would not be a realistic goal for such research, since finding truly socio-spatially segregated areas where house type and social type were completely coherent would be feasible only in something like a totalitarian state. The study has, however, shown indications of proximity of social and spatial values over the entire city of Malmö.

## Discussion of policy

This dissertation began with a critical reading of national policy that questioned the economic basis of definitions of segregation. I proceeded to offer an alternative definition based on cultural capital, represented by education. However, using that definition the same subareas that were pointed out by the economic definition would be marked for segregation intervention measures as those areas are also the ones with the fewest educational resources. So, the reader may ask, what's the difference? Why all the lights and fireworks when the conclusion is the same?

My goal, as the author of this dissertation, was not to change the definition of segregation in order to pinpoint other deprived groups that are in need of state intervention. In fact that would contradict to my goal as it would further cement the negative segregation that the areas in questions suffer from. It would be stigmatization. By constantly focusing on negative segregation, research and policy risk reinforcing the stigmatization of deprived segregated areas. Focusing instead on the voluntary segregation we all are a part of and the exclusion/inclusion processes that such segregation is based on might be a more fruitful path for future research. Indeed, the people who live in the most deprived segregated areas are the least Swedish, the least rich, the least educated and the youngest. So what does it matter which variable we use to establish this?

It matters in two ways, both related to policy interventions. First, If we choose to see the problem as an ethnic problem (by choosing that variable as the fundamental one), chances are that we will try to intervene with policy measures that affect the ethnic variable. Are we sure that is what we want to do? Are we sure we do not want to change the economic situation, the educational situation or the age group constitution instead? Why do we presume that an indicating variable is also the cause of the problem? As argued in chapter two, we must not do that. Shedding light on several variables helps us to see the problem in different ways and can hopefully affect policy in a broader way.

Second, focusing on the excluded parts of the population is only one kind of policy intervention, the other being focusing on the excluding part of the population, i.e. the Swedish, educated, wealthy, 25-44/45-64 age groups. In order to determine whether the exclusion mechanisms can be changed, one has to examine where the excluding residential mechanisms take place. And in these answers will be different. Asking the question why inner city residential areas exclude people with compulsory school only and upper secondary school educations is very different from asking why suburban residents exclude the non-wealthy from their residential neighborhoods. So the answer will indeed differ.

There are therefore two prerequisites for this dissertation to have a full impact on policy. One, focus in questions of policy intervention for segregation should be on the excluding group, not the excluded group. Two, research must seriously examine the excluding group in order to discern the excluding mechanisms and where they take place. One such place could be residentially segregated areas.

Another reflection is that one might consider what one wishes to change. Changing the economic situation, by redistribution of wealth is not very politically popular today (unless we consider re-distribution of wealth in the opposite direction, as the middle class is restored to power by the sale of a great deal of state property, which is very common at the moment), and changing people's ethnicity is not one of the traditional roles of the state. Changing the distribution of age groups is interesting but probably requires a radical revision of family life. Changing the educational system and its relation to residential segregation or even the view on educational qualifications, however, seems to be the state's forte. Another forte is using spatial planning to change the circumstances of segregation. So why not work with that as an important variable in empirical investigations, rather than focusing all the attention on ethnic or economic factors?

When implementing segregation studies in planning practice, there are the possibilities of using social impact analyses in addition to the current common health impact analyses. Such social impact analysis could make use of segregation analyses, like this one

- 
1. The gender distribution is fairly equal with the exceptions of Fridhem and Teatern where it is slanted towards more male workers.
  2. Politically the areas are dark blue and leaning towards radicalness if the age groups that are overrepresented are younger and towards reactionariness if older.
  3. Mean incomes are medium to low and people older than 65 years are overrepresented. The underrepresentation of families leads as usual to slightly higher incomes per capita than mean incomes.
  4. People vote lightly red and are slightly reactionary. Kronprinsen is an exception to this being both dark blue and strongly reactionary.
  5. Mean incomes are medium with Valdemarsro being an exception at the highest income level.
  
  6. The overrepresented age levels are the young (0-18) in Kroksbäck, Hindby and Valdemarsro and 19-24 in Rostorp.
  7. Only in Hindby is the male worker overrepresented.
  8. Politically Hindby is strongly reactionary while blue or red weighs equal in the other areas or numbers are not available.
  9. Income per capita is medium to the highest with the exception of Oxievång where it is low.
  10. Mobility levels are lowest to low with medium only in Östra Skrävlinge.
  11. Employment is the highest in most areas, medium in Oxievång and the lowest in Kulladal.
  12. Politically where the numbers are available it is fairly equal tending towards red in Oxievång and Västra Kattarp and blue in Oxie Kyrkby: People are strongly reactionary as well.
  
  13. Mean incomes are the highest to high only in Eriksfält.
  14. "Swedishness" is either the highest as in Södra Sallerup, Bunkeflostrand and Riseberga or medium-high in Johanneslust, Bulltofta and Eriksfält.
  15. Politically the area is blue and reactionary for Södra Sallerup, Bunkeflostrand and Riseberga while equal and conventional tending towards radical in Johanneslust and Eriksfält.
  16. People have high levels of space access indoor with the exception of Lönngården.
  17. The centrality levels are either the highest or medium.
  
  18. People have either the highest levels of indoor space (in the apartment dominated areas) or low levels in housing with children.
  19. Indoor space is low to the lowest except in Riseberga where it is high.
  20. The gender distribution is fairly equal with the exceptions of Fridhem and Teatern where it is slanted towards male workers.
  
  21. Politically the areas are dark blue and leaning towards radicalness if the age groups that are overrepresented are younger and towards reactionariness if older.
  22. People have either the highest levels of indoor space (in the apartment dominated areas) or low levels in housing with children.
  23. Mean incomes are the highest to high only in Eriksfält.
  24. "Swedishness" is either the highest as in Södra Sallerup, Bunkeflostrand and Riseberga or medium-high as in Johanneslust, Bulltofta and Eriksfält.
  25. Politically the area is blue and reactionary for Södra Sallerup, Bunkeflostrand and Riseberga while equal and conventional tending towards radical in Johanneslust and Eriksfält.
  26. Indoor space is low to the lowest except in Riseberga where it is high.
  27. Mean incomes are medium with Valdemarsro being an exception at the highest income level.

28. The overrepresented age groups are the young (0-18) in Kroksbäck, Hindby and Valdemarsro and 19-24 in Rostorp.
29. Only in Hindby is the male worker overrepresented.
30. Politically Hindby is strongly reactionary while blue or red weighs equal in the other areas or numbers are not available.
31. Mean incomes are medium to low and people older than 65 years are overrepresented. The underrepresentation of families leads as usual to slightly higher incomes per capita than mean incomes.
32. People vote lightly red and slightly reactionary. Kronprinsen is an exception to this being both dark blue and heavily reactionary.
33. People have high levels of space access indoor with the exception of Lönngården.
34. The centrality levels are either the highest or medium.
  
35. Income per capita is medium to the highest with the exception of Oxievång where it is low.
36. Mobility levels are lowest to low with medium only in Östra Skrävlinge.
37. Employment is highest in most areas, medium in Oxievång and the lowest in Kulladal.
38. Politically where the numbers are available it is fairly equal tending towards red in Oxievång and Västra Kattarp and blue in Oxie Kyrkby and strongly reactionary as well.
  
39. Andersson and Bråmås correlate as follows: the more inhabitants in an area of owner-occupancy homes the larger the mean income and employment rate and the higher the "Swedishness". Their findings are consistent with mine. (Andersson, Bråmås & Hogdal 2007:33)
40. The conclusion reached by Andersson and Bråmås regarding segregation in Malmö is similar: "The larger share of inhabitants in an area that live in owner-occupied housing, the larger share with high mean incomes and high levels of employment and the smaller the share of inhabitants with foreign background" [my translation] (Andersson, Bråmås & Hogdal 2007:7) We thus agree on on this type of segregation. What this study shows is that there are other types of segregation than income segregation.

# Morphological Survey - The subareas

## APPENDIX I

Type	Davidshall	Fågelbacken	Gamla Staden	Hästhagen	Inre Hamnen	Kronborg
<b>A</b>	Rådmanvången	Rönneholm	Rörsjöstaden	Västra Hamnen	Västra Sorgenfri	
Type	Katrinelund	Möllevången	Norra Sofielund	Slussen	Södervärn	Värnhem
<b>B</b>	Östervärn					
Type	Allmänna Sjukhuset	Annelund	Ellstorp	Kirsebergsstaden	Lönngården	Östra Sorgenfri
<b>C</b>						
Type	Bellevue	Djupadal	Fridhem	Hyllieby	Nya Bellevue	Rosenvång
<b>D</b>	Solbacken	Teatern	Västervång			
Type	Annetorp	Borgmästaregården	Dammfri	Gamla Limhamn	Limhamns hamnområde	Lugnet
<b>E</b>	Mellanheden	Sibbarp				
Type	Klagshamn	Skumparp	Toarp	Vintrie		
<b>F</b>						
Type	Gröndal	Håkanstorp	Kronprinsen	Lorensborg	Södertorp	
<b>G</b>						
Type	Hindby	Kroksbäck	Rostorp	Valdemarsro		
<b>H</b>						
Type	Almvik	Bellevuegården	Höja	Lindeborg	Västra Söderkulla	Östra Söderkulla
<b>I</b>						
Type	Gullvik	Kulladal	Käglinge	Lockarp	Oxie Kyrkby	Oxievång
<b>J</b>	Östra Skrävlinge					
Type	Bulltofta	Bunkeflostrand	Eriksfält	Johanneslust	Riseberga	Södra Sallerup
<b>K</b>						
Type	Jägersro Villastad	Kvarnby	Stenkällan	Tygelsjö by	Videdal	Virentofta
<b>L</b>	Västra Klagstorp					
Type	Kastanjegården	Kristineberg	Tygelsjö vång	Västra Kattarp		
<b>M</b>						
Type	Flensburg	Heleneholm	Södra Sofielund			
<b>N</b>						
Type	Almgården	Apelgården	Lindängen	Segevång		
<b>O</b>						
Type	Almhög	Augustenborg	Gullviksborg	Hermodsdal	Holma	Nydala
<b>P</b>	Persborg					
Type	Herrgården	Kryddgården	Törnrosen	Örtagården		
<b>Q</b>						

Table i:1 Survey arranged in the order of the social type classifications (A-Q).

## The subareas: social type A

**Davidshall** – *closed grid blocks with open yards, closed grid blocks with yard buildings, largely industrialized or commercialized ground floor plots, slum clearance blocks.*

The area commonly referred to as Davidshall is made up of the blocks bordering the Davidshall square, developed in the early 1930s by master builder Eric Sigfrid Persson after the move of Kockum's Engine Works (*Kockums mekaniska verkstäder*) that was located here between 1840 and 1910. The plan was designed by Erik Bülow-Hübe in the late 1920s. These blocks are *closed grid blocks with open yards*.

The subarea Davidshall also includes several other morphs. A few buildings toward the route Södra Förstadsgatan hail from the period 1850-1880. Buildings along Drottninggatan bordering the north side of this subarea as well as buildings along the south border of this subarea are *closed grid blocks with yard buildings*, or sometimes *largely industrialized or commercialized ground floor plots*. These were built during the 1890s and the early 20th century.

A few buildings were built between 1950 and 1980 (totaling approximately 10% of the total housing) and another few were built after 1980 (totaling another 12% of the total housing), indicating a sizable chunk of *slum clearance block* housing (Reisnert et al. 1989:32-38).

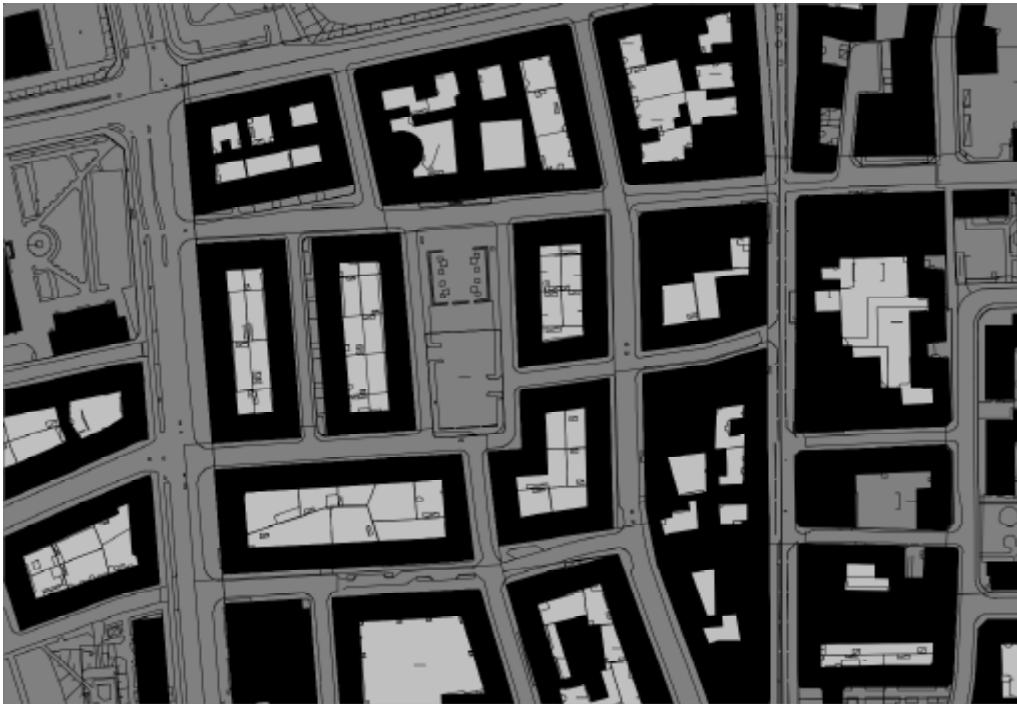


Figure i:1 The five blocks adjacent to the Davidshall square constitute Davidshall proper, while the subarea (*delområde*) Davidshall consists of several other blocks.



**Fågelbacken** – *lamellar yard shapes, free-standing lamellar buildings, closed grid blocks with open yard, largely industrialized or commercialized ground floor plots, post-modern reform blocks, closed grid block with yard buildings, liberal routescapes.*

This subarea has a rich, well-documented history. The first building period was before WWI – ca. 1900-1914. Around 1900, several three-storey *closed grid blocks with yard buildings* were built along the route Västra Rönneholmsvägen (center and center-east on the map). The eastern block no longer has its northwest corner (now parking) and the western block has been supplemented by *free-standing lamellar buildings* (planned and built in 1944).

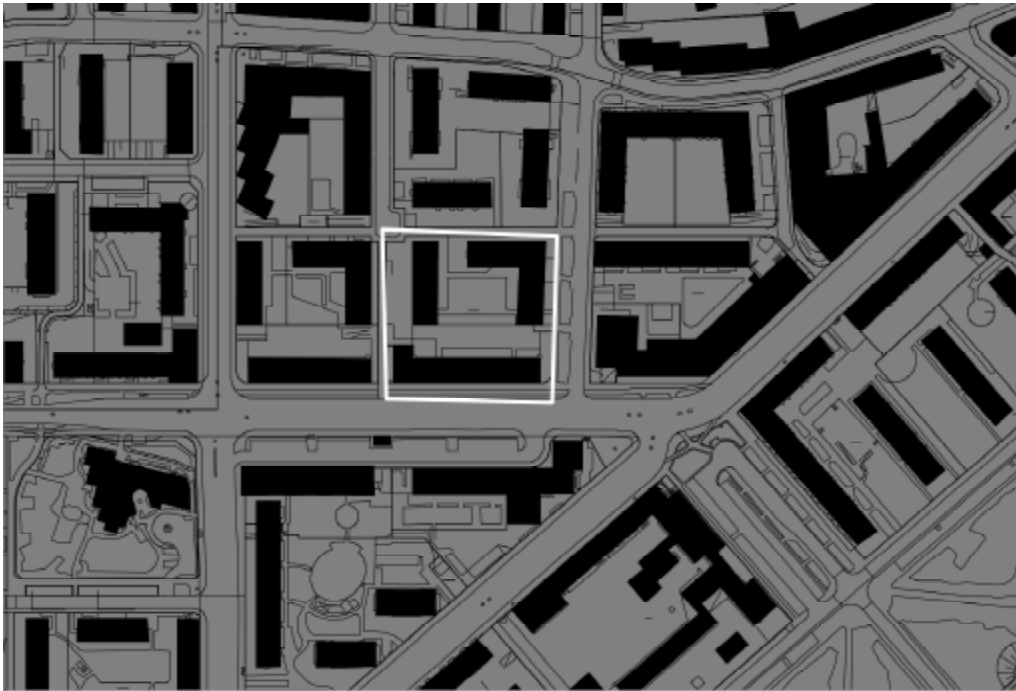
The two blocks in the northwestern corner of this subarea were originally built in 1911-12 as *closed grid blocks with open yard*.

In the southeastern part of this subarea there is a *largely industrialized or commercialized ground floor plot* connected to the Tuborg factory that was built around WWI.

The second building period was right before WWII, featuring *free-standing lamellar buildings* built in 1937. The third building period was dominated by *lamellar yard shapes* built in 1946-49. Supplementary buildings in the previously mentioned blocks were also constructed during this period. *Lamellar yard shape buildings* continued to be built during the 1950s all over this subarea.

The southwestern part of this subarea is part of the plan for Pildammsstaden. In some cases there are earlier buildings along a *liberal routescape*.

More recent building has been supplementary. A few buildings are from the 1980s (totaling less than 11% of the total housing) and one block is a *post-modern reform block* from the late 1980s (Reisnert et al. 1989:42-46; Améen 1964:129-141).



*Figures i:2 and i:3 The diversity of Fågelbacken reflects buildings from a variety of time periods.*

**Gamla Staden** - largely industrialized or commercialized ground floor plots, slum clearance blocks, closed grid blocks with open yards, closed grid blocks with yard buildings, liberal routescapes, free-standing lamellar buildings, lamellar yard shapes.

Gamla Staden is the subarea that includes the historically consecrated parts of town and is thus extensively historically documented. To summarize, in Gamla Staden roughly one third of the buildings date from pre-1940, another third from the 1960s-1980s and the last third are post-1980. A few influential plans can be mentioned: one by Gabriel Winge from 1968 (Caroli City). Another one by Erik Bülow-Hübe from 1937. Of interest is also the plan for the removal of fortifications in the early 19th century (Améen 1972:52-53). However, most of the historical parts have *fait accompli* plans. It was not possible to make a more detailed study of Gamla Staden within the scope of this survey.

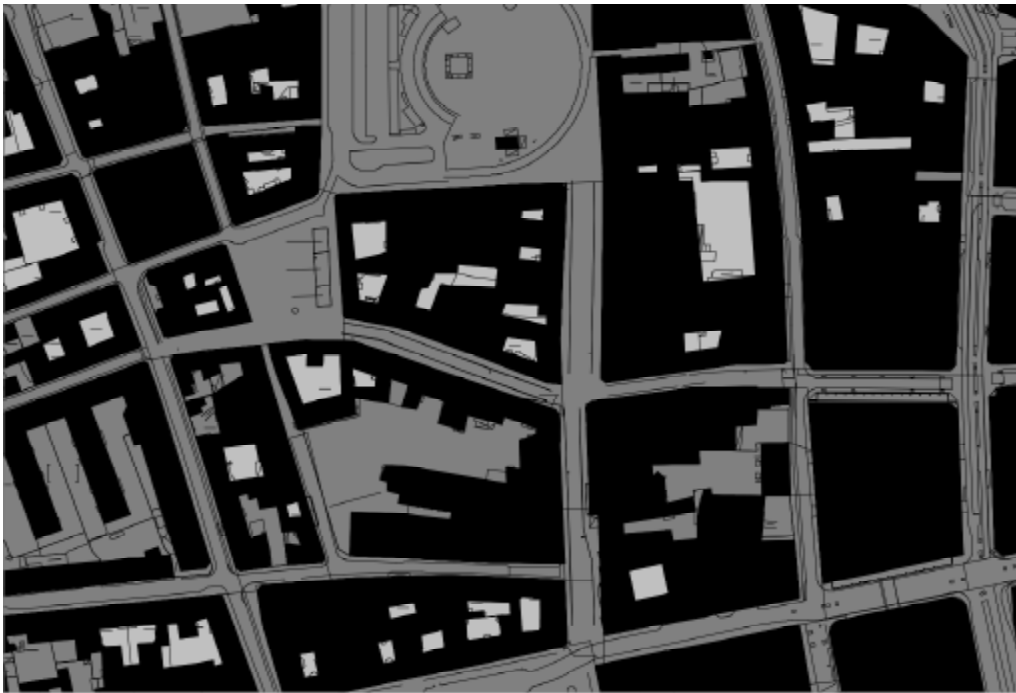


Figure i:4 The densest parts of Gamla Staden are connected to the Södergatan route and are largely commercialized.

**Hästhagen** – *closed grid blocks with open yards, lamellar yard shapes.*

The northern part of this subarea was protected donational land until 1965 (Améen 1964:118-120).

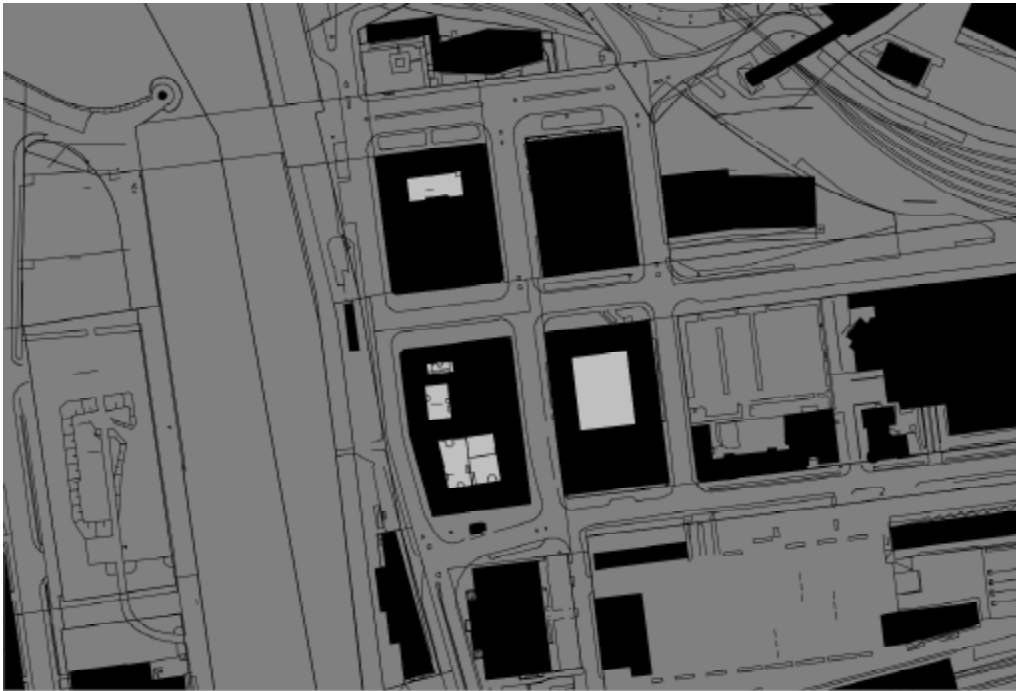
The first housing built in this subarea was the hotel in the south-eastern corner originally built for the Baltic exhibition in 1914. During the 1920s and 30s the *closed grid blocks with open yards* that dominate this subarea were built. The plan is from 1932 (signed by Erik Bülow-Hübe). The westernmost part was built with *lamellar yard shapes* (L-shaped) in the 1940s (Reisnert et al.1989:50-54).



*Figure i:5 The northern parts of Hästhagen, like its counterpart Rörsjöstaden, were developed according to the regulations for donational lands, i.e. with institutional buildings.*

**Inre Hamnen** – largely commercialized or industrialized ground floor plots.

This subarea is undergoing changes presently (Malmö Översiktsplan 2000 2001:68-69).



*Figure i:6 The older blocks with mixed housing/commercial uses near Skeppsbron in Inre Hamnen.*



**Kronborg** - *lamellar yard shapes, free-standing lamellar buildings.*

Kronborg was built over a relatively short period of time. The parallel *free-standing lamellar buildings* have protection from the route along Kronborgsvägen by blocks of *lamellar yard shapes*. There is one *free-standing lamellar building* – a tower block as well. The first buildings were built in 1944-45, while most of the housing is from the 1950s. The last buildings were built during the 1960s. Most buildings have 4-6 storeys while the tower block has 14. This subarea is part of Pildammsstaden (the plan was signed by Erik Bülow-Hübe in 1942). This subarea has changed very little over time (Reisnert et al. 1989:58-61).

**Ribersborg** – *free-standing lamellar buildings, lamellar yard shapes, closed grid blocks with open yards.*

The history of Ribersborg consists of several periods. The Ribershus exhibition in 1937-38 “We dwell” (*Vi bo*) arranged by the Swedish Society of Industrial Design (*Svenska slöjdföreningen*) is one of the most interesting, with Eric Sigfrid Persson as the builder and Erik Bülow-Hübe as the planner with a plan from 1936. In addition to buildings built for the exhibition, most of this development was built from 1938-40, with *free-standing lamellar buildings* (wide houses). Toward the Ribersborg beach the buildings are eight to ten storeys high.

The remainder of this subarea was built before 1960 in *lamellar yard shape* L-shaped buildings, as well as *free-standing lamellar buildings* and *tower blocks* as used previously. The southeastern part of this subarea is from ca. 1916, based on Anders Nilsson’s earlier plan, and developed as *closed grid blocks with yard buildings*. Another few blocks - *closed grid blocks with open yards* were added ca 1930. At the Fridhem square, there is a *largely industrialized or commercialized ground floor plot* (Reisnert et al. 1989:72-75).

**Rådmanvången** – *largely commercialized or industrialized ground floor plots, closed grid blocks with yard buildings, closed grid blocks with open yards, slum clearance blocks, free-standing lamellar buildings.*

Rådmanvången is situated along several southern exits from historical Malmö, and has a general history of routescapes. Most of these buildings have been classified as *largely commercialized or industrialized ground floor plots*.

**Rönneholm** – *free-standing lamellar buildings, lamellar yard shapes, closed grid blocks with yard buildings, bourgeois large one-family houses, closed grid blocks with open yards, early modern megablocks.*

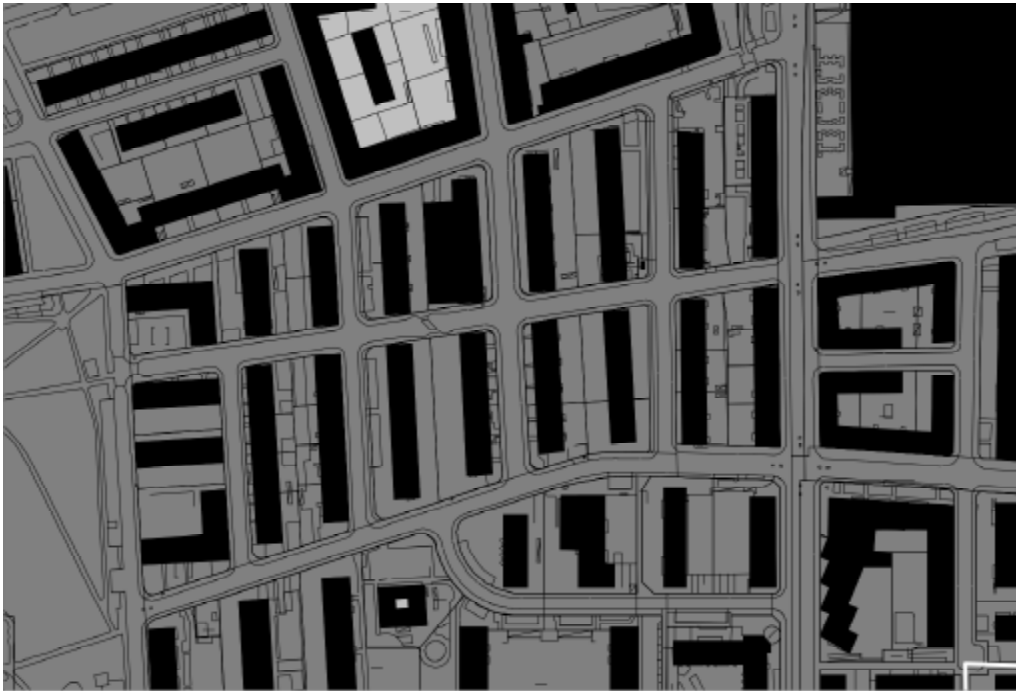
Rönneholm as well as the previously mentioned Fågelbacken was primarily developed during the post-war period as part of Pildammsstaden (the plan was signed by Erik Bülow-Hübe in 1942) (Améen 1964:135-138, 1972:64-65). The plan respects the ownership structure of the earlier agrarian society, while modifying 1930s *free-standing lamellar buildings* into the *lamellar yard shapes* of the post-war period, 1940-1960. Part of this subarea was planned as early as 1935. The three northeastern blocks situated along Regementsgatan are *closed grid blocks with yard buildings* from the period between 1900 and WWI.

To the west there is a block of *bourgeois one-family houses* from 1907 and the following years which is an extension of the Fridhem *bourgeois one-family housing* subarea.

A few blocks from the 1930s are *closed grid blocks with open yards*, but the majority of the buildings are from the 1940s and 1950s and built as either *free-standing lamellar buildings* or *lamellar yard shapes* as mentioned above.

In the southwest corner, five larger lamellar buildings are part of the Mellanheden development and introduce the neighborhood unit and *the early modern megablock* into this subarea.

A few buildings were added in the 1970s (Reisnert et al.1989:76-81).

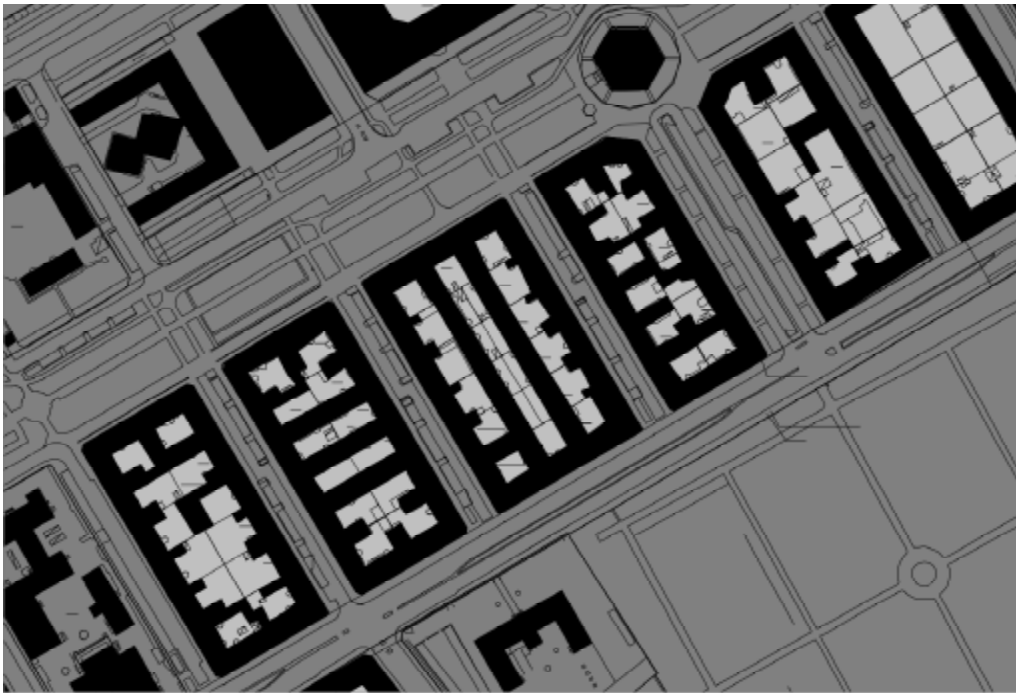


*Figures i:7 and i:8 The vast majority of Rönneholm consists of lamellar buildings in the grid.*



**Rörsjöstaden** – *closed grid blocks with yard buildings, closed grid blocks with open yards.*

Rörsjöstaden is the best example in Malmö of *closed grid blocks with yard buildings* and the whole development, successively built, can be read as a chronological catalogue of building types extending from the early twentieth century to pre-war *closed grid blocks with open yards*. Rörsjöstaden and Hästhagen have very little of the *dense largely industrialized or commercialized ground floor plots* normally associated with the central positions they occupy, mainly due to the history of having been developed until 1965 under State guidance as a donational land area (cf. Améen above). Also of note are the lower topological centrality levels in the areas.



*Figure i:9 Rörsjöstaden can be read as a chronological catalogue of building development from closed grid blocks with yard buildings to closed grid blocks with open yards. The oldest blocks, located to the southwest of this map, are from the 1880s and 1890s and the youngest ones, located to the northeast of this map are from the 1920s and 1930s. What you are seeing is the central Rörsjöstaden area.*

**Västra Hamnen** – *post-modern reform blocks.*

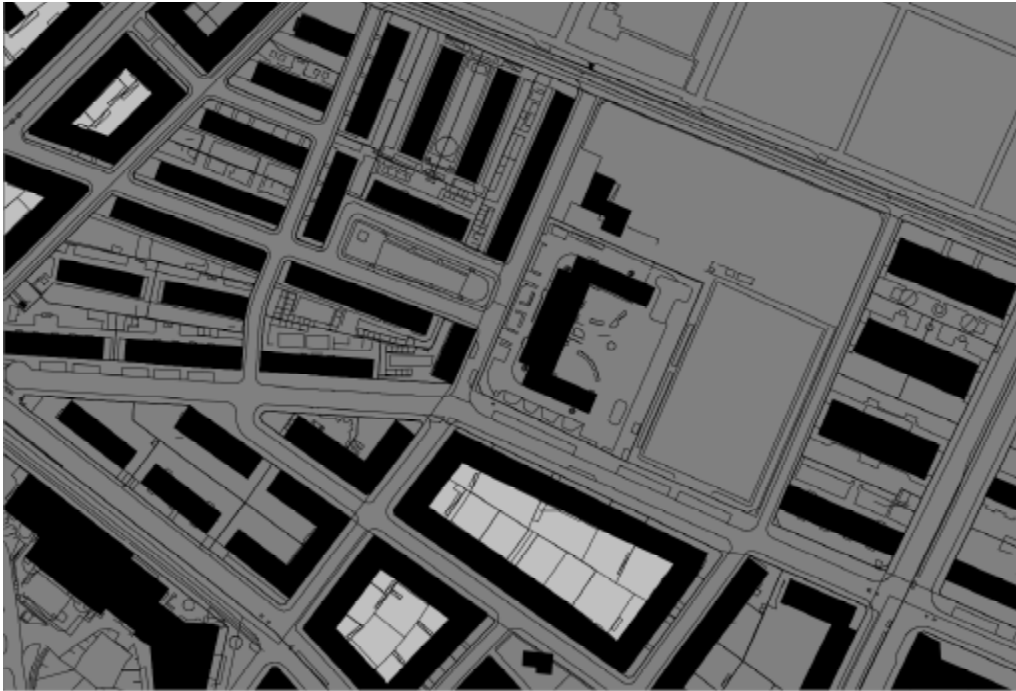
Västra Hamnen was created for the Housing exhibition Bo01 in 2001 (plan by Klas Tham in 1999). The plan resembles several older plans like the grid block plans and the plans for lamellar yard shapes.



*Figure i:10 The Bo01 exhibition subarea in Västra Hamnen was a major stake in marketing Malmö as a housing area for the affluent.*

**Västra Sorgenfri** – *closed grid blocks with yard buildings, free-standing lamellar, closed grid blocks with open yards.*

Västra Sorgenfri was built historically from the northwest toward the southeast – with *closed grids block with yard buildings* from 1903-08. The 1922 blocks are based on Anders Nilsson's plan, after which a plan by Erik Bülow-Hübe from 1927 mixes *free-standing lamellar buildings* with *closed grid blocks with open yards*. That plan was constructed in 1927-1937. There are some 1960s *slum clearance blocks* as well. The northwestern plan is a simple orthogonal grid while the southeastern plan is adapted to the Spånehusvägen route (Reisnert et al. 1989: 98-103).

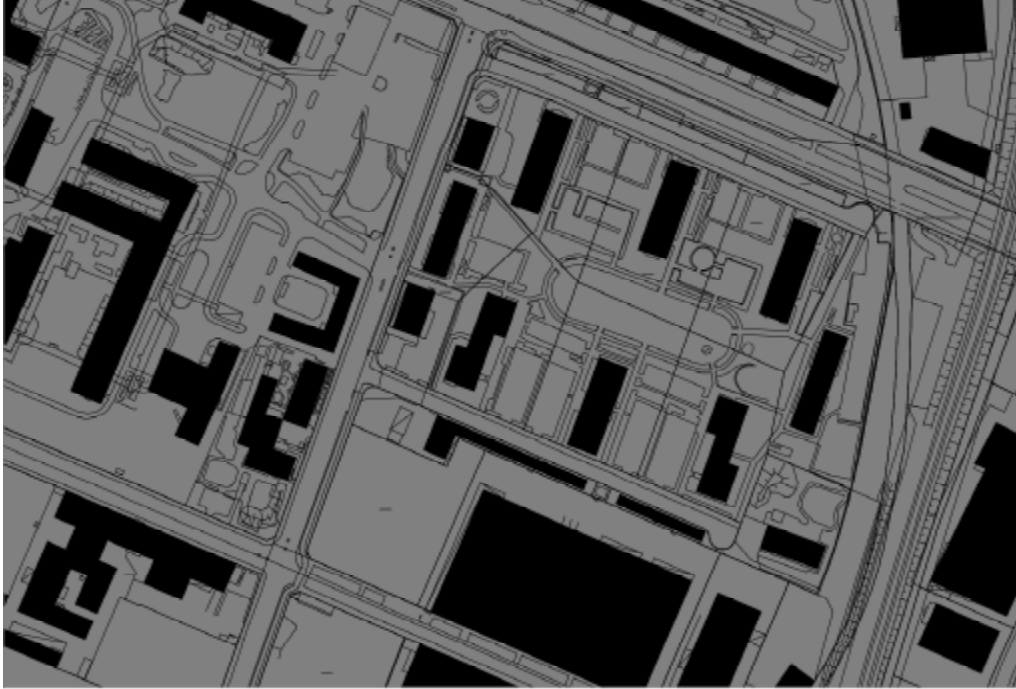


*Figure i:11 The southeastern part of Västra Sorgenfri. During the 1920s and 1930s closed grid buildings with open yards were built adjacent to lamellar buildings in the grid.*

## The subareas: social type B

### **Katrinelund** – *early modern megablocks*.

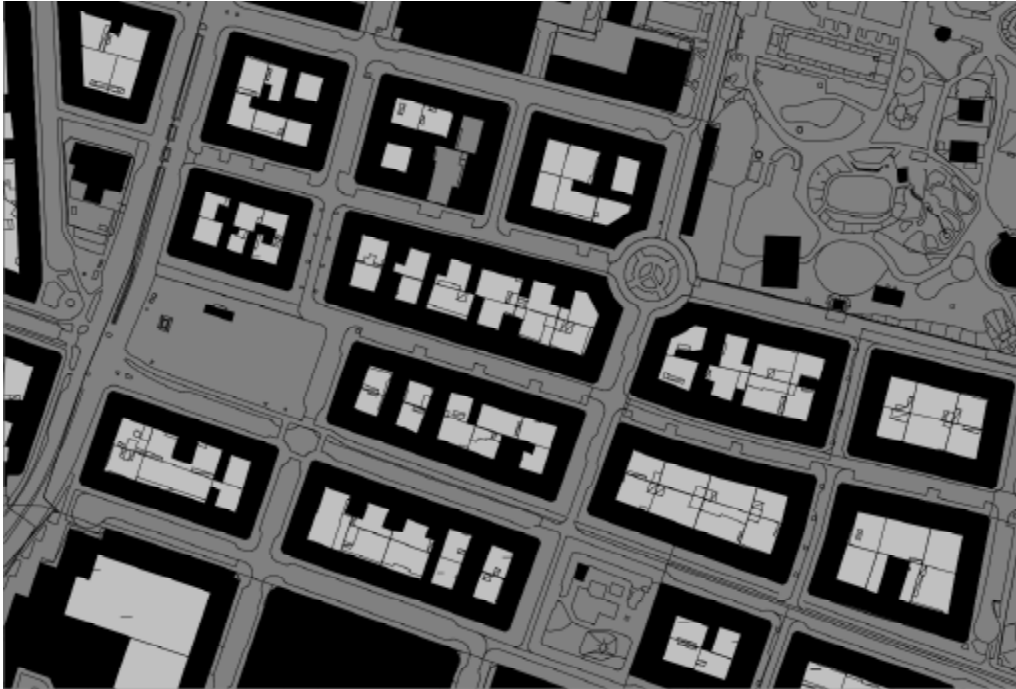
The housing area is from ca. 1960 and typical of *early modern megablocks* – neighborhood units– that still keep style elements from the *lamellar yard shape* era. The plan is from 1958 (Reisnert et al. 1989:54-57).



*Figure i:12 The lamellar buildings lining up toward the railroad crossing to the east of Katrinelund are good examples of lamellar yard shapes turning into the early modern megablocks. The plan is from 1958.*

**Möllevången** – *closed grid blocks with yard buildings, largely industrialized or commercialized ground floor plots, closed grid blocks with open yards, slum clearance blocks, liberal routescapes, early modern megablocks.*

Möllevången is second only to Rörsgästaden as an example of *closed grid blocks with yard buildings* from the early 20th century (city plan by Nilsson established in 1903), as well as having a fair amount of 1960s *slum clearance blocks*. Significant numbers of *early modern megablocks* as well as *largely industrialized or commercialized ground floor plots*, some of which have only recently (during the last five years) lost their industrial status, are sported as well. A fair number of blocks have been converted to *closed grid blocks with open yards*.



*Figure i:13 The closed grid blocks with yard buildings in the vicinity of the Möllevången square (at the west in the map) are fine examples of late 19<sup>th</sup> century buildings.*

**Norra Sofielund** - closed grid blocks with open yards, slum clearance blocks, liberal routescapes, post-modern row house blocks.

The history of this subarea as a municipality outside Malmö City proper gives it specific building traits that are still identifiable. (Améen 1964: 124-129). I chose to classify this part, the southern part of this subarea, as a liberal routescape, although the building characteristics are actually from later dates, in order to honor the plot division that is still intact. The northern parts of this subarea are visible on a map from 1936.

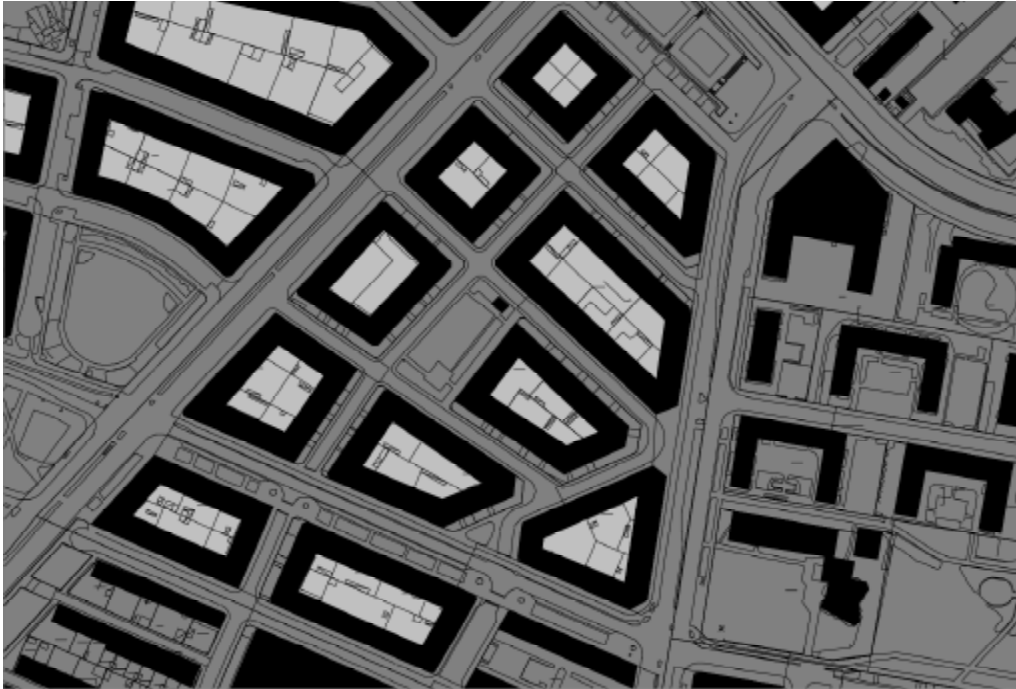


Figure i:14 The northern part of the subarea Norra Sofielund with its closed grid blocks with open yards.

**Slussen** - closed grid blocks with yard buildings, largely industrialized or commercialized ground floor plots, slum clearance blocks, closed grid blocks with open yards, liberal routescapes, lamellar yard shapes.

Slussen is at a crossroads position in Malmö, with the historical eastern thoroughfare leading through it from east-west (Östra Förstadsgatan) visible as early as on Georg Gustafsson's map from 1871, and modernist traffic arteries cutting through it from north-south (Drottninggatan, Föreningsgatan) (Lunds Universitet & Malmö Stad 2006:52-71). The diversity of the blocks reflects the diversity of this subarea's history.



**Södervärn** - *closed grid blocks with open yards.*

Most of the buildings are from the early 20th century. There was a railroad station until 1971, where the current bus station is. The plots were divided between 1929 and 1938. The plan is from 1927 and prescribes closed grid blocks with four-storey buildings. *Closed grid blocks with open yards* are the norm. A few buildings were renovated quite without consideration to their characteristics during the 1970s and could possibly have been classified as *slum clearance blocks*, although they have not been (Reisnert et al. 1989:90-93).



*Figure i:15 Södervärn with the two housing blocks located in the Allmänna Sjukhuset subarea to the west*

**Värnhem** – *largely industrialized or commercialized ground floor plots, closed grid blocks with open yards, slum clearance blocks, early modern megablocks, free-standing lamellar buildings.*

Värnhem is the subarea south of Värnhemstorget and was largely rebuilt during the 1970s with *early modern megablocks*. A fair percentage of 1920s *closed grid blocks with open yards* are also present. A large part of this subarea contains the Sorgenfri industrial subarea. The morph *largely industrialized or commercialized ground floor plots* is present here as well. Along Föreningsgatan there is one *closed grid block with yard buildings* from 1912-13 and another two more with mainly buildings from 1919 and 1933, one of which is a hybrid between the *closed grid block* and a *lamellar yard shape*, here classified as a *slum clearance block*. *Free-standing lamellar buildings* placed parallel to the Nobelvägen street were built during the mid 1930s. Several 1960s and 1970s *slum clearance blocks* fill out the balance of this subarea which is still partly community service buildings. There are also allotments in this subarea (Reisnert et al. 94-97).



*Figure i:16 The straight lamellar buildings that line the Nobelvägen street in the northeastern corner of the Värnhem subarea are unusual in their placement parallel to the street.*



**Östervärn** - *closed grid blocks with yard buildings, closed grid blocks with open yards, slum clearance blocks, largely industrialized or commercialized ground floor plots.*

Historically Östervärn is a major crossroads on the outskirts of Malmö, and is situated close to where the Östervärn railroad station originally stood (1893). The buildings are either *closed grid blocks with yard buildings* or *closed grid blocks with open yards*. There are also a few blocks of *largely industrialized or commercialized ground floor plots*. The southeastern part of this subarea is *closed grid blocks with yard buildings* and *closed grid blocks with open yards* built during two periods: first part in 1897-1911 and then in 1925-1939. The northwestern part of this subarea is 1960s *slum clearance blocks*, some of which are commercial enough to be called *largely industrialized or commercialized ground floor plots*. The street grid is often crossed by a 1960s street system. A few older buildings have survived the onslaught and remain as relics of pre-industrial society, dating from about 1850. They could have been classified as *liberal routescapes*, but they are too few to warrant separate classification. There are also a few larger buildings from the late 19th century. Östervärn is sometimes mistaken for the subarea named Värnhem (Reisnert et al. 1989:104-109).



Figure i:17 The administrative definition of Östervärn includes the areas immediately north of the Värnhem square, Värnhemstorget.

## The subareas: social type C

**Allmänna Sjukhuset** – *closed grid blocks with open yards, lamellar yard shapes.*

There are two 1930s blocks along Södra Förstadsgatan based on a plan for Södervärn in 1927 that are *closed grid blocks with open yards* and a third that is a *lamellar yard shape*. Most of this subarea belongs to the hospital (Reisnert et al. 1989:90-93).

**Annelund** – *lamellar yard shapes.*

Most of Annelund was built from west to east during the late 1950s with *lamellar yard shapes*. A few buildings to the west were built based on the original plan from 1938 (Reisnert et al. 1989:24-26).

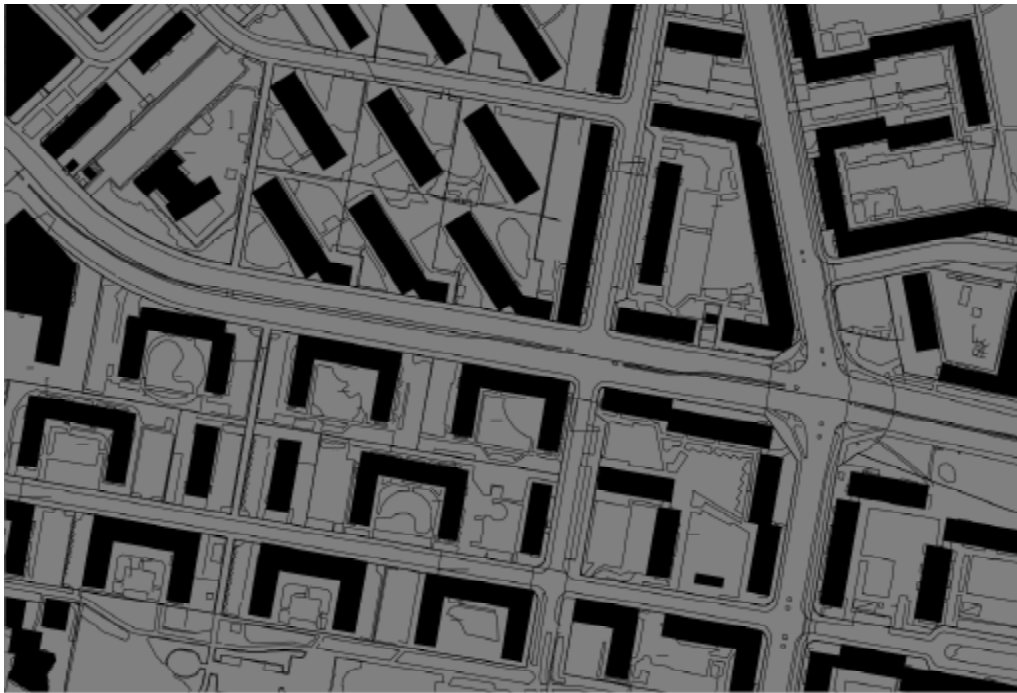


Figure i:18 Annelund is very consistent in its volumes of lamellar building in the grid

**Ellstorp** – *free-standing lamellar buildings, lamellar yard shapes.*

This subarea was conceived in the city plan 1937 and subsequently built from 1937-1944. It is unified, consistent and built as *free-standing lamellar buildings* combined with *lamellar yard shapes* in long buildings. Two of the buildings were given new metal siding in 1978 giving them the appearance of modern megablocks, but that was no reason to classify them as such (Reisnert et al. 1989:38-42).

**Kirsebergsstaden** – *liberal routescapes, slum clearance blocks, lamellar yard shapes, free-standing lamellar buildings, row house blocks, more regulated “own your own homes”*.

Kirseberg was the second of Malmö’s two early housing subareas for industrial workers, both built around the mid-1860s. Its suburban (in the “*faubourg*” sense) character is emphasized by the topographical seclusion from most of Malmö, a trait that is unusual in the topography of Malmö. Today there are remnants of these *liberal routescapes* as well as *slum clearance blocks* and *lamellar yard shapes* in the central parts of Kirseberg (Améen 1964:121-124). It is the most varied subarea in this social type. The plan is a *fait accompli* plan that was signed in 1936 and again in 1939 by Erik Bülow-Hübe. This subarea was under construction until the 1950s with *free-standing lamellar buildings* with three storeys alternately placed in either a north-south direction or an east-west direction. A few blocks were developed as late 1950s *lamellar yard shapes* star buildings. Another small number of supplementary buildings were added in the 1980s. The *more regulated “own your own homes”* are part of Rostorp’s “own your own home” subarea that have ended up outside the administrative border of the Rostorp subarea (Tykesson 2002a:78-89).



Figure i:19 The historically central parts of Kirsebergsstaden showing the variety of buildings that are present today.

**Lönngården** – *free-standing lamellar buildings*.

Lönngården consists of five blocks built from 1934-37. The plan from the 1930s is for *free-standing lamellar buildings* in four storeys with narrow buildings in a rigid north-south orientation. A plan for lamellar buildings in three storeys was executed from 1952-54 (Reisnert et al. 1989:68-71).



**Östra Sorgenfri** – *early modern megablocks, lamellar yard shapes, free-standing lamellar buildings, closed grid blocks with yard buildings, closed grid blocks with open yards.*

Östra Sorgenfri was built partly as emergency housing during WWII, and partly as housing for large families (*barnrikehus*). *Lamellar yard shapes* or *free-standing lamellar buildings* is the norm. A few buildings from about 1850 pre-date Malmö modern planning history (which can be said to begin with the plan for Rörjöstaden in 1872). These buildings could have been classified as *liberal routescapes*, as they were built along Spånehusvägen, but since they have been immersed in grid blocks, I chose to classify them as such. In general, there is often a choice of block classification of older blocks, since they have a hybrid character, with buildings and renovation of buildings from different time periods. In this case, the early 1900s yard building is in itself a hybrid form resulting from a history that touches on the *routescape* and the *closed grid block*.

There is a single plot owner-occupied one-family house as well as a few low scale buildings from the 1920s that were not classified separately from their immediate surroundings. A regular plan for this subarea was conceived in 1927 and revised during the following years and the *free-standing lamellar buildings* come from this period (built in 1935-36). The *lamellar yard shapes* date from a plan from 1938 and were built in 1944-46. During 1952-54, neighborhood units were conceived and built as *early modern megablocks* even though their form still resembles *lamellar yard shapes*. One single building is from the 1980s (Reisnert et al. 1989:110-116).



Figure i:20 The southern part of Östra Sorgenfri is dominated by the lamellar building in the grid, although several other super-morphs are present, such as the routescape and the closed grid block.

## The subareas: social type D

**Bellevue** – row house blocks, bourgeois large one-family houses.

The majority of the houses are *bourgeois large one-family houses* in park-like environment. This subarea is older than its counterpart, Nya Bellevue. The plan, by Anders Nilsson, can be seen in his map from 1914. Another plan was proposed in 1915-16. Most of the buildings are from 1900 to 1915. The current plan is a *fait accompli* plan, adopted in 1922 (Reisnert in Reisnert et al. 1989:140-143).



Figure i:21 The large estates of Bellevue.

**Djupadal** – *row house blocks, massproduced industrial suburban one-family housing, converted summer cottages.* Most of this subarea is from the 1950s and later. Major Anders Nilsson's plan is from 1915-16 and followed the incorporation of Limhamn small market town (*köping*) into Malmö. The plan is Sittean in character. This subarea has some diversity. Several one-family houses and summer cottages (e.g. ones built 1914, 1913, 1921, and 1923) are combined with small apartment houses for several families (resembling small tower blocks) (*flerfamiljsvillor*).

There were supplementary additions to this subarea west of Djupadalsparken in 1930 and 1936. In 1944-45 buildings were added north of Djupadalsparken

In the late 1950s, to the east and southeast, large areas of *mass produced industrial suburban one-family housing* and *row house blocks* were added. There is also a more recent part of this subarea from the 1980s, which is *post-modern row house blocks* (Ranby in Rejnert et al. 1989:144-147).



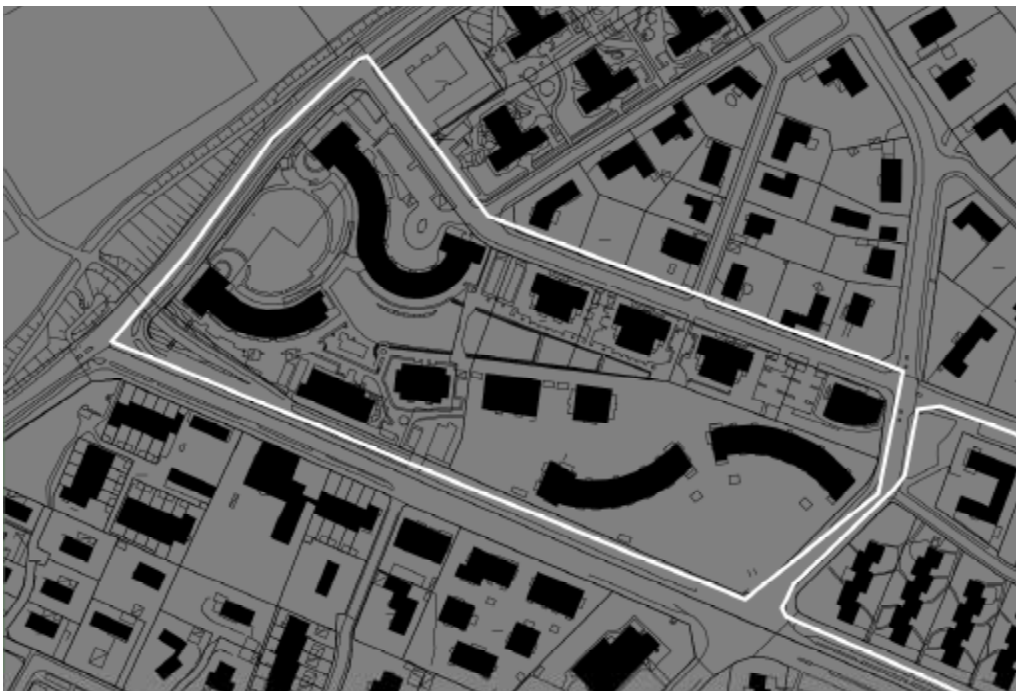
Figure i:22 The different parts of Djupadal are easy to spot on an orthographic map.

**Fridhem** – *bourgeois large one-family houses, row house blocks and post-modern reform blocks.* Malmö's economically most affluent subarea has many buildings with considerable symbolic capital in the architectural world, such as the modern *row house block* Friluftstaden (Eric Sigfrid Persson 1944-48), and the *post-modern reform block* Potatisåkern (designed by Moore, Ruble and Yudell in the 1980s) as well as having Malmö's best collection of patrician villas.





*Figure i:23 Frilufsstaden (highlighted) in Fridhem is a modernist rowhouse block development. Living there confers attractive symbolic capital on its inhabitants.*



*Figure i:24 Potatisäkern in Fridhem is a post-modernist reform block development. Living there confers attractive symbolic capital on its inhabitants.*



**Hyllieby** – *liberal routescapes, row house blocks, massproduced industrial suburban one-family housing.*

Hyllieby is located on an ancient site, although all that remains today are a few buildings related to the *pre-industrial village street* of Hyllie (rural buildings) and some less regulated “own your own home”s from the beginning of the 1900s. I have categorized the remains of the small village center as a *liberal routescape*. The majority of this subarea was built in the late 1960s to mid-1970s as *massproduced industrial suburban one-family housing* and *row house blocks* (Ranby in Reisnert et al. 1989:148-151).



*Figure i:25 Most of Hyllieby was developed in the late 1960s to mid-1970s.*

**Nya Bellevue** - *bourgeois large one-family houses*.

Nya Bellevue was designed on the basis of a mature Sittean plan by Anders Nilsson that can be seen on his map from 1917. Building began in 1910, but most of the buildings are from the 1920s and 30s. Many older houses have large coherent gardens thanks to off-placement of the main building on the plot (Reisnert in Reisnert et al. 1989:156-159).

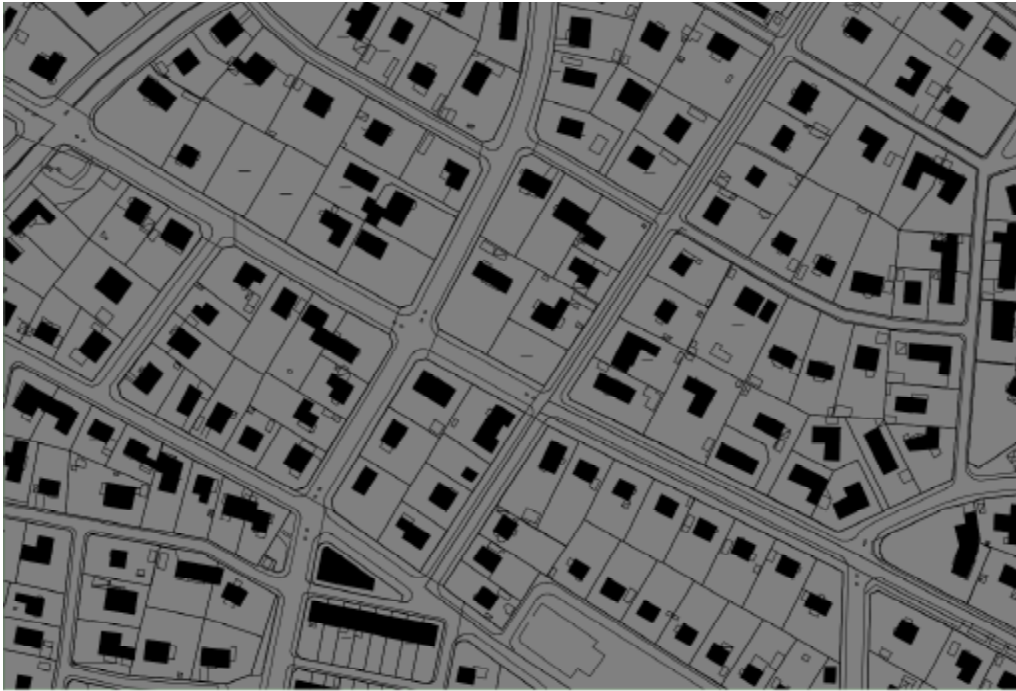


Figure i:26 The central placement on the plot of the bourgeois large one-family house was apparently negotiable in Nya Bellevue, where many plots have a more street-oriented placement of the main building.

**Rosenvång** – *row house blocks, more regulated “own your own homes”, less regulated “own your own homes”, bourgeois large one-family houses*.

There are *bourgeois large one-family houses* from the 1920s and the 30s, as well as *row house blocks* from the 1930s and small apartment houses from 1936 that was developed around 1942 into *row house blocks*. From the 1940s and 1950s single plot *bourgeois large one-family houses* started to be built and are still being constructed. This subarea contains a relatively (for this social type) large amount of housing of “*own your own home*” kind. Thus those morphs have been relevant as well in the categorization (Ranby in Reisnert et al. 1989:160-163).

**Solbacken** – *row house blocks, early modern megablocks, more regulated “own your own homes”, largely commercialized or industrialized ground floor plots.*

This subarea was built on previous donational land and is hybrid in character. Three *row house blocks*, centrally located, were built between 1963 and 1964.

A few two-storey *row house blocks* were built during the 1960s in the shelter of the *early modern megablocks* in the northern part.

Solbacken’s residential district (*villaområde*) of *more regulated “own your own homes”* was built primarily between 1923 and 1934.

A few *early modern megablocks* along John Ericssons väg are three storey buildings with livable attics under saddle-back roofs.

The northern part of this subarea was built between 1958 and 1959 as combined office and housing (Reisnert in Reisnert et al. 1989:186-189).

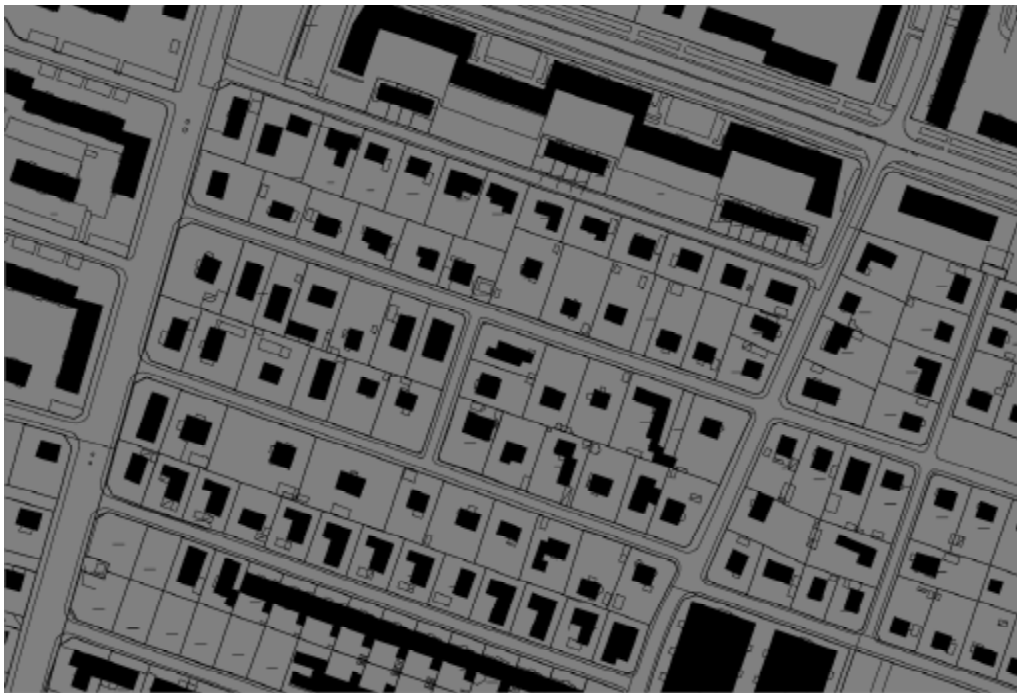


Figure i:27 Several morphs cover the subarea of Solbacken.

**Teatern** - *lamellar yard shapes.*

This subarea is dominated by the institutional theater located here, but a few *lamellar yardshapes*, part of the Pildammsstaden development, are located here as well.

**Västervång** – *bourgeois large one-family houses, more regulated “own your own homes”, row house blocks.*

The Västervång subarea, consisting mainly of *bourgeois large one family houses* and “*own your own homes*” was planned in 1928 and built mainly between 1935 and 1945. Large parts of this subarea were built during the 1970s and 1980s as single plot owner-occupied one-family houses, here classified as *more regulated “own your own home”*. In the plans for the area it is clear that emphasis was placed on vegetable patches for self-sufficiency, which is the reason for the displacement of the house on the plot. One or two storeys with a basement for storing fruits and vegetables was a common variant of the plan. Part of this subarea is part of Friluftsstaden, built by Eric Sigfrid Persson 1943-48 as *row house blocks* (Reisnert in Reisnert et al. 1989:168-171).



*Figure i:28 The houses in the Västervång residential district were built in 1935-1945 for self-sufficiency in wartime.*



## The subareas: social type E

**Annetorp** – *less regulated “own your own homes”, early modern megablocks, late modern megablocks, post-modern reform blocks, liberal routescapes, row house blocks, largely commercialized or industrialized ground floor plots.*

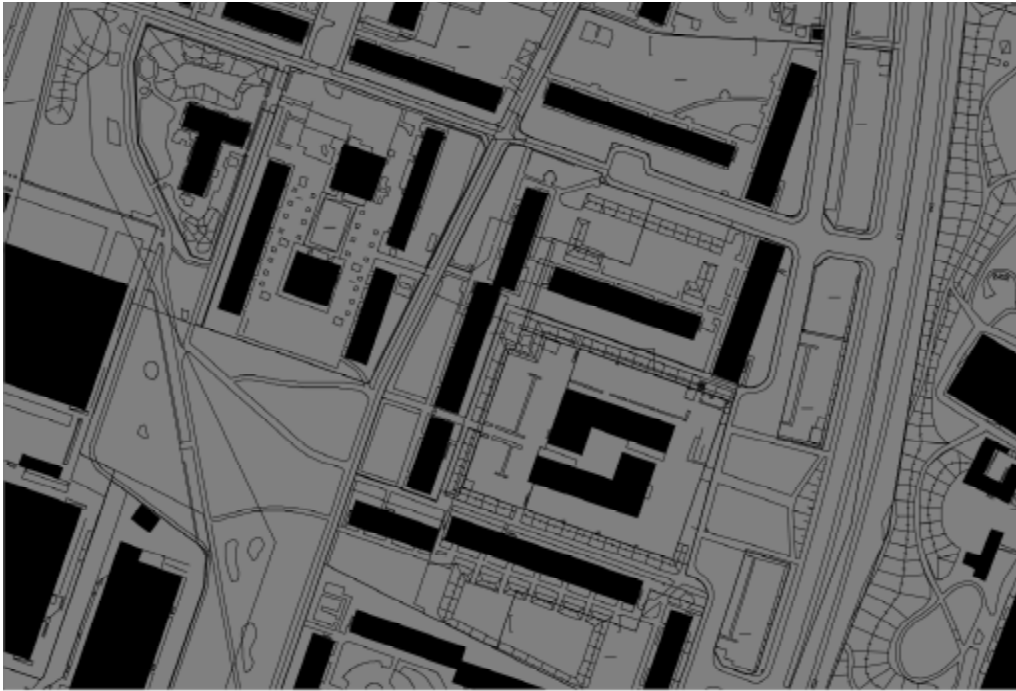
This subarea has a few pre-industrial buildings as well as buildings related to 19<sup>th</sup> century *liberal routescapes*. Some of these plots were subsequently developed as *largely commercialized or industrialized ground floor plots*, when Limhamn had a city center of its own. Most of this subarea, however, is the Annetorp “own your own home” area “Our Home” (*Vårt Hem*), planned in 1924 and built during the 1920s and 1930s. It has been classified as *less regulated “own your own homes”*. Approximately 15% of the houses were built after 1950 and about 17% of the houses that were built before 1950 were still in their original condition in 1989. This subarea also has a substantial number of *early and late modern megablocks*, an enclave of *row house blocks* and a few *post-modern reform blocks* (Thormark in Reisner 1989:136-139).



Figure i:29 Annetorp. The “own your own home” area (egnhemsområdet): “Vårt hem”.

**Borgmästaregården** – *early modern megablocks, post-modern reform blocks.*

Borgmästaregården was built from 1963 until mid-1960s. It consists of lamellar loaves either three or eight to nine storeys high. It also includes three seventeen-storey buildings, among the highest in Malmö, and it was built by HSB and Svenska Riksbyggen. There is one *post-modern reform block* built after 1989 (Larsson in Rejnert et al. 1989:172-175).



*Figure i:30 The megablocks of Borgmästaregården.*

**Dammfri** – *early modern megablocks, lamellar yard shapes, free-standing lamellar buildings.*

Dammfri was conceived in the 1950s and developed as twelve meter wide buildings with three or four storeys. The westernmost *early modern megablock* is part of Gunnar Lindman's plans for Mellanheden from 1941 and 1949, and was built as a unit in the early 1950s. It consists of six-storey buildings connected with one storey commercial buildings along Köpenhamnsvägen.

The central and eastern parts of the Dammfri subarea are based on a plan from 1942 and successively were built after WWII. The central part is built with parallel *free-standing lamellar buildings*, of three to four storeys, arranged together with ten *tower blocks*, of three storeys. The eastern part is *lamellar yard shapes* with open corners.

The southeasternmost part is experimental housing originally built to compare building costs. It consists of one narrow "Stockholm house", one narrow "Gothenburg house" and one wide "Malmö house". The idea was to compare the narrow lamellar houses with the wide one, in terms of economic viability. Most of the yards were renewed in the 1990s and in 2001 a densification with four-storey housing was added (Reisnert et al. 1989:29-32, Tykesson et al. 2002a:56-67).

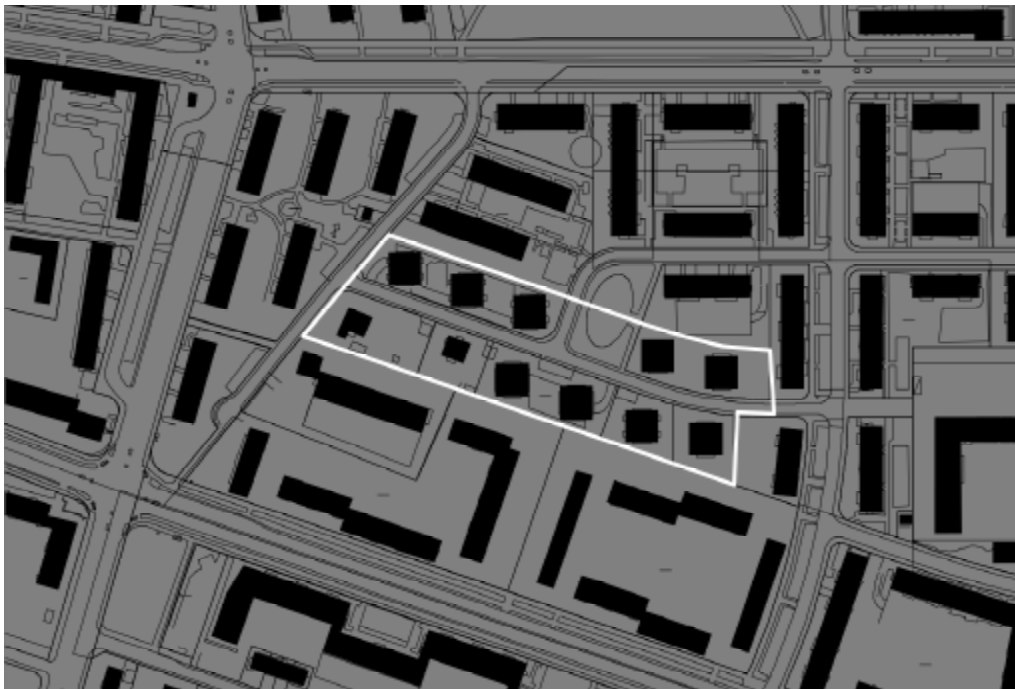


Figure i:31 The tower blocks in Dammfri are categorized as free-standing lamellar buildings in the survey.

**Gamla Limhamn** – *lamellar yard shapes, free-standing lamellar buildings, largely industrialized or commercialized ground floor plots, liberal routescapes, closed grid blocks with open yards, slum clearance blocks, early modern megablocks, more regulated "own your own homes", row house blocks.*

The Limhamn municipality was recognized in 1886 and Limhamn became a small market town (*köping*) before it was incorporated into Malmö in 1915. Limhamn was an industrial 19th century boom town. The basic rectangular street grid can be seen on an unsigned plan from 1890. Erik Bülow-Hübes plan from 1938 covers the northeastern and southeastern parts and does not modify the street grid but mostly initiates *lamellar yard shapes*. The urban district still retains a varied character. The 1945 plan shows three storey high *lamellar yard shape* as well as *free-standing lamellar buildings* with a street grid plan. The change of plan was authorized in 1947 by Gunnar Lindman. Some 19<sup>th</sup> century *liberal routescape* street buildings (*gatehus*) remain (Tykesson et al. 2002a:68-77).



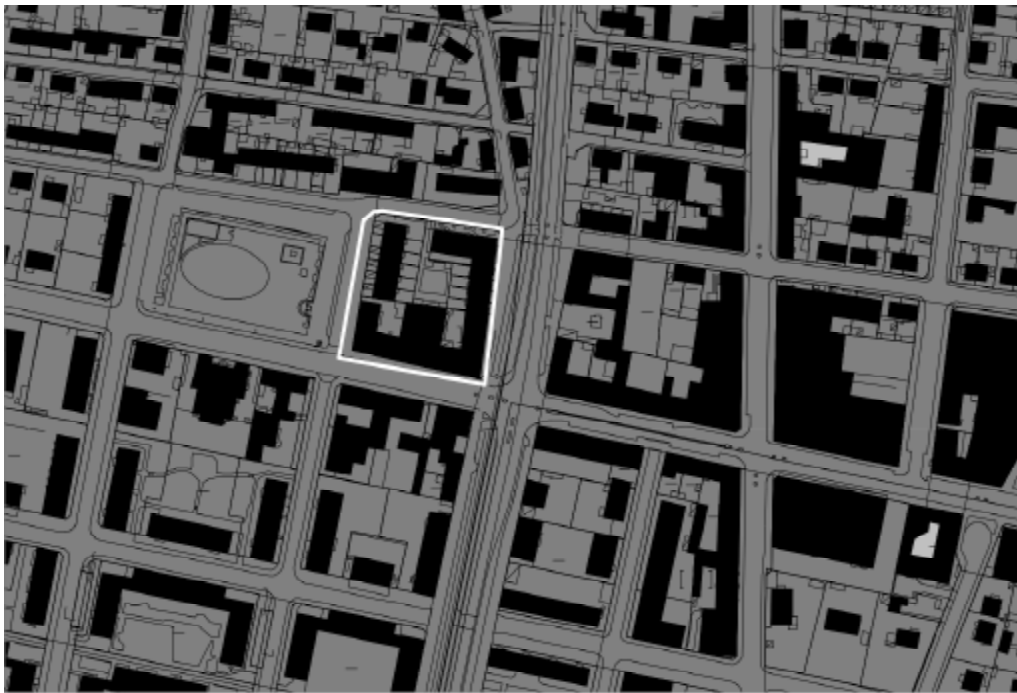


Figure i:32 and i:33 Gamla Limhamn was a municipality and small market town (*köping*) before it was incorporated into the City of Malmö and has a significant variety of morphs with hybrid blocks like the one highlighted being especially common.

**Limhamns hamnområde** – *post-modern reform blocks, post-modern row house blocks.*

A plan for this subarea was presented in 1997 as a brownfield development scheme for the housing exhibition Bo 2000. The exhibition was later moved to the western harbor as Bo01, but the plan remains more or less unchanged. This subarea was developed from the 1980s onward and the plan can be regarded as a *fait accompli* plan. Presently this subarea is still being developed (Malmö Comprehensive Plan 2000:70-71; Malmö Comprehensive Plan Supplement 2005:55).

**Lugnet** – closed grid blocks with open yards, closed grid blocks with yard buildings, largely industrialized or commercialized ground floor plots, late modern megablocks, slum clearance blocks.

This subarea was originally Malmö's oldest working class suburb (Améen 1964:121-122) and can be seen on Georg Gustafsson's map from 1871. It was completely demolished during the 1960s and 1970s and replaced with *late modern megablocks* with fourteen storey high buildings. The only remaining buildings are *liberal routescapes* along Södra Förstadsgatan, Drottninggatan and Amiralsgatan, which were subsequently transformed into *largely commercialized or industrialized ground floor plots*. This subarea also has five blocks that were planned as part of Rör sjö staden. Gustafsson's plan from 1872 is the basis for the Rör sjö staden *closed grid blocks with yard buildings*. Half of one block has buildings from 1875-1880, while the two other blocks have buildings from 1890-1914. There are also still a few buildings from the 1920s and 1930s along Drottninggatan and Södra Förstadsgatan. The *slum clearance blocks* are from 1975, 1976, 1986 and 1985 (Reisnert et al. 1989: 64-67).



Figure i:34 Although the five easternmost blocks of Lugnet were planned as part of Rör sjö staden, most of them were demolished and rebuilt beginning in the 1960s.



**Mellanheden** – *early modern megablocks, more regulated “own your own homes”*.

This subarea consists of two distinct parts: one-family housing from the 1920s and apartment buildings from the 1950s. The apartment buildings were designed on the basis of plans by Gunnar Lindman (in 1941 and 1949).

The plan from 1949 for the *early modern megablocks* is a neighborhood unit as defined in the Government Commission Report of 1945 (Bostadssociala Utredningen), and with the report came the initiation of public housing companies. MKB (Malmö City Housing Company) was founded in 1946 and Mellanheden was the second subarea developed by MKB. The star buildings were designed by Thorsten Roos in 1951.

Several buildings have later been insulated using brick siding. The one-family housing, *more regulated “own your own homes”* were built in the southeastern part in the 1920s (Reisnert in Reisnert et al. 1989:152-155).



*Figure i:35 The star buildings at Mellanheden were the second neighborhood unit built by the City's public housing company, MKB, and were designed by Thorsten Roos in 1951. The star buildings are a good example of how lamellar yard shape morph is transformed into the early modern megablock.*

**Sibbarp** – row house blocks, less regulated “own your own homes”, lamellar yard shapes, massproduced industrial suburban one-family housing, liberal routescapes, post-modern reform blocks, post-modern row house blocks. Many of the buildings in the “own your own home” area and among the mass-produced industrial suburban one-family housing as well as the row house blocks are from the 1960s. The liberal routescapes are the remains of old village streets from either the 19<sup>th</sup> century industrial era or pre-industrial fishermen’s homes near Vallbygränd or Sandegårdsgatan.

Part of the less regulated “own your own home” area could have been classified as converted summer cottage streets from early 1900s. Other liberal routescapes are based on working class blocks (arbetarlängor) – working class housing from the Limhamns industrial boom in the 1880s. There are a few blocks with three storey lamellar yard shapes from the 1940s and 1950s (Reisnert et al. 1989:164-167).



Figure i:36 In Sibbarp there are several morphs, such as lamellar yard shapes in the northeast and row house blocks in the northwest.

## The subareas: social type F

**Klagshamn** – *liberal routescapes, post-modern rowhouse blocks, massproduced industrial suburban one-family housing.*

This subarea is largely agrarian. The *liberal routescape* is the result of late 19<sup>th</sup> century industrial housing built in conjunction with the founding of the Klagshamn Lime Quarry Inc. (*Klagshamns Kalkbrotts AB*), 1895, which was closed in 1939. A railroad line connected Klagshamn to Tygelsjö as well. The harbor was used by fishermen. From the 1980s, *post-modern rowhouse blocks* and *massproduced industrial suburban one-family housing* has showed up increasingly (Andersson, H. 1972:64).

**Skumparp** – *liberal routescapes.*

The village of Naffentorp was subjected to land reform (*enskifte*) 1812-1814 and during the 19<sup>th</sup> century the Skumparp plot, which had not been built on before, was built with street houses (*gatehus*) and small farm houses (*småbruk*). The village of Skumparp was not subjected to land reform (*laga skifte*) until the late 1930s, and was thus considered a single plot until that time. From the 1860s and 1870s and on workers at the lime quarries in Klagshamn and Limhamn moved to Skumparp (Persson, B. 1998:394-398).

**Toarp** – *liberal routescapes, post-modern rowhouse blocks.* This subarea is largely agrarian and the *liberal routescape* consists of partitioned (subdivided) farms. The ecological village, which is a *post-modern row house block*, is from 1992.



Figure i:37 Partitioned farms in Toarp.

**Vintrie** – *liberal routescapes, post-modern rowhouse blocks, pre-industrial village streets.*

The subarea Vintrie consists of several agglomerations: The pre-industrial villages of Bunkeflo and Vintrie, Lilla Vintrie and Östra Vintrie.

Out of these, Lilla Vintrie is a *liberal routescape*, born out of a land partitioning in the early 19<sup>th</sup> century and migration of lime quarry workers during the late 19<sup>th</sup> century. Lilla Vintrie stagnated during the depression and with the closing of the Klagshamn lime quarry in 1939. Lilla Vintrie was incorporated into the City of Malmö in 1971. It is a commuting village today with new *post-modern row house blocks*.

Östra Vintrie was built with the coming of the railroad in 1886 and had more craftsmen and tradesmen rather than being working class, but otherwise it is similar to a *liberal routescape*.

The village of Vintrie is one of three older villages in the parish (the other two being Bunkeflo and Naffentorp) and had a north-south *pre-industrial village street* as well as 17 homesteads (*hemman*) in 1701. The village was transformed by the burghers of Malmö who owned much of the village and influenced developments during the next 200 years into a small number of large farms through the land reforms (*skiften*).

The village of Bunkeflo was the smallest of the three older villages, with 9 homesteads and a church. The *pre-industrial village street* was east-west in direction. In this village, in contrast to Vintrie, the households were divided at the deaths of the older generations, so there were 27 households at the end of the 19<sup>th</sup> century. Several street houses (*gatehus*) remain in the original village. *Post-modern rowhouses* are still being added. Most of the lands are still agrarian or road areas (Persson, B. 1998:231-307; 399-411).



## The subareas: social type G

**Gröndal** – *late modern megablocks, post-modern rowhouse blocks, less regulated “own your own homes”, mass produced industrial suburban one-family housing, post-modern reform blocks, late modern megablocks.*

The plan from 1965 was signed by Gabriel Winge and shows three six and eight storey buildings and one sixteen-storey building arranged as a *late modern megablock* i.e. built adjacent to a green area. Building started in 1966 and in 1969 the plan was revised. Approximately 85% of the housing is *late modern megablocks* and the remaining 15% are *post-modern row houses* or *less regulated “own your own homes”* and *more regulated “own your own homes”*.

The category housing (*kategoriboende*) 350 apartments for the elderly in Södertorpsgården from the 1990s are *post-modern reform blocks*. There are major variations in building sizes and facade renovations over time (Tykesson 2002c:66-73).



Figure i:38 In Gröndal, the late modern megablock is separated from the less regulated “own your own home” area by a large green area.



**Håkanstorp** – *More regulated “own your own homes”, liberal routescapes, free-standing lamellar buildings, early modern megablocks, post-modern row house blocks.*

*Liberal routescapes* were built in the southeastern corner of the three blocks in the orthographic photo between 1904 and 1911, outside the borders of Malmö on partitioned plots. There are also small apartment houses here.

*More regulated “own your own homes”,* originally from the mid 1920s, have now been largely renovated (with brick insulation). Changes in windows, garage additions and fences blur the distinctions between the younger *more regulated “own your own homes”* in a few blocks built from the 1930s to 1950s and the 1970s *massproduced industrial suburban one-family houses* along Fylkinggatan. This subarea was regulated as it was part of the City of Malmö in the 1920s, although the plan is a *fait accompli* plan from 1944.

The *free-standing lamellar buildings* along Sallerupsvägen are from the late 1940s, and the *early modern megablocks* are from 1958. There are a few *post-modern row house blocks* as well, from the 1980s (Ranby in Reisnert et al. 1989:46-50, Tykesson et al. 2002b:72-79).



Figure i:39 By subarea, the more regulated “own your own home” category covers more than 53% of the Håkanstorp subarea, although only 22% of the population of Håkanstorp lives there.

**Kronprinsen** – *largely industrialized or commercialized ground floor plot.*

The highest building in a complex of six is 27 storeys high. This subarea was finished in 1963-64. The block is owned by the Hugo Åberg company, which also determined the plan to a large extent. It can be described as landmark Americanized residential architecture with a high degree of self-sufficiency, originally a sporting TV station, restaurants, and a shopping mall. The plan was signed in 1961 by Gabriel Winge (Reisnert et al. 1989:62-63, Tykesson et al. 2002b:88-95).

**Lorensborg** – *early modern megablocks*.

This subarea was built for the soccer World Cup in 1958 as Stadionstaden. This subarea consists of *early modern megablocks* from three-storey buildings to three sixteen-storey buildings. A number of eight-storey lamellar buildings are arranged as *early modern megablocks* with centralized green areas surrounded by the higher buildings and the lower buildings in the periphery. There are four ten-storey buildings facing a park. The plan is from 1956 and the buildings were individualized in style (Larsson in Rejnert et al. 1989: 184-185, Tykesson (ed.) 2002b:108-119).



Figure i:40 The early modern megablocks of Lorensborg sport enormous green carpet lawns.

**Södertorp** – *late modern megablocks, less regulated “own your own homes”.*

This subarea was built with three and eight storey buildings adjacent to a larger green area, *late modern megablocks*. Södertorp was incorporated into the City of Malmö in 1931. This subarea was largely unbuilt until the 1960s, save for allotment gardens. The plan is from 1965 and was signed by Gabriel Winge. The southern part was planned in 1969, with two larger groups of buildings each group arranged in relation to three yards (Tykesson 2002c:168-173).



Figure i:41 and i:42 Södertorp is heavily dominated by late modern megablocks.

## The subareas: social type H

**Hindby** – *less regulated “own your own homes”, mass-produced industrial suburban one-family housing, row house blocks, post-modern row house blocks, early modern megablocks, post-modern reform blocks.*

The “own your own home” area “Own Hearth” (*Egen Hård*) was successively built between 1910 and 1950 “outside the borders” of Malmö, following a vague plan. There are varying plot sizes and placement of houses on plots in this subarea. Most of the buildings are from the 1920s. There is a *fait accompli* plan from 1943.

A substantial amount of *massproduced industrial suburban one-family housing* was added in the 1970s and rowhouses from the 1970s and 80s add to the variation in this subarea.

In 1957 a plan for *early modern megablocks* with four storey high buildings was established in the northwest. The *row house blocks* are part of the plan for the Rosengårdsstadens “own your own home” area, but most of the area consists of *mass-produced industrial suburban one-family housing*.

There are also a couple of *post-modern reform blocks* and *post-modern row houses* as well in this subarea (Thormark in Rejnert et al. 1989:216-219).



**Kroksbäck** – *late modern megablocks, mass-produced industrial suburban one-family housing, row house blocks, less regulated “own your own homes”.*

The *mass produced industrial suburban one-family housing* and the *row house blocks* are in the western part. The remaining “own your own homes” are to the north. The eastern part is *late modern megablocks* from the 1960s.

The megablocks in Kroksbäck were part of the first “million program” areas in Malmö. The northern part of the megablock area was built by HSB and some of it is yellow brick architecture. The southern part was built by MKB and has been largely renovated. The buildings have three and eight storeys. The traffic solution is radical in its separation of walking and cycling from car traffic through lowered streets and elevated walkways. The Kroksbäck area was originally part of an even larger projected area that was never developed owing to the end of the “million program”. The plan was signed in 1965 by Gabriel Winge, and the area was developed shortly thereafter.

Kroksbäcksparken, the area’s green area is to the southeast, administratively it is part of a different subarea (Tykesson et al. 2002c:90-99).



Figure i:43 Kroksbäck, between the late modern megablocks and the row houses there is today a traffic artery.

**Rostorp** – more regulated “own your own homes”, lamellar yard shapes.

Rostorp’s “own your own home” area was built from 1923-26 with identical type drawings (*typritningar*) following a plan by Erik Bülow-Hübe that signed in 1922. The plan is an orthogonal grid focused on two open spaces in the center. This subarea is very uniform, and all buildings have their gables facing the street. However, plot depth differs throughout the subarea. In 1962 permission was granted to insulate the houses with red brick. Only 20% of the one-family housing remained in its original form in 1989.

Facing Lundavägen there are blocks of U-shaped lamellar yard shapes, , designed ca. 1940 (Thormark in Reisnert et al. 1989:124-128).

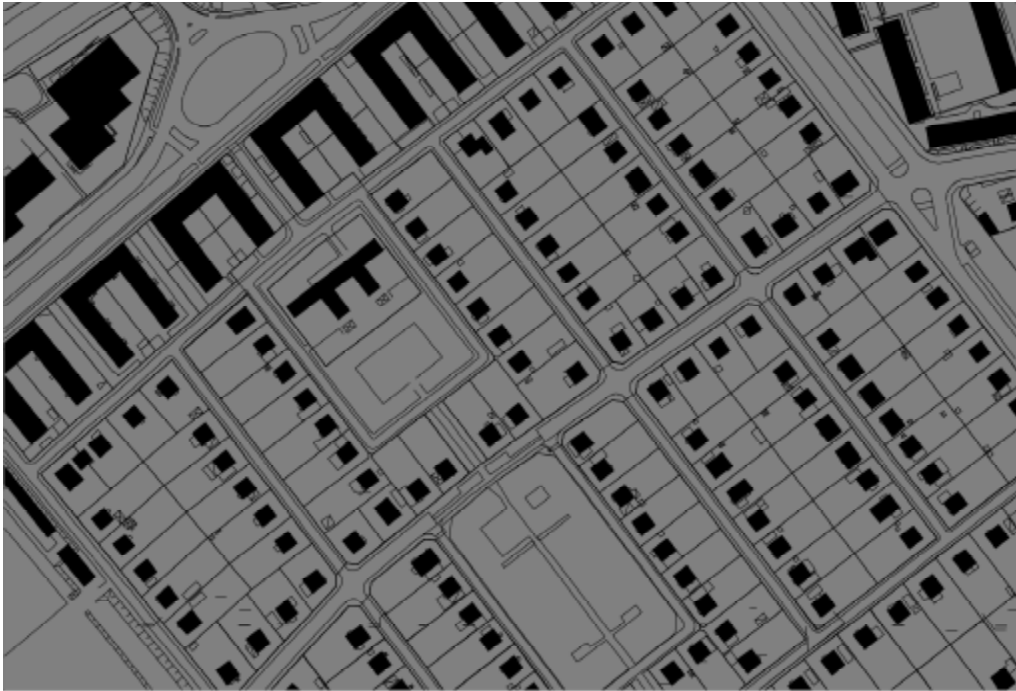


Figure i:44 Rostorps “own your own home” area and the lamellar yard shapes facing Lundavägen.

**Valdemarsro** – *less regulated “own your own homes”, row house blocks.*

The “own your own home” area Valdemarsro, was built from the mid-1920s through the 1930s, on the basis of a plan by Erik Bülow-Hübe in 1923. The *row house blocks* are from 1978, and some *massproduced suburban industrial one-family housing* in the form of catalogue homes is from 1970-80. Over time a great variety of materials, placement and additions have come into use. More than 50% of this subarea was built after 1960, so the building age also varies (Ranby in Rejnert et al. 1989:132-135).



*Figure i:45 The less regulated “own your own home” area of Valdemarsro features a less regulated gable orientation than the more regulated “own your own home” areas.*



## The subareas: social type I

**Almvik** – *late modern megablocks, post-modern rowhouse blocks.*

This subarea consists mainly of *late modern megablocks* from the early 1970s. A few of these blocks are sixteen storey tower blocks – Högaholm – which are among Malmö's highest buildings. The plan was made in 1969-70 by Svenska Riksbyggen together with Gabriel Winge. The tower blocks are surrounded by low three storey high lamellar buildings. The area was extended in 1973. In the late 1990s a small area of *post-modern rowhouses* was added east of Trelleborgsvägen (Tykesson et al. 2002c:50-57).



*Figure i:46 The tower blocks of Högaholm are among the most conspicuous buildings in the Almvik subarea.*

**Bellevuegården** - *late modern megablocks, bourgeois large one-family house, row house blocks, post-modern reform blocks, massproduced industrial suburban one-family housing.*

Bellevuegården is one of the last of the “million program” areas built in Malmö, in the early 1970s. A few of the buildings are articulated, with bay windows.

Senior citizen blocks were built in the 1990s as *post-modern reform blocks* with expansive roofs and plastered facades in pastels.

A small area of the western part was mentioned in the 1908 plan as a section of Bellevue residential district, *bourgeois large one-family houses*, but most of it was built in the 1960s as *row house blocks* and *massproduced industrial suburban one-family housing*.

The eastern megablock section was included in the general plan from 1956. In 1968 a more varied plan was designed with three, six and nine storey high buildings (Tykesson 2002c:58-65).

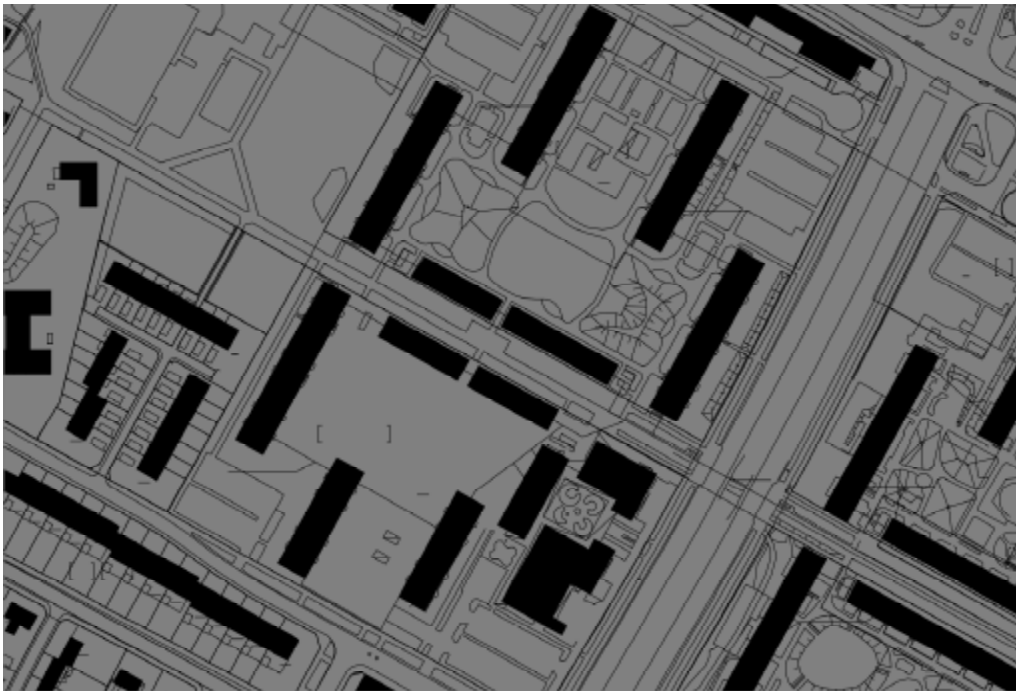


Figure i:47 Bellevuegården is one of the last “million program” areas built in Malmö

**Höja** – late modern megablocks, less regulated “own your own homes”.

This subarea consists mainly of two late modern megablocks: Vita Höja with nine storey high white buildings and Gula Höja with three storey high yellow lamellar buildings. The respective plans were signed by Gabriel Winge in 1966 and 1968 and the areas were designed and built by Svenska Riksbyggen and BPA. In 2002, the balconies were glazed and extended.

The northeastern part is a less regulated “own your own home” area adjacent to Videdal (Tykesson et al. 2002c: 84-89).



Figure i:48 The Höja megablocks and a small corner of the less regulated “own your own home” area adjacent to Videdal.



**Lindeborg** – *late modern megablocks, post-modern reform blocks, row house blocks, post-modern rowhouse blocks, massproduced industrial suburban one-family housing, less regulated “own your own homes”*.

This subarea is dominated in part by *late modern megablocks*, developed in the early 1970s on the basis of a plan that was a carbon copy of the Klostergården plan in Lund, with its repetitive large scale “million program” architecture. Identical facades on three and eight storey high buildings are grouped around seven courtyards.

A few *post-modern reform blocks*, both the so called Alps buildings constructed by MKB and Riksbyggen during the late 1970s and the 1980s, as well as during the 1990s and 2000s, the BoKlok buildings were designed and built by IKEA and Skanska.

The northeastern *less regulated “own your own home”* area, Bergdala, has “own your own home” buildings from the 1930s and possibly a few buildings built in conjunction to the Malmö-Trelleborg railroad that went through the area 1886-1971. This subarea as a whole was incorporated into the City of Malmö in 1971. The plan is from 1972, and was developed by Curt Ivarsson. Plan changes were initiated in 1976, adding one-storey *row house blocks* and *massproduced industrial suburban one-family housing* to the east and the north. Some of the buildings have been densified (supplemented with more buildings without any addition of green areas) during different periods (Tykesson et al. 2002c: 100-107).



Figure i:49 The Lindeborg plan was developed as a carbon copy of the Klostergården plan in Lund.

**Västra Söderkulla** – *late modern megablocks, post-modern reform blocks, row house blocks, less regulated “own your own homes”, largely industrialized or commercialized ground floor plots.*

This subarea consists primarily of two *late modern megablocks*, a northern part and a southern part. The northern part was built during the early 1960s and is unusual in that its street grid make parts of the area available for through traffic instead of the more common cul de sacs. The plan is from 1959 and was signed by Gabriel Winge. Most buildings have four or eight storeys but there are also a couple of thirteen storey buildings adjacent to a park area. There are also a few *row house blocks* in the northwestern part, as well a small part of a *less regulated “own your own home”* area. The plan for the southern part was designed in 1966, and the buildings were built shortly thereafter. The plan shows buildings with two, three, five and eight storeys. Most of the buildings were built by HSB. The original green area plan was designed by Per Friberg (Tykesson et al. 2002b:142-151).



*Figure i:50 As here in Västra Söderkulla, the local authority have tended to group modern megablocks with “own your own homes” administratively at the subarea classification level.*

**Östra Söderkulla** – *late modern megablocks, less regulated “own your own homes”, row house blocks.*

This subarea consists mainly of *late modern megablocks* designed 1964-1968 by HSB arkitektkontor in Malmö and have three, five or eight storeys with yellow brick facades and flat roofs. The plans are from between 1961 and 1966 and were signed by Gabriel Winge. There are a total of ten houses in three blocks, placed orthogonally. Low buildings are placed in the east-west direction and high buildings are placed in the north-south direction (Reisnert in Reisnert et al. 1989:220-223, Tykesson et al. 2002b:152-158).

## The subareas: social type J

**Gullvik** – *less regulated “own your own homes”, mass-produced industrial suburban one-family housing, row house blocks, post-modern reform blocks.*

This subarea was incorporated into the City of Malmö in 1931. The oldest parts consist of old farms, plots that were partitioned by corporations and sold as “*own your own home*” areas, *less regulated*, between 1909 and 1918. This was typical of outside the border settlements (*utomgränsbebyggelse*) at the time period. Varying plot placement and sizes of plots, but most of the plots are occupied by small houses. There are also some outbuildings and other agricultural buildings that were built adjacent to the farm housing. The plan was designed in 1953 as a *fait accompli* plan.

During the 1960s *rowhouse blocks* and two-storey high *mass-produced industrial suburban one-family housing* were added. That plan is from 1959.

During the 1970s and 80s the western part was built with *row house blocks*. Plans for those developments are from 1980 and 1988.

A few *post-modern reform blocks* were added later (Thormark in Rejnert et al. 1989:205-207).

**Kulladal** – *less regulated “own your own homes”, mass-produced industrial suburban one-family housing, early modern megablocks, late modern megablocks, row house blocks.*

In this varied subarea a few blocks, *less regulated “own your own home”s*, were built during the 1910s between Lindeborgsstigen (then the railroad from Malmö-Vellinge) and Per Albin Hanssons väg (then the country road from Malmö-Trelleborg). The plots were used during World War I as allotment gardens, and were converted into one-family housing between 1920 and 1938. The first *fait accompli* plan in 1938 was a simple orthogonal grid.

“Per Albin Hansson’s home” is an enclave housing area mentioned in the general plan 1962 and in a plan from 1964. Buildings are centrally placed and green areas are located on the periphery of the building complexes. It is an early example of *late modern megablock* housing, with three and eight storey high buildings designed by the HSB architecture office in Malmö.

The northern part of this subarea is part of Blekingsborg’s neighborhood unit, based on plans by Gunnar Lindman 1953 and 1955, and built in 1956 as *early modern megablocks*. The Blekingsborg neighborhood unit is characterized by larger buildings centralized around a green area and lower buildings on the periphery. There are four twelve storey high buildings.

*Row house blocks* were added during the 1970s. About 25% of the *less regulated “own your own homes”* are from this time period as well, and have often replaced older buildings. Very few of the buildings have kept their original character. Most have been insulated with bricks (Thormark in Rejnert et al. 1989:180-183, Tykesson et al. 2002:96-107).

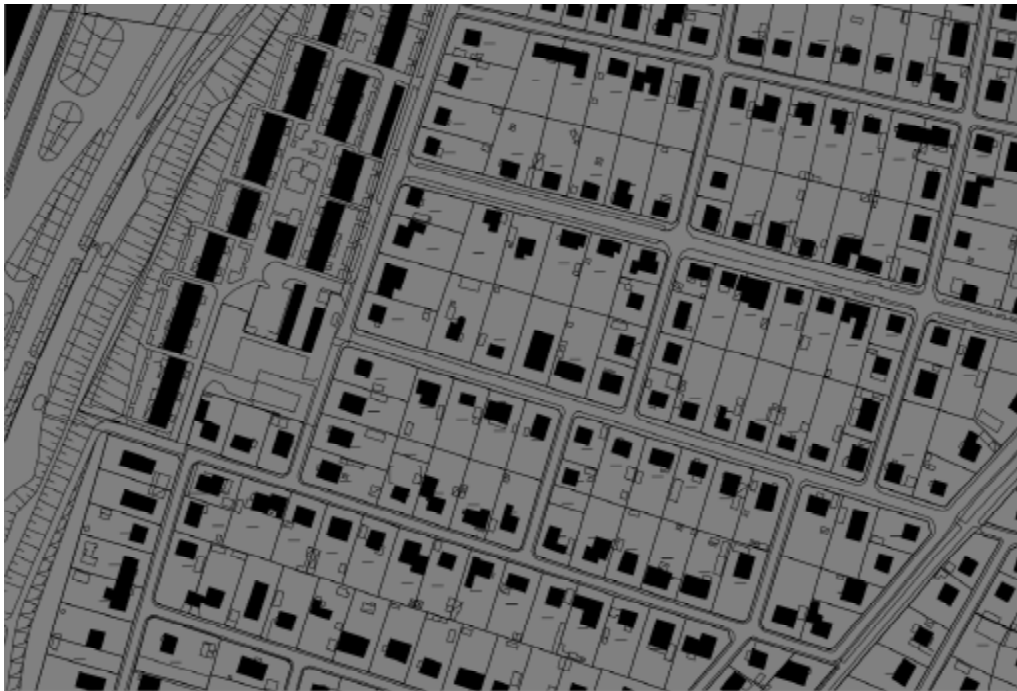


Figure i:51 Part of the large and diverse Kulladal subarea with rowhouses to the west.



**Käglinge** – less regulated “own your own homes”, massproduced industrial suburban one-family housing, post-modern row house blocks.

An earlier “own your own home” area has been supplemented by massproduced industrial suburban one-family housing, and later with post-modern rowhouse blocks. Part of this subarea is also agricultural.



Figure i:52 A part of Käglinge, featuring a less regulated “own your own home” area to the left.

**Lockarp** – pre-industrial village street.

Lockarp is basically an old church and a village street. This subarea is largely agricultural.



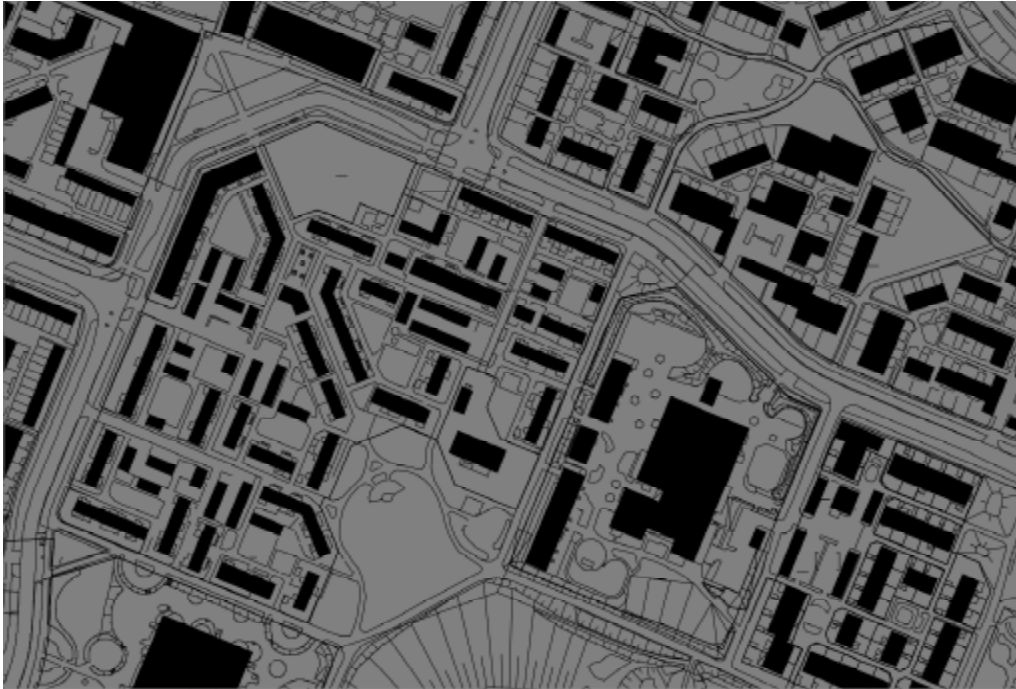
Figure i:53 The pre-industrial village street pattern in Lockarp.

**Oxie Kyrkby** – *less regulated “own your own homes”, massproduced industrial suburban one-family housing, pre-industrial village streets, row house blocks.*

Oxie Kyrkby went through a major expansion during the 1970s. A group of houses near the church has existed since at least 1806. The village was incorporated into the City of Malmö in 1967.

**Oxievång** – *rowhouse blocks, largely industrialized or commercialized ground floor plots, post-modern row house blocks, massproduced industrial suburban one-family housing.*

In central Oxievång there is a *commercialized ground floor plot*, but otherwise this subarea was developed after 1970 with *row house blocks*.



*Figure i:54 Row house blocks in Oxievång.*

**Östra Skrävlinge** – *post-modern reform blocks, less regulated “own your own homes”, massproduced industrial suburban one-family housing, post-modern reform blocks, row house blocks, liberal routescapes.*

This subarea is largely agricultural, and includes a few industrial sites as well. Along Klågerupsvägen there are older buildings that should be considered part of a routescape.

## The subareas: social type K

**Bulltofta** – *post-modern row house blocks.*

This subarea was an airstrip until 1972 and was later developed into *post-modern row house blocks.*

**Bunkeflostrand** – *converted summer cottages, less regulated “own your own homes”, row house blocks, post-modern row house blocks, massproduced industrial suburban one-family housing.*

In the northern part, west of Klagshamnsvägen there is a larger part that is *converted summer cottages.* South of that area there are *post-modern row house blocks* from the 1980s, *row house blocks* from the 1960s, *massproduced industrial suburban one-family housing* and a summer cottage residential area that has not yet been converted.

East of Klagshamnsvägen there is a larger *less regulated “own your own home”* area mixed with *mass-produced industrial suburban one-family housing.*

*Post-modern row house blocks* stand to the far east. This part is expanding quite extensively at the moment, as the residential area Annestad. This subarea as a whole was incorporated into the City of Malmö in 1971.

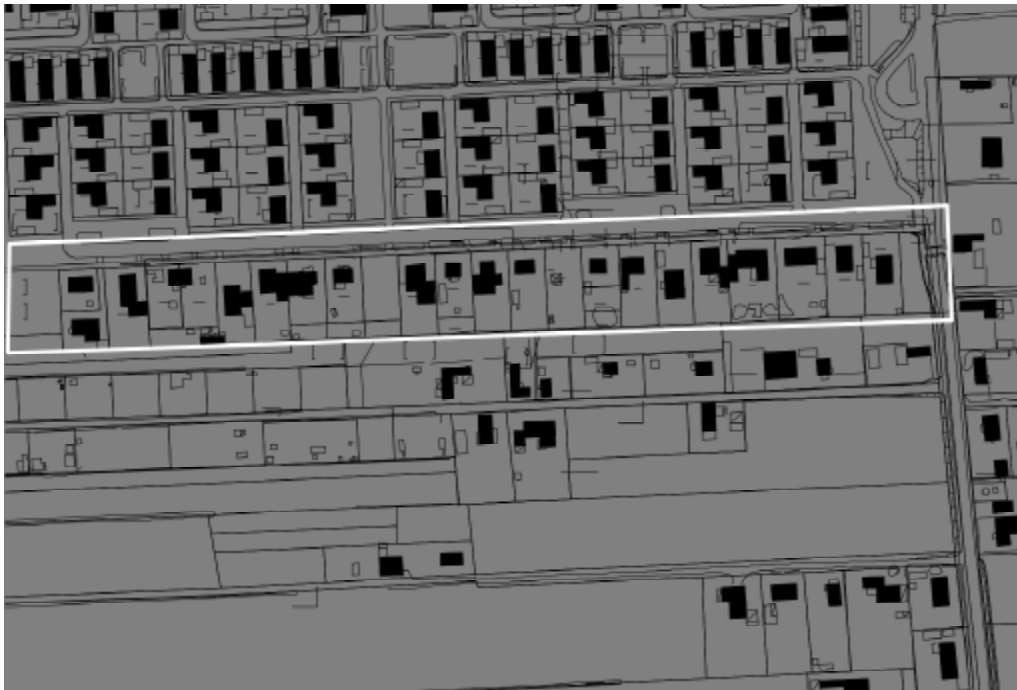


Figure i:55 Bunkeflostrand. *Converted summer cottage street highlighted.*

**Eriksfält** – *liberal routescapes, less regulated “own your own homes”, row house blocks.*

Along Backavägen and Fosievägen there are still some *liberal routescapes* from the 1890s. “Own your own homes”, of varying character built from 1910-30, cover the rest of the northern part of this subarea. Some of these homes are of the more affluent sort, with a large centrally placed building, while others are of the poorer sort, with street placement and a basement for food storage.

The southern part consists of approximately 70 almost identical “own your own homes”, built in the mid 1940s, according to a plan in 1938.

A few *row house blocks* from the 1960s and supplementary buildings erected during the 1970s and 80s round off this subarea. The plan grid has been adapted from old routes (Thormark in Reisnert et al. 1989:200-203).



*Figure i:56 The diagonal roads of Eriksfält point us to the history of the liberal routescape.*



**Johanneslust** – more regulated “own your own homes”, row house blocks, post-modern row house blocks.

The “own your own home” area, Flygstaden, was initiated in 1918 and the City of Malmö built the first 18 houses. All of them are 1½ storeys high, designed between 1919 and 1924 and either: a) the traditional “own your own home” with a kitchen and two rooms on the ground floor and kitchen and one room on top.

b) The other type: a two-family house with the apartments upstairs and downstairs rather than side by side, with bottom floor kitchen and one or two rooms and a separate apartment on the top floor. 60% of these have been transformed, mainly with brick insulation.

The *row house blocks* along Sallerupsvägen are from 1928-32. They are in 1½ floors with plastered facades, steep saddle roofs and classic, sometimes rustic work decorations. Many of these buildings have been transformed (Reisnert et al. 1989: 120-123).



Figure i:57 Johanneslust: the more regulated “own your own home” area Flygstaden is to the right.

**Riseberga** – *less regulated “own your own homes”, row house blocks, massproduced industrial suburban one-family housing, post-modern row houses.*

To the west of the residential area there is a larger recreational area. Riseberga is partly an older “own your own home” area, built during the interim between WWI and WWII on an orthogonal grid with a heterogeneity of buildings and placements of plots, although the cubic proportions and steep roofs of the 1930s buildings dominate. Riseberga is also partly *row houses* and *massproduced industrial suburban one-family housing*, and sometimes small rectangular catalogue homes, from the 1950s and 1960s. There is a *fait accompli* plan from 1950. Riseberga was incorporated into the City of Malmö in 1935 (Ranby in Reisnert et al. 1989:240-243).



Figure i:58 Row house blocks in Riseberga.

**Södra Sallerup** – *pre-industrial village street, post-modern row houses, less regulated “own your own homes”, row house blocks.*

This subarea as a whole is mostly agricultural. Free-lying farms are excluded from the survey (although they are included in the social data). There is a village street with an old church.

## The subareas: social type L

**Jägersro Villastad** – *massproduced industrial suburban one-family housing.*

This subarea was built in the 1960s.

**Kvarnby** – *row house blocks, post-modern row house blocks, more regulated “own your own homes”.*

Parts of the Husie *pre-industrial village street* and Husie church are included, although most of Husie is in the Södra Sallerup subarea.

**Stenkällan** – *massproduced industrial suburban one-family housing, late modern megablocks, row house blocks, less regulated “own your own homes”.*

This subarea consists of *late modern megablocks* named “Röda Höja” because of its red brick. It was built on the basis of a plan by Gabriel Winge and Bertil Lagerås from 1965. The buildings are two or three storeys high, plus six nine storey buildings with the lower housing arranged toward the areas with one-family housing. The buildings were built 1966-67 and are very similar to one another, sporting long sightlines and flat roofs. There is also a large area of *massproduced industrial suburban one-family housing* mainly from the 1970s, *row house blocks* from the same period, and *less regulated “own your own homes”* – a few from the 1930s, the rest from the 1950s, 1960s and 1970s (Tykesson 2002c:162-167).



Figure 1:59 Stenkällan – *late modern megablocks, less-regulated “own your own home”s and mass produced industrial suburban one-family housing.*



**Tygelsjö by** – *massproduced industrial suburban one-family housing, row house blocks, post-modern row house blocks, pre-industrial village streets.*

The *pre-industrial village street* expanded over time, with morphological layers added around its core. A railroad station was built in the 1880s. Most of the layers are from the 1970s.



Figure i:60 Tygelsjö by – note the pre-industrial village street near the top of the plan.

**Videdal** – *liberal routescapes, massproduced industrial suburban one-family housing, less regulated “own your own homes”, row house blocks, bourgeois large one-family house.*

This subarea still has some *liberal routescape* buildings along Sallerupsvägen in the north from between 1900 and 1914 made of red industrial brick – buildings in 1½ storeys and with brick roofs. The remains of a small railroad village, built from 1894 to 1920 (The Malmö-Genarp railroad went through here until it was closed in 1948) are adjacent to this routescape and there are a few older buildings near Hohögsskolan. Otherwise this subarea consists historically of four parts, Dalvik, Videdal, Hohög and Ulricedal. Immediately east of the railroad area is Dalviks egnahemsområde, a *less regulated “own your own home”* area from the 1920s and 1930s that also has a few functionalist buildings. The easternmost part of Dalvik was built during the 1960s and 1970s with *mass-produced industrial suburban one-family housing*. Otherwise the area consists of 1960s one-family housing. Along V Skrävlingevägen there are blocks of *liberal routescape* as well – street-houses from the 1880s as well as small agricultural buildings with some *less regulated “own your own homes”* supplementing the blocks from the 1920s, while the vast majority of the southeastern part of this subarea is 1½ storeys *row house blocks* built by Riksbyggen. Northwest of V Skrävlingevägen there are a few *less regulated “own your own homes”* from the 1940s and 1950s mixed with *bourgeois larger one-family houses* from the late 19<sup>th</sup> and early 20<sup>th</sup> century. There is a block from the mid 1950s with both *massproduced industrial suburban one-family housing* and a *less regulated “own your own home”* area. There are 1960s, 1970s and 1980s enclaves where row houses, atrium houses and one family housing are all mixed. Most of the new buildings between Västra Skrävlingevägen and Videdal are from 1960-64. West of V Skrävlingevägen there are houses linked together with a garage and *row house blocks* from 1974-1975. There are also single one-family houses from the 1980s. The oldest plan for this subarea is from 1957, and is of the *fait accompli* type. Later plans are for the enclaves.

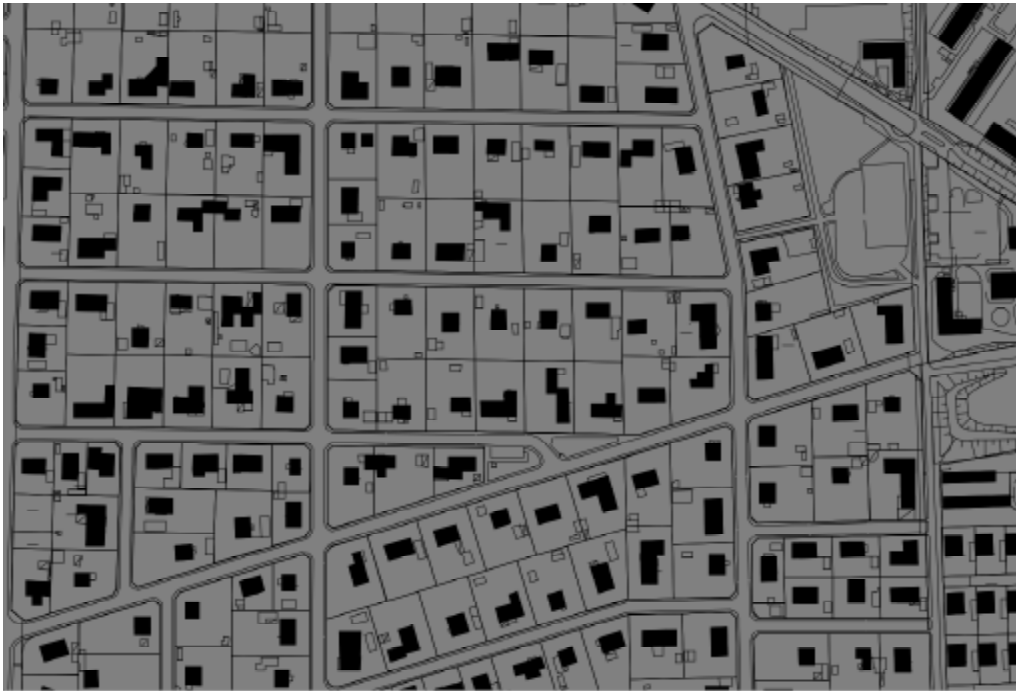
The northern part of the plan was designed to fit in with the existing railroad embankment – otherwise it is a simple orthogonal plan. V Skrävlingevägen became a model for later plans. Newer areas are freer in terms of planning (Reisnert in Reisnert et al. 1989:244-247).



Figure i:61 Videdal – chain houses classified as rowhouse blocks.

**Virentofta** – row house blocks, less regulated “own your own homes”, more regulated “own your own homes”.

This subarea consists of several parts: Toftängen, Virentofta, Nya Hallstorp and Trollängen. Along Klågerupsvägen there was once an agricultural routescape, and in 1894 the Malmö-Genarp railroad was built through the subarea. There are still a few agrarian buildings. In 1920 the main agricultural plots were sold as “own your own home” plots which resulted in a less regulated “own your own home” architecture with a plethora of varied architecture. Those houses had large gardens clearly intended for self-sufficiency. *Fait accompli* plans were adopted in 1957 and 1960. Later, several row house blocks were built in the northern part of Nya Hallstorp as well as Trollängen. They were built from the 1960s and 1970s, with additional housing from the 1980s. The row house plans for Trollängen are from 1957, 1969 and 1985. A few blocks were built in 1973 (Reisnert in Reisnert et al. 1989: 248-251).



*Figure i:62 Virentofta – less regulated “own your own homes”.*



*Figure i:63 Virentofta – less regulated “own your own homes”.*

**Västra Klagstorp** – *pre-industrial village street.*  
A church from the 1880s.



*Figure i:64 Västra Klagstorp – the pre-industrial village street.*



## The subareas: social type M

**Kastanjegården** – row house blocks, massproduced industrial suburban one-family housing. Suburban one-family housing from the 1970s.

**Kristineberg** – row house blocks, massproduced industrial suburban one-family housing, bourgeois large one-family houses, less regulated “own your own homes”. This subarea is a hybrid between a light industrial area with remaining adjacent housing (less regulated “own your own homes”) and three roughly equally sized developments from the post-war era of massproduced industrial suburban one-family housing, row house blocks and large houses most easily described as bourgeois large one-family houses.

**Tygelsjö vång** – pre-industrial village street.

This subarea is agricultural. I have categorized it as a pre-industrial village street owing to there being several farms in a row in the southern part, although most of this subarea is outlying farms.

**Västra Kattarp** – more regulated “own your own homes”, lamellar yard shapes.

Rosengårdsstadens “own your own home” area was built mostly in the 1920s, although the plots were sold as early as 1910. The laws passed in 1904 and 1905 for “own your own homes” regulated the construction of the area. A plan for the western part by Anders Nilsson in Sittean style with irregular streets was supplemented by housing built in the late 1910s with large gardens intended for self-sufficiency. I have classified it as a more regulated “own your own home” area. The southeastern part was constructed on the basis of a largely fait accompli plan in 1933 by Erik Bülow-Hübe from 1930-50. There is a lamellar yard shape from the 1950s in the southwestern part (Ranby in Reisnert et al. 1989:234-237).

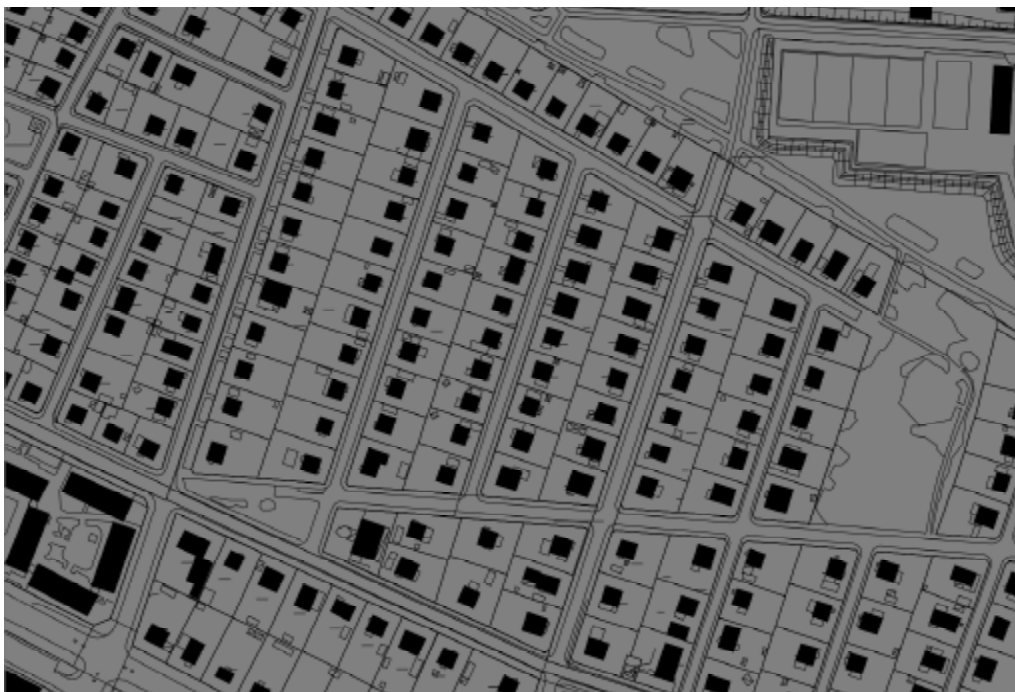


Figure i:65 Västra Kattarp - parts of the more regulated “own your own home” area.

## The subareas: social type N

**Flensburg** – *lamellar yard shapes, largely commercialized or industrialized ground floor plots.*

In the entire subarea there are only two blocks that are not hospital or commercial buildings. One block is a *lamellar yardshape* near Dalaplan, with four to six storey high buildings built from 1940-41 with a few stores on the first floor. The other block, directly south of the first, is seven to eight storeys high and was built in 1966 as a *largely commercialized or industrialized ground floor plot*. The western part of this subarea (the larger hospital subarea) was originally donational land (Reisnert in Reisnert et al. 1989:176-179).

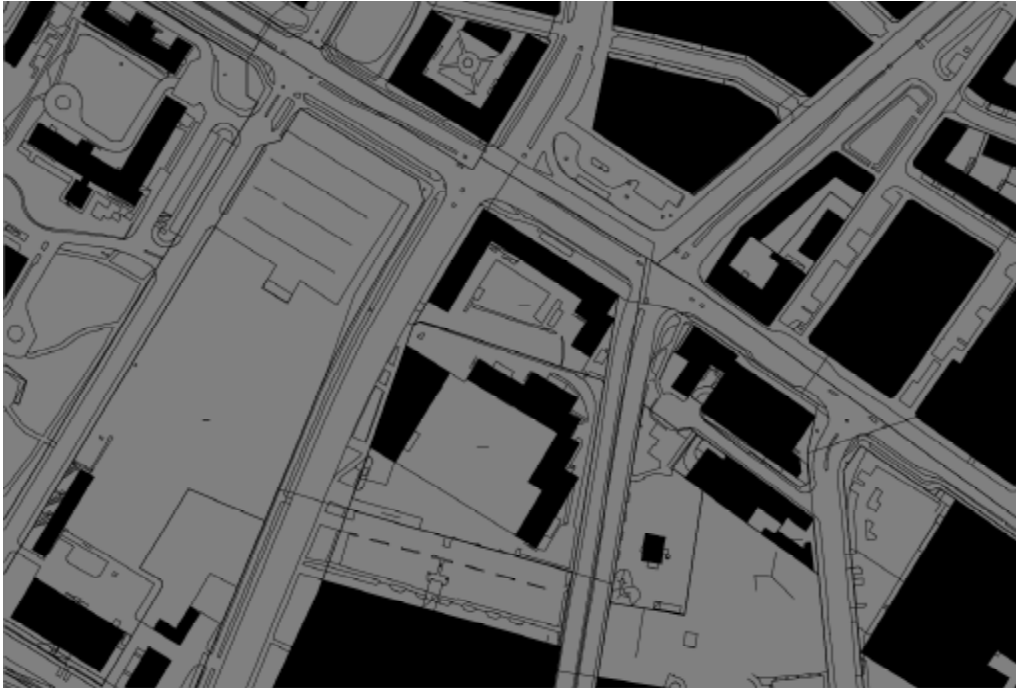
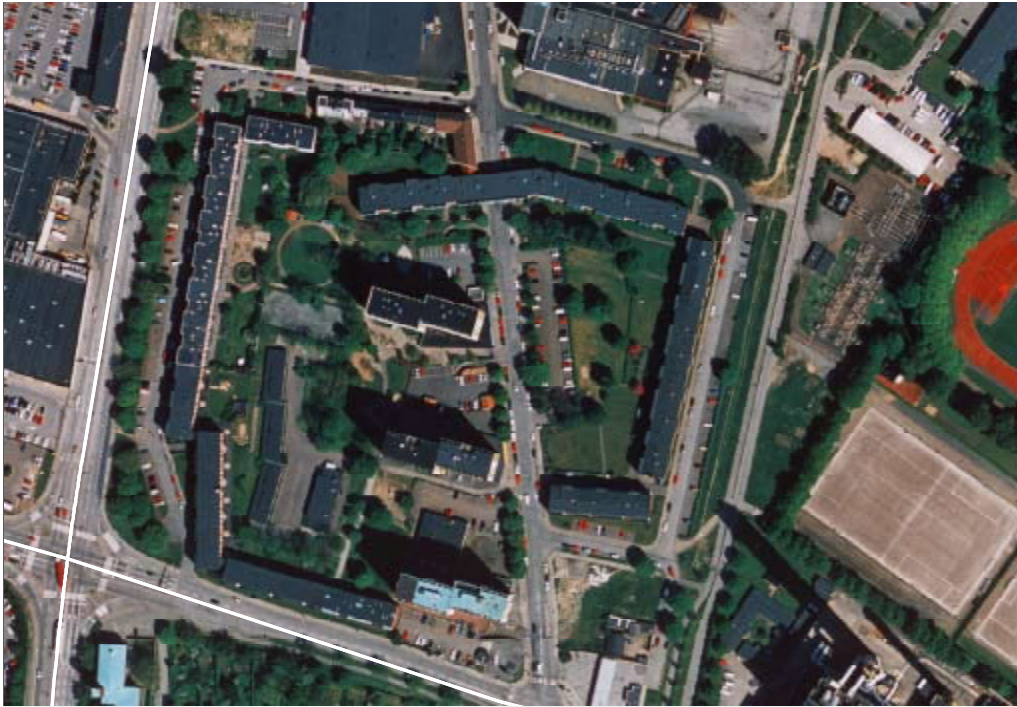


Figure i:66 Flensburg – the two blocks that are housing blocks are in the center of the plan.

**Heleneholm** – *early modern megablocks, liberal routescapes.*

The *early modern megablocks* are part of Blekingsborg neighborhood unit built according to plans by Gunnar Lindman in 1953 and 1955. It was built 1956 as *early modern megablocks*. Three fourteen storey buildings along Fosievägen, while the rest are three storey buildings. The housing area is remarkable in terms of the road that runs underneath one of the buildings (Tykesson et al. 2002b:56-63).



*Figure i:67 Heleneholm – notice the building that crosses the street.*



**Södra Sofielund** – *early modern megablocks, closed grid blocks with open yards, liberal routescapes, lamellar yard shapes, post-modern row house blocks.*

The *liberal routescape* stems from the period when Sofielund was a municipality, before its incorporation to the City of Malmö 1910 and is of the street house variety rather than of the route variety. The *early modern megablocks* were planned by Gunnar Lindman in 1952 and built by Riksbyggen in 1953. They have three or four storey high buildings with cul de sac streets and underground garages as well as a tower block. A large part of this subarea is from the 1930s in *closed grid blocks with open yards*, 1950s housing, tower block (Améen 1964:124-129, Tykesson 2002a:152-159).



Figure i:68 Södra Sofielund – note the plot division in the liberal routescape.

## The subareas: social type O

### **Almgården** – *late modern megablocks.*

This subarea was in its entirety developed by the Hugo Åberg Company in 1969-1972. It consists of high buildings facing an adjacent park and low five storey buildings grouped around courtyards and also facing the traffic network. The plan was designed in 1965-68 by Gabriel Winge. This subarea was built by the predecessor of Skanska, Skånska Cementgjuteriet, using the Complete Concrete Method (*Allbetongmetoden*) (Tykesson 2002c:42-49).

### **Apelgården** – *late modern megablock.*

Apelgården was planned as part of Rosengård by Gabriel Winge in 1967. Rosengård was incorporated into the City of Malmö 1911 but remained largely agrarian until the 1962 comprehensive plan was adopted. The housing area was built during the late 1960s as free-standing housing in *late modern megablocks* eight-storey and three-storey high, orthogonally placed and arranged as one piece of a square centered around Rosengård Center. Adjacent to the housing there is a large green area (Ranby in Reisnert et al. 1989:228-231).



Figure i:69 The Apelgården housing area was built during the late 1960s as free-standing housing with late modern megablocks. Adjacent to the housing there is a large green area.

### **Lindängen** – *late modern megablocks.*

Lindängen is part of the “million program” and most of this modern megablock in three parts was built during the early 1970s. The first part was planned in 1967 and 1968 with three and eight storey buildings, traffic separation and cul de sacs. The western part consists of three, five, eight and sixteen storey buildings. In 1970, a plan was designed for the last part, with three storey lamellar buildings. A new plan in 1978 for the southern part has also been made. The MKB and HSB and BGB companies built the different parts. Characteristics include the open, long sightlines and slightly irregularly grouped buildings in the *late modern megablock* morph. In 1992, a renovation plan was designed with the intent of changing the perceived monotony of this subarea (Tykesson 2002c:108-119).

**Segevång** – *early modern megablocks, post-modern rowhouse blocks.*

The *early modern megablock* housing area was planned in 1956 and 1958 by Lindman and was built during the first half of the 1960s by HSB, MKB and Svenska Riksbyggen, using careful planning and scale sequential architecture. The southeastern part of this subarea was planned in 1988 as *post-modern row house blocks* (Ranby in Reisnert et al. 1989:131, Tykesson et al. 2002a:130-141).



*Figure i:70 Segevång The early modern megablock housing area was planned in 1956/1958 by Lindman and was built during the first half of the 1960s by HSB, MKB and Svenska Riksbyggen, using careful planning and scale sequential architecture.*

## The subareas: social type P

**Almhög** – *early modern megablocks, less regulated “own your own homes”, more regulated “own your own homes”*. This subarea can be divided into three parts. To the northwest a part consisting of *less regulated “own your own homes”*, which was probably developed in the 1920s before the incorporation of the whole subarea into the City of Malmö in 1936. In the southeast, there is a part consisting of *more regulated “own your own homes”* in the “own your own home” area, Maryhill, where a *fait accompli* plan was adopted in 1952. Between those two subareas, lamellar buildings of four and eight storeys designed as an *early modern megablock* neighborhood unit in 1958 by the HSB architectural office in Malmö, on the basis of a plan by Gabriel Winge from 1957 (Thormark in Rejnert et al. 1989:192-195).

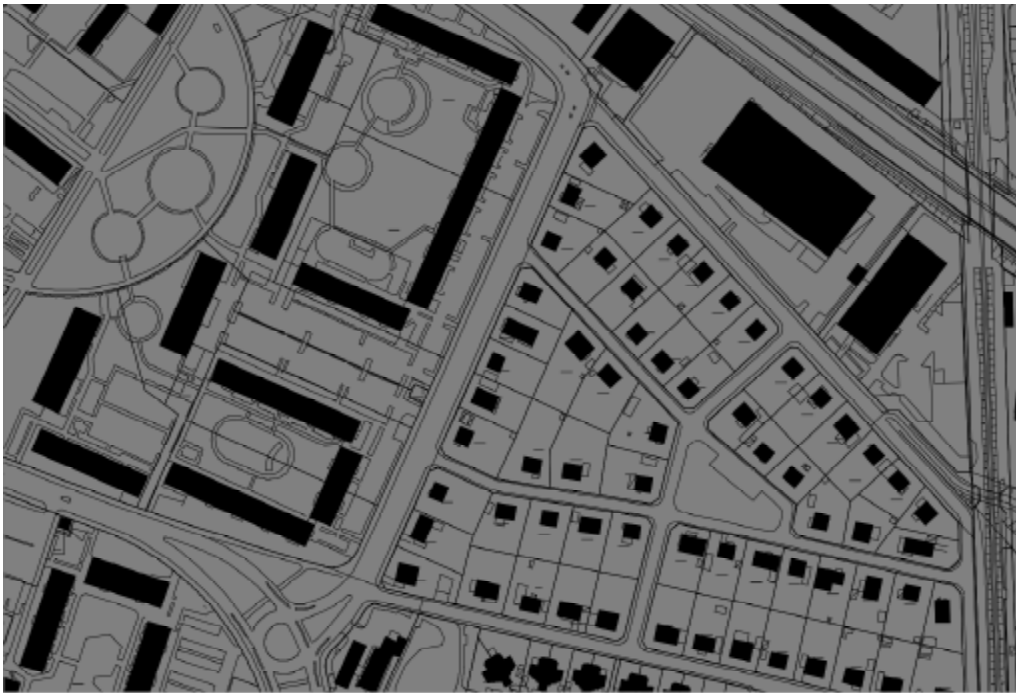


Figure i:71 Almhög - In the southeast a part consisting of more regulated “own your own homes” in Maryhill for which a *fait accompli* plan was adopted in 1952.



**Augustenborg** – *early modern megablocks, lamellar yard shapes, free-standing lamellar buildings, liberal routescapes.*

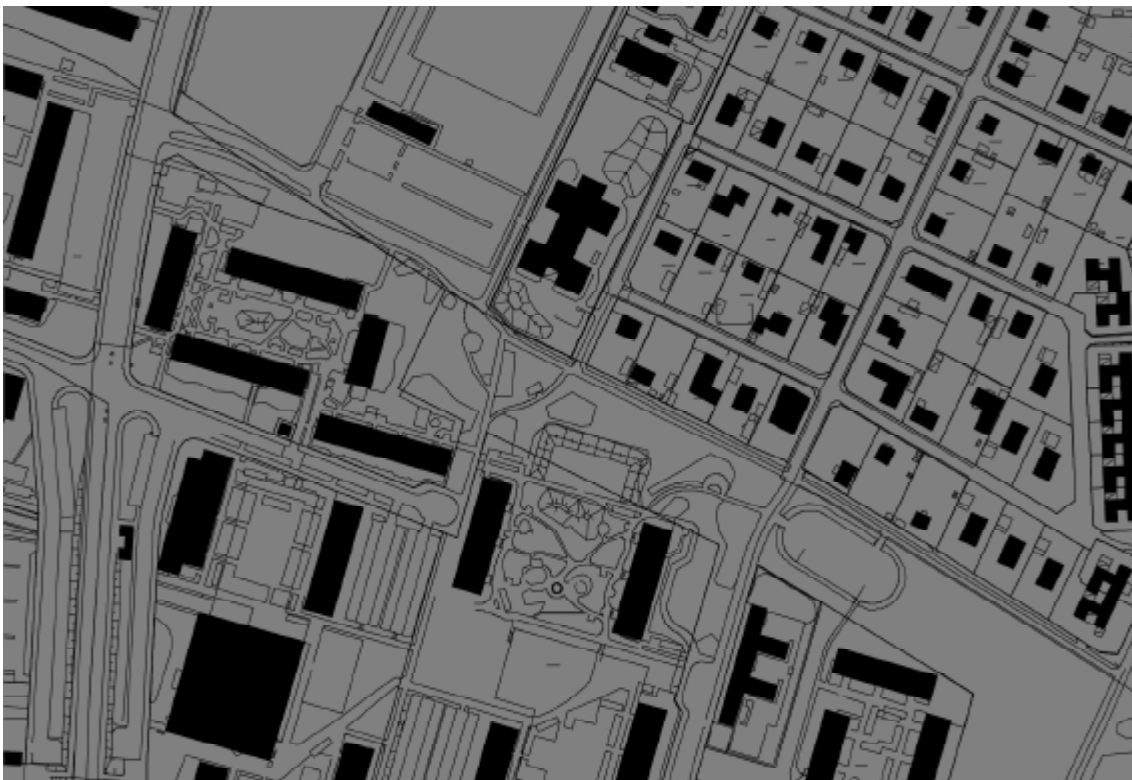
This subarea was incorporated into the City of Malmö in 1911, but wasn't exploited until the 1950s. It consists of two main parts, and a few *liberal routescape* buildings as well. The plan from 1939 for the northwestern part has an L-shape three storey high *lamellar yard shape* and *free-standing lamellar buildings* in the grid, built from the 1940s to the 1960s. Most of the southeastern area was designed and built between 1948 and 1952 by Svenska Riksbyggens Arkitektkontor in Stockholm and is an *early modern megablock* (the first neighborhood unit (*grannskapsenhet*) in Malmö) and consists of a small square surrounded by housing lamellar buildings with eight and four storeys. In the 1990s Augustenborg became part of 'ecology-city' – a city improvement project focused on ecological housing (Thormark in Rejnert et al. 1989:196-199, Tykesson et al. 2002a:44-55).



*Figure i:72 Augustenborg, the first neighborhood unit (grannskapsenhet) in Malmö was designed and built between 1948 and 1952.*

**Gullviksborg** – *early modern megablocks, less regulated “own your own homes”, massproduced industrial suburban one-family housing, post-modern row house blocks, row house blocks.*

This subarea was incorporated into the City of Malmö 1931, before which in 1918 a farm was parceled out to create Gullviksborgs “own your own home” area. The plan was established as a *fait accompli* in 1958. The smaller scale part of this subarea consists of this “own your own home” area with relatively large plots and small houses mostly built during the 1920s and 1930s. A few blocks to the north were built after WWII and a few in the southeast in the late 1970s as *row house blocks* adjacent to the railroad. *Massproduced industrial suburban one-family housing* was created for the Bo86 housing exhibition (plan in 1984), and a few blocks of *post-modern rowhouses* even later. In 1965 an *early modern megablock* (plan in 1963) was erected to the south of this smaller scale part of Gullviksborg, near the ring road, with a circle of three storey high buildings surrounding a core of eight storey buildings in simplistic architecture (Reisnert in Reisnert et al. 1989:208-211).

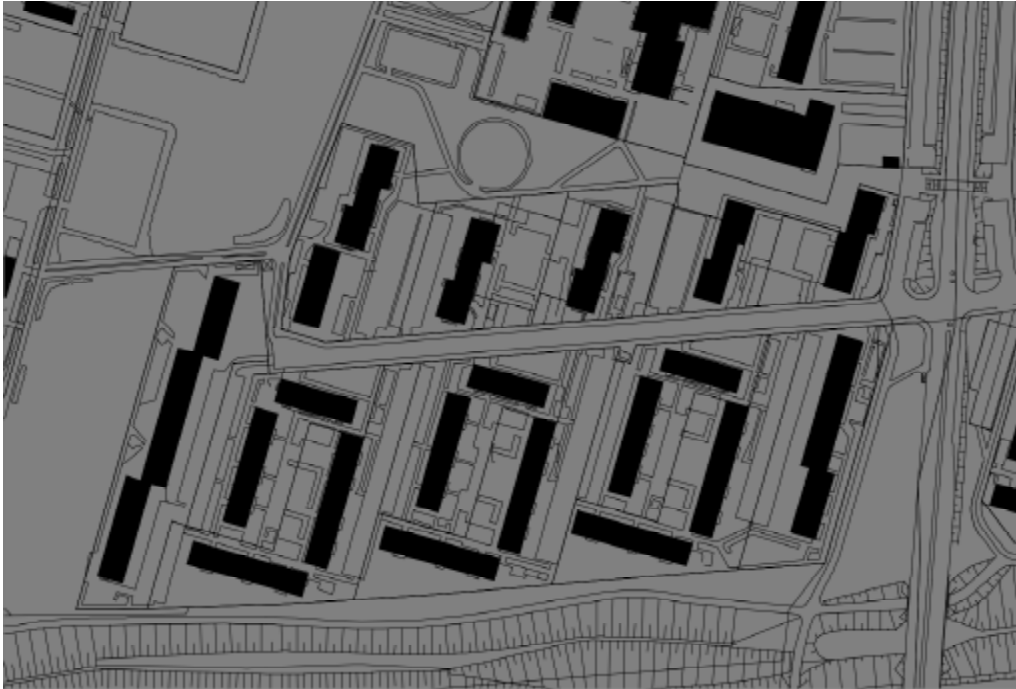


*Figure i:73 In 1965 an early modern megablock (plan in 1963) was erected to the south of this smaller scale part of Gullviksborg, near the ring road, with a circle of three storey high buildings surrounding a core of eight storey buildings in simplistic architecture.*



**Hermodsdal** - *early modern megablocks.*

This subarea was built in the early 1960s according to a plan from 1959 (planned together with the Nydala subarea) by Gabriel Winge. Before exploitation this subarea was agricultural. To the west of the housing there is a large park and recreational area. Buildings have three, four, eight, and thirteen storeys arranged in the *early modern megablock* form with higher buildings centralized and lower buildings along the edges. This subarea is accessed through cul de sac parking streets (Tykesson et al. 2002b:64-71).



*Figure i:74 Hermodsdal - buildings have three, four, eight, and thirteen storeys and are arranged in the early modern megablock form with higher buildings centralized and lower buildings along the edges.*

**Holma** – *late modern megablocks.*

This subarea was built 1972-1974 as part of the “million program” and was originally intended to be part of a larger area which was never built due to the end of the “million program”. The plan, from 1972, focused on cul de sac traffic separation. The bulk of this subarea consists of three and eight storey buildings arranged in three groups. Designed in 1971 and built thereafter. Two thirds of this subarea was built by MKB and Skanska and the remaining third by Riksbyggen and BPA. In 1990 a major renovation project was carried out with post-modern entrances added and enrichment of forms and colors (Tykesson m fl 2002:c74-83).



*Figure i:75 Holma – one of the last modern megablocks built in Malmö.*

**Nydala** – *early modern megablocks, less regulated “own your own homes”, row house blocks.*

This subarea was incorporated into Malmö in 1931. The part of this subarea in the southwestern corner consists of an originally parceled out plot with *less regulated “own your own homes”* built during the 1920s and 1930s. A *row house block* from 1961 is in the southernmost part of this part of this subarea. The larger part - *early modern megablocks* - was planned in 1958 with four to eight storey high housing grouped around a central park, and was built by Svenska Riksbyggen, HSB and MKB (Reisnert in Reisnert et al. 1989:220-223, Tykesson et al. 2002b:120-129).



*Figure i:76 Nydala - the larger part - early modern megablocks - was planned in 1958 with four to eight storey high housing grouped around a central park and built by Svenska Riksbyggen, HSB and MKB.*



**Persborg** – *early modern megablock.*

Original plan by Gunnar Lindman 1953 as a neighborhood unit. It was built in 1954 by MKB and designed by Svenska Riksbyggen. Traffic separation combined cul de sacs and parking. Serpentine buildings with courtyards adjacent to the buildings as well as central courtyards. Three-storey high buildings. Renovated in 1988 with brick laid on all plastered facades - woodwork and balconies were also changed. Traffic access and the overall plan was retained. There is also a square separated from the rest of the buildings in this subarea (Thormark in Rejnert et al. 1989:224-227).

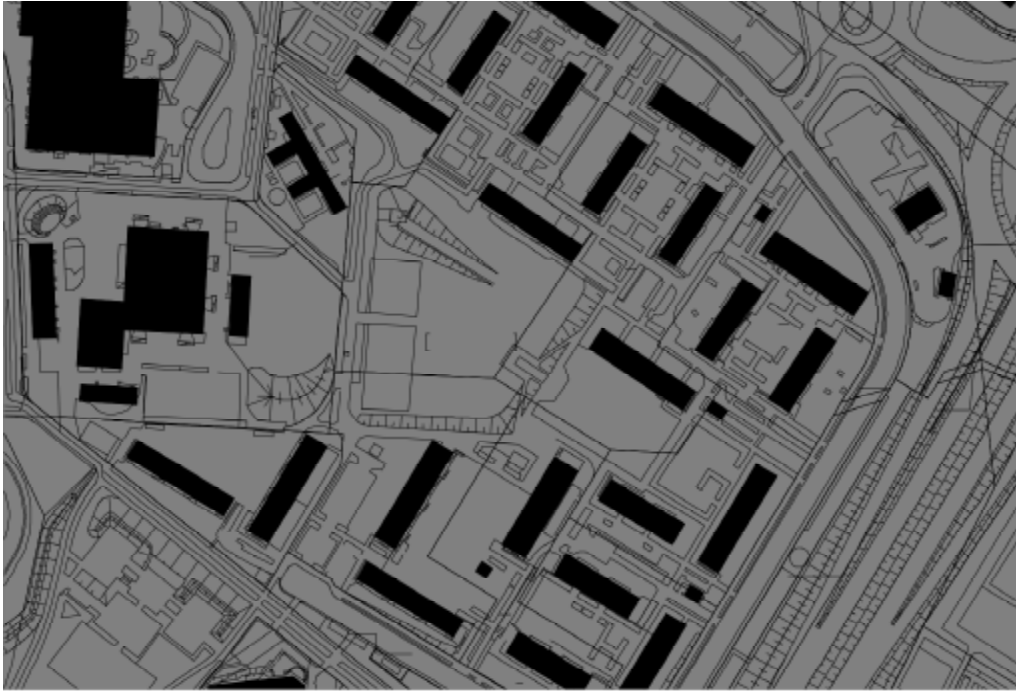


*Figure i:77 Persborg - serpentine buildings with courtyards adjacent to the buildings as well as central courtyards.*

## The subareas: social type Q

### **Herrgården** – *early modern megablocks*.

Herrgården is part of Rosengård, which was built according to a plan by Gabriel Winge from 1967. Three, six and nine storey high buildings face entrance and playground yards (Ranby in Rejnert et al. 1989:228-231).



*Figure i:78 Herrgården, early modern megablock where three, six and nine storey high buildings face entrance and playground yards.*

**Kryddgården** – *late modern megablocks.*

Kryddgården is featured in the Rosengård plan by Winge from 1967, and was built during the late 1960s. Kryddgården mainly consists of two 250 m long buildings converted to office buildings and free-standing three, six, nine and sixteen storey high buildings (Ranby in Rejnert et al. 1989:228-231, Tykesson et al. 2002c:155-161).



*Figure i:79 Kryddgården - nine and three storey high buildings wedged in between the traffic system of the inner ring road and Amiralsgatan.*



**Törnrosen** – *early modern megablock.*

This subarea was built as the first part of Rosengård (incorporated into the City of Malmö in 1911 but largely agricultural) in 1962-64 according to a plan by Gabriel Winge from 1962, and was renovated for the Bo86 building exhibition (Ranby in Rejnert et al. 1989:232-234).



*Figure i:80 Törnrosen was the critically acclaimed first stage in the Rosengård complex and is notable for its spatial intricacies and the small amount of mixed use that is part of its plan.*

**Örtagården** – *early modern megablocks.*

This subarea is part of the Rosengård plans by Gabriel Winge from 1963 and 1967 and built during the late 1960s. Örtagården consist of free-standing housing with modern megablocks either eight storey high surrounding a central green area or three storey high in four yard shaping formations, all together orthogonally arranged as one piece of a square around Rosengård Center (Ranby in Rejnert et al. 1989:228-231).



*Figure i:81 Örtagården - free-standing housing with modern megablocks either eight storey high or three storey high, orthogonally arranged as one piece of a square around Rosengård Center (northeast corner).*

# Correlation tables

## APPENDIX II

Table ii:1

Variable 1	Variable 2	R2-correlation
University education	Mean Income	0.142
University education	Upper secondary school only	-0.64
University education	Compulsory school only	-0.871
University education	Income per inhabitant	0.433
University education	Mobility	0.042
University education	“Swedishness”	0.305
University education	Age group 0-5	-0.022
University education	Age group 16-18	-0.097
University education	Age group 6-15	-0.087
University education	Age group 19-24	0.000
University education	Age group 25-44	0.074
University education	Age group 45-64	-0.001
University education	Age group 65-79	-0.001
University education	Age group 80+	0.022
University education	Employed	0.103
Upper secondary school only	Compulsory school only	0.313
Upper secondary school only	Mean income	-0.038
Upper secondary school only	Income per inhabitant	-0.149
Upper secondary school only	Mobility	-0.114
Upper secondary school only	“Swedishness”	-0.002
Upper secondary school only	Age group 0-5	-0.009
Upper secondary school only	Age group 6-15	0.011
Upper secondary school only	Age group 16-18	0.009
Upper secondary school only	Age group 19-24	-0.032
Upper secondary school only	Age group 25-44	0.06
Upper secondary school only	Age group 45-64	0.057
Upper secondary school only	Age group 65-79	0.067
Upper secondary school only	Age group 80+	0.000
Upper secondary school only	Employed	0.031
Compulsory school only	Mean income	-0.156
Compulsory school only	Income per inhabitant	-0.48
Compulsory school only	Mobility	-0.024
Compulsory school only	“Swedishness”	-0.503
Compulsory school only	Age group 0-5	0.056
Compulsory school only	Age group 6-15	0.124
Compulsory school only	Age group 16-18	0.151
Compulsory school only	Age group 19-24	0.000
Compulsory school only	Age group 25-44	-0.08
Compulsory school only	Age group 45-64	-0.002
Compulsory school only	Age group 65-79	0.002
Compulsory school only	Age group 80+	-0.026
Compulsory school only	Employed	-0.255
Mean income	Income per inhabitant	0.531
Mean income	Mobility	-0.304

Mean income	“Swedishness”	0.266
Mean income	Age group 0-5	0.018
Mean income	Age group 6-15	0.177
Mean income	Age group 16-18	0.161
Mean income	Age group 19-24	-0.287
Mean income	Age group 25-44	-0.188
Mean income	Age group 45-64	0.393
Mean income	Age group 65-79	-0.013
Mean income	Age group 80+	-0.035
Mean income	Employed	0.355
Income per inhabitant	Mobility	-0.028
Income per inhabitant	“Swedishness”	0.44
Income per inhabitant	Age group 0-5	-0.11
Income per inhabitant	Age group 6-15	-0.055
Income per inhabitant	Age group 16-18	-0.026
Income per inhabitant	Age group 19-24	-0.061
Income per inhabitant	Age group 25-44	-0.024
Income per inhabitant	Age group 45-64	0.238
Income per inhabitant	Age group 65-79	0.063
Income per inhabitant	Age group 80+	0.041
Income per inhabitant	Employed	0.267
Mobility	“Swedishness”	-0.07
Mobility	Age group 0-5	-0.003
Mobility	Age group 6-15	-0.23
Mobility	Age group 16-18	-0.191
Mobility	Age group 19-24	0.467
Mobility	Age group 25-44	0.57
Mobility	Age group 45-64	-0.415
Mobility	Age group 65-79	-0.238
Mobility	Age group 80+	-0.003
Mobility	Employed	-0.211
“Swedishness”	Age group 0-5	-0.092
“Swedishness”	Age group 6-15	-0.04
“Swedishness”	Age group 16-18	-0.056
“Swedishness”	Age group 19-24	-0.146
“Swedishness”	Age group 25-44	-0.007
“Swedishness”	Age group 45-64	0.166
“Swedishness”	Age group 65-79	0.071
“Swedishness”	Age group 80+	0.06
“Swedishness”	Employed	0.707
Employed	Age group 0-5	-0.012
Employed	Age group 6-15	0.005
Employed	Age group 16-18	0.000
Employed	Age group 19-24	-0.353
Employed	Age group 25-44	-0.025
Employed	Age group 45-64	0.272
Employed	Age group 65-79	0.045
Employed	Age group 80+	0.000

Variable	Variable	R-square value
University education	Before 1940	0.556
University education	Between 1940 and 1960	0.051
University education	Between 1960 and 1980	-0.474
University education	After 1980	0.159
University education	Rental	0.001
University education	Tenant-owned apartment	-0.112
University education	Ownership	0.018
University education	Outdoor space	0.059
University education	Indoor space	0.077
University education	Centrality	0.015
"Swedishness"	Before 1940	0.049
"Swedishness"	Between 1940 and 1960	0.000
"Swedishness"	Between 1960 and 1980	-0.075
"Swedishness"	After 1980	0.559
"Swedishness"	Rental	-0.373
"Swedishness"	Tenant-owned apartment	-0.034
"Swedishness"	Ownership	0.411
"Swedishness"	Outdoor space	0.675
"Swedishness"	Indoor space	0.169
"Swedishness"	Centrality	-0.394
Mean Income	Before 1940	0.001
Mean Income	Between 1940 and 1960	-0.04
Mean Income	Between 1960 and 1980	0.000
Mean Income	After 1980	0.722
Mean Income	Rental	-0.705
Mean Income	Tenant-owned apartment	-0.09
Mean Income	Ownership	0.656
Mean Income	Outdoor space	0.81
Mean Income	Indoor space	0.024
Mean Income	Centrality	-0.626
Political Blueness	Before 1940	0.095
Political Blueness	Between 1940 and 1960	0.017
Political Blueness	Between 1960 and 1980	-0.08
Political Blueness	After 1980	0.52
Political Blueness	Rental	-0.207
Political Blueness	Tenant-owned apartment	-0.155
Political Blueness	Ownership	0.275
Political Blueness	Outdoor space	0.477
Political Blueness	Indoor space	0.177
Political Blueness	Centrality	-0.181
Reactionary	Before 1940	-0.676
Reactionary	Between 1940 and 1960	-0.082
Reactionary	Between 1960 and 1980	0.495
Reactionary	After 1980	0.029
Reactionary	Rental	-0.335
Reactionary	Tenant-owned apartment	0.035
Reactionary	Ownership	0.209
Reactionary	Outdoor space	0.257
Reactionary	Indoor space	0.008

Reactionary	Centrality	-0.615
Older age	Before 1940	-0.118
Older age	Between 1940 and 1960	0.037
Older age	Between 1960 and 1980	0.039
Older age	After 1980	-0.052
Older age	Rental	0.000
Older age	Tenant-owned apartment	0.523
Older age	Ownership	-0.013
Older age	Outdoor space	-0.005
Older age	Indoor space	0.289
Older age	Centrality	-0.045
Upper secondary school only	Before 1940	-0.327
Upper secondary school only	Between 1940 and 1960	-0.036
Upper secondary school only	Between 1960 and 1980	0.27
Upper secondary school only	After 1980	0.015
Upper secondary school only	Rental	-0.221
Upper secondary school only	Tenant-owned apartment	0.254
Upper secondary school only	Ownership	0.137
Upper secondary school only	Outdoor space	0.146
Upper secondary school only	Indoor space	0.011
Upper secondary school only	Centrality	-0.354
Income per capita	Before 1940	0.098
Income per capita	Between 1940 and 1960	0.001
Income per capita	Between 1960 and 1980	-0.137
Income per capita	After 1980	0.538
Income per capita	Rental	-0.295
Income per capita	Tenant-owned apartment	-0.01
Income per capita	Ownership	0.259
Income per capita	Outdoor space	0.445
Income per capita	Indoor space	0.316
Income per capita	Centrality	-0.278
Compulsory school only	Before 1940	-0.423
Compulsory school only	Between 1940 and 1960	-0.008
Compulsory school only	Between 1960 and 1980	0.475
Compulsory school only	After 1980	-0.359
Compulsory school only	Rental	0.075
Compulsory school only	Tenant-owned apartment	0.045
Compulsory school only	Ownership	-0.059
Compulsory school only	Outdoor space	-0.194
Compulsory school only	Indoor space	-0.143
Compulsory school only	Centrality	0.05
Mobility	Before 1940	0.255
Mobility	Between 1940 and 1960	0.047
Mobility	Between 1960 and 1980	-0.207
Mobility	After 1980	-0.177
Mobility	Rental	0.384
Mobility	Tenant-owned apartment	0.043
Mobility	Ownership	-0.384
Mobility	Outdoor space	-0.508
Mobility	Indoor space	-0.02



Mobility	Centrality	0.457
Employment	Before 1940	0.074
Employment	Between 1940 and 1960	-0.015
Employment	Between 1960 and 1980	-0.052
Employment	After 1980	0.625
Employment	Rental	-0.459
Employment	Tenant-owned apartment	-0.032
Employment	Ownership	0.412
Employment	Outdoor space	0.659
Employment	Indoor space	0.136
Employment	Centrality	-0.413

EPOP values for morph association:

Variable	Morph	R-square
University education	I:1 Pre-industrial village street	0.000
University education	I:2 Liberal routescape	0.181
University education	I:3 Largely industrialized or commercialized ground floor plot	0.004
University education	II:1 Closed grid block with yard buildings	0.22
University education	II:2 Closed grid block with open yard	0.2
University education	II:3 Slum clearance block	0.22
University education	III:1 Converted summer cottage	0.199
University education	III:2 Bourgeois large one-family house	0.067
University education	III:3 Less regulated "own your own home"	-0.006
University education	IV:1 More regulated "own your own home"	-0.003
University education	IV:2 Massproduced industrial suburban one-family housing	0.001
University education	IV:3 Row house block	-0.003
University education	IV:4 Post-modern rowhouse block	0.045
University education	V:1 Free-standing lamellar building	0.017
University education	V:2 Lamellar yard shape	0.096
University education	VI:1 Early modern megablock	-0.086
University education	VI:2 Late modern megablock	-0.27
University education	VI:3 Post-modern reform block	0.006
Reactionariness	I:1 Pre-industrial village street	0.227
Reactionariness	I:2 Liberal routescape	-0.123
Reactionariness	I:3 Largely industrialized or commercialized ground floor plot	-0.004
Reactionariness	II:1 Closed grid block with yard buildings	-0.331
Reactionariness	II:2 Closed grid block with open yard	-0.601
Reactionariness	II:3 Slum clearance block	-0.331
Reactionariness	III:1 Converted summer cottage	0.002
Reactionariness	III:2 Bourgeois large one-family house	-0.057
Reactionariness	III:3 Less regulated "own your own home"	0.341
Reactionariness	IV:1 More regulated "own your own home"	0.152
Reactionariness	IV:2 Massproduced industrial suburban one-family housing	0.376
Reactionariness	IV:3 Row house block	0.205
Reactionariness	IV:4 Post-modern rowhouse block	0.123
Reactionariness	V:1 Free-standing lamellar building	-0.219
Reactionariness	V:2 Lamellar yard shape	-0.493
Reactionariness	VI:1 Early modern megablock	0.008
Reactionariness	VI:2 Late modern megablock	0.288
Reactionariness	VI:3 Post-modern reform block	0.004

Political Blueness	I:1 Pre-industrial village street	0.203
Political Blueness	I:2 Liberal routescape	0.000
Political Blueness	I:3 Largely industrialized or commercialized ground floor plot	0.046
Political Blueness	II:1 Closed grid block with yard buildings	0.006
Political Blueness	II:2 Closed grid block with open yard	0.003
Political Blueness	II:3 Slum clearance block	0.006
Political Blueness	III:1 Converted summer cottage	0.353
Political Blueness	III:2 Bourgeois large one-family house	0.121
Political Blueness	III:3 Less regulated "own your own home"	0.189
Political Blueness	IV:1 More regulated "own your own home"	0.189
Political Blueness	IV:2 Massproduced industrial suburban one-family housing	0.21
Political Blueness	IV:3 Row house block	0.152
Political Blueness	IV:4 Post-modern rowhouse block	0.063
Political Blueness	V:1 Free-standing lamellar building	-0.079
Political Blueness	V:2 Lamellar yard shape	-0.003
Political Blueness	VI:1 Early modern megablock	-0.23
Political Blueness	VI:2 Late modern megablock	-0.125
Political Blueness	VI:3 Post-modern reform block	0.123
"Swedishness"	I:1 Pre-industrial village street	0.326
"Swedishness"	I:2 Liberal routescape	0.063
"Swedishness"	I:3 Largely industrialized or commercialized ground floor plot	0.042
"Swedishness"	II:1 Closed grid block with yard buildings	-0.002
"Swedishness"	II:2 Closed grid block with open yard	-0.053
"Swedishness"	II:3 Slum clearance block	-0.002
"Swedishness"	III:1 Converted summer cottage	0.225
"Swedishness"	III:2 Bourgeois large one-family house	0.058
"Swedishness"	III:3 Less regulated "own your own home"	0.158
"Swedishness"	IV:1 More regulated "own your own home"	0.065
"Swedishness"	IV:2 Massproduced industrial suburban one-family housing	0.373
"Swedishness"	IV:3 Row house block	0.105
"Swedishness"	IV:4 Post-modern rowhouse block	0.189
"Swedishness"	V:1 Free-standing lamellar building	-0.065
"Swedishness"	V:2 Lamellar yard shape	-0.122
"Swedishness"	VI:1 Early modern megablock	-0.39
"Swedishness"	VI:2 Late modern megablock	-0.043
"Swedishness"	VI:3 Post-modern reform block	0.009
Mean Income	I:1 Pre-industrial village street	0.595
Mean Income	I:2 Liberal routescape	0.005
Mean Income	I:3 Largely industrialized or commercialized ground floor plot	0.009
Mean Income	II:1 Closed grid block with yard buildings	-0.076
Mean Income	II:2 Closed grid block with open yard	-0.205
Mean Income	II:3 Slum clearance block	-0.076
Mean Income	III:1 Converted summer cottage	0.19
Mean Income	III:2 Bourgeois large one-family house	0.083
Mean Income	III:3 Less regulated "own your own home"	0.29
Mean Income	IV:1 More regulated "own your own home"	0.252
Mean Income	IV:2 Massproduced industrial suburban one-family housing	0.505
Mean Income	IV:3 Row house block	0.325
Mean Income	IV:4 Post-modern rowhouse block	0.094
Mean Income	V:1 Free-standing lamellar building	-0.252

Mean Income	V:2 Lamellar yard shape	-0.084
Mean Income	VI:1 Early modern megablock	-0.482
Mean Income	VI:2 Late modern megablock	-0.025
Mean Income	VI:3 Post-modern reform block	0.036
Compulsory school only	I:1 Pre-industrial village street	-0.071
Compulsory school only	I:2 Liberal routescape	-0.18
Compulsory school only	I:3 Largely industrialized or commercialized ground floor plot	-0.043
Compulsory school only	II:1 Closed grid block with yard buildings	-0.227
Compulsory school only	II:2 Closed grid block with open yard	-0.071
Compulsory school only	II:3 Slum clearance block	-0.227
Compulsory school only	III:1 Converted summer cottage	-0.142
Compulsory school only	III:2 Bourgeois large one-family house	-0.036
Compulsory school only	III:3 Less regulated "own your own home"	0.000
Compulsory school only	IV:1 More regulated "own your own home"	-0.005
Compulsory school only	IV:2 Massproduced industrial suburban one-family housing	-0.045
Compulsory school only	IV:3 Row house block	-0.019
Compulsory school only	IV:4 Post-modern rowhouse block	-0.043
Compulsory school only	V:1 Free-standing lamellar building	-0.043
Compulsory school only	V:2 Lamellar yard shape	-0.018
Compulsory school only	VI:1 Early modern megablock	0.292
Compulsory school only	VI:2 Late modern megablock	0.25
Compulsory school only	VI:3 Post-modern reform block	-0.007
Older age	I:1 Pre-industrial village street	-0.004
Older age	I:2 Liberal routescape	-0.088
Older age	I:3 Largely industrialized or commercialized ground floor plot	0.015
Older age	II:1 Closed grid block with yard buildings	0.019
Older age	II:2 Closed grid block with open yard	0.001
Older age	II:3 Slum clearance block	0.019
Older age	III:1 Converted summer cottage	-0.212
Older age	III:2 Bourgeois large one-family house	0.000
Older age	III:3 Less regulated "own your own home"	0.093
Older age	IV:1 More regulated "own your own home"	0.071
Older age	IV:2 Massproduced industrial suburban one-family housing	0.057
Older age	IV:3 Row house block	0.063
Older age	IV:4 Post-modern rowhouse block	-0.042
Older age	V:1 Free-standing lamellar building	0.049
Older age	V:2 Lamellar yard shape	-0.001
Older age	VI:1 Early modern megablock	0.035
Older age	VI:2 Late modern megablock	0.129
Older age	VI:3 Post-modern reform block	-0.035
Employed	I:1 Pre-industrial village street	0.344
Employed	I:2 Liberal routescape	0.056
Employed	I:3 Largely industrialized or commercialized ground floor plot	0.002
Employed	II:1 Closed grid block with yard buildings	0.000
Employed	II:2 Closed grid block with open yard	-0.06
Employed	II:3 Slum clearance block	0.000
Employed	III:1 Converted summer cottage	0.202
Employed	III:2 Bourgeois large one-family house	0.121
Employed	III:3 Less regulated "own your own home"	0.259
Employed	IV:1 More regulated "own your own home"	0.151

Employed	IV:2 Massproduced industrial suburban one-family housing	0.481
Employed	IV:3 Row house block	0.302
Employed	IV:4 Post-modern rowhouse block	0.161
Employed	V:1 Free-standing lamellar building	-0.022
Employed	V:2 Lamellar yard shape	-0.018
Employed	VI:1 Early modern megablock	-0.519
Employed	VI:2 Late modern megablock	-0.029
Employed	VI:3 Post-modern reform block	0.005
Upper secondary school only	I:1 Pre-industrial village street	0.197
Upper secondary school only	I:2 Liberal routescape	-0.061
Upper secondary school only	I:3 Largely industrialized or commercialized ground floor plot	-0.009
Upper secondary school only	II:1 Closed grid block with yard buildings	-0.193
Upper secondary school only	II:2 Closed grid block with open yard	-0.287
Upper secondary school only	II:3 Slum clearance block	-0.193
Upper secondary school only	III:1 Converted summer cottage	-0.048
Upper secondary school only	III:2 Bourgeois large one-family house	-0.052
Upper secondary school only	III:3 Less regulated "own your own home"	0.21
Upper secondary school only	IV:1 More regulated "own your own home"	0.082
Upper secondary school only	IV:2 Massproduced industrial suburban one-family housing	0.256
Upper secondary school only	IV:3 Row house block	0.191
Upper secondary school only	IV:4 Post-modern rowhouse block	0.076
Upper secondary school only	V:1 Free-standing lamellar building	-0.044
Upper secondary school only	V:2 Lamellar yard shape	-0.267
Upper secondary school only	VI:1 Early modern megablock	-0.052
Upper secondary school only	VI:2 Late modern megablock	0.331
Upper secondary school only	VI:3 Post-modern reform block	-0.077
Mobility	I:1 Pre-industrial village street	-0.258
Mobility	I:2 Liberal routescape	0.008
Mobility	I:3 Largely industrialized or commercialized ground floor plot	0.000
Mobility	II:1 Closed grid block with yard buildings	0.333
Mobility	II:2 Closed grid block with open yard	0.635
Mobility	II:3 Slum clearance block	0.333
Mobility	III:1 Converted summer cottage	-0.161
Mobility	III:2 Bourgeois large one-family house	0.005
Mobility	III:3 Less regulated "own your own home"	-0.569
Mobility	IV:1 More regulated "own your own home"	-0.258
Mobility	IV:2 Massproduced industrial suburban one-family housing	-0.636
Mobility	IV:3 Row house block	-0.343
Mobility	IV:4 Post-modern rowhouse block	-0.108
Mobility	V:1 Free-standing lamellar building	0.258
Mobility	V:2 Lamellar yard shape	0.275
Mobility	VI:1 Early modern megablock	0.081
Mobility	VI:2 Late modern megablock	-0.044
Mobility	VI:3 Post-modern reform block	-0.072
Income per capita	I:1 Pre-industrial village street	0.217
Income per capita	I:2 Liberal routescape	0.006
Income per capita	I:3 Largely industrialized or commercialized ground floor plot	0.067
Income per capita	II:1 Closed grid block with yard buildings	0.035
Income per capita	II:2 Closed grid block with open yard	0.000
Income per capita	II:3 Slum clearance block	0.035

Income per capita	III:1 Converted summer cottage	0.163
Income per capita	III:2 Bourgeois large one-family house	0.256
Income per capita	III:3 Less regulated "own your own home"	0.098
Income per capita	IV:1 More regulated "own your own home"	0.111
Income per capita	IV:2 Massproduced industrial suburban one-family housing	0.175
Income per capita	IV:3 Row house block	0.111
Income per capita	IV:4 Post-modern rowhouse block	0.007
Income per capita	V:1 Free-standing lamellar building	-0.011
Income per capita	V:2 Lamellar yard shape	0.002
Income per capita	VI:1 Early modern megablock	-0.467
Income per capita	VI:2 Late modern megablock	-0.075
Income per capita	VI:3 Post-modern reform block	0.056

# Glossary of terms

## APPENDIX III

access route buildings	tillfartsbebyggelse
allotment garden	kolonilott
Area Facts 2004	Områdesfakta 2004
asbestos cement sheeting	eternit
bay window	burspråk
bourgeois large one-family house	borgerlig villa
category housing	kategoriboende
central city body	stadskropp
central city core	stadskärna
closed grid block	stenstadskvarter
closed grid block with open yard	storgårdskvarter
closed grid block with yard buildings	stenstadskvarter med gårdshus
combinations of highrise and low buildings	kombinationer av höghus och låghus
compressed blocks	sammanträngt byggnadsätt
compulsory school only	högstadiutbildning
converted summer cottage	konverterad sommarstuga
dense-low	tätt-lågt
densification	förtätning
district	stadsdel
donational lands	donationsjordar
(dwelling) "own your own home"	bostadsegna hem
Election Authority	Valmyndigheten
folk high school	folkhögskola
free-standing lamellar building	friliggande lamellhus
free-standing two storey lamellar building	friliggande tvåvånings lamellhus
gallery building	loftgångshus
Government Commission Report on Political Housing	Bostadspolitiska utredningen
Government Commission Report on Practical and Hygienic Housing	Praktiska och hygieniska bostäder (utredning)
Government Commission Report on Raised Standards of Housing	Höjd bostadsstandard (utredning)
Government Commission Report on Rational One-family House Construction	Rationellt småhusbyggande (utredning)
Government Commission Report on Slum Clearance	Saneringsutredningen
Government Commission Report on Social Housing	Bostadssociala utredningen
hemman	homestead
highrise tower block	hög punkthusgrupp
houses linked to each other with a garage	kedjehus
Housing Supply Act	bostadsförsörjningslagen
income earner	inkomsttagare
Klagshamn Lime Quarry Inc.	Klagshamns Kalkbrotts Ab
Kockum's Engine Works	Kockums mekaniska verkstäder
lamellar building in the grid	lamellhus i stadsrutnät
lamellar loaf	lamellimpa
lamellar yard shape	lamellhusgård
land reform	skifte



largely industrialized or commercialized ground floor plot	i stort industrialiserad eller kommersialiserad markplanstomt
liberal routescape	liberal stråkbebyggelse
line building blocks	radstående byggnadssätt
long, low working class building	arbetarlånga
low tower block	Låg punkthusgrupp
Malmö City Land Surveying Department	Malmö Stadsmätning
Malmö City Planning Office	Malmö Stadsbyggnadskontor
Malmöhus Regional "Own Your Own Home" Community	Malmöhus läns egnahemsförening
massproduced industrial suburban one-family housing	industriellt massproducerat suburbant småhus
mean income	disponibel medelinkomst
megablock	megakvarter
merchant house	handelsgård
million program	miljonprogram
mixed open garden city	blandad öppen trädgårdsstad
mixed suburban housing	blandad trädgårdsstad
mixed-use buildings	hus med blandad användning
mobile working class	arbetsfolk utan burskap
multiple plot one-family house	grupphusbyggd villa
multiple residence house	flerfamiljsvilla
municipality	municipalområde
narrow building	smalhus
National Metropolitan Policy	Storstadsutredningen
neighborhood unit	grannskapsenhet
older closed grid block	äldre, sluten kvartersstad
one-family housing	villor, radhus
"outside the border building"	utomgränsbebyggelse
owner-occupied area	småhusområde
"own your own home"	egnahem
"own your own home" loans	egnahemslån
"own your own home" movement	Egnahemsrörelsen
pre-industrial town	förindustriell stad
pre-industrial village street	förindustriell bygata
political inclination	politisk benägenhet
post-modern reform block	postmodernt reformkvarter
residential district	villaområde
ribbon window	fönsterband
route	stråk
routescape	stråkbebyggelse
row house block	radhuskvarter, kedjehuskvarter
row house group	radhusgrupp
Scania	Skåne
rustic work	rusticiering
shantytown	kåkstad
shopping street	butiksgata
single plot one-family house	styckebyggd villa, enfamiljshus
slab building blocks	skivhusgrupp
slum clearance block	saneringskvarter
small farm "own your own home"	småbruksegnahem
small house blocks, free-standing houses	småhuskvarter, friliggande hus
small market town	köping

small town block with yard buildings	småstadskvarter med gårdshus
socle	sockel
sparse one-family housing area	glest småhusområde
sparse small house blocks	glesa småhusområden
star-shaped building	stjärnhus
State Building Office – Scanian Association for Building	Statens byggnadsbyrå – Skånska föreningen för byggnadskultur
Statistics Sweden	Statistiska Centralbyrån, SCB
storey	våning
street houses	gatehus
subarea	delområde
”Swedishness”	”svenskhhet”
Swedish Society of Industrial Design	Svenska slöjdföreningen
tenant-owner association	bostadsrättsförening
tenant-owned apartment	bostadsrätt
terraced house	Radhus, flervånings
The Centre Party	Centerpartiet
The Christian Democrats	Kristdemokraterna
The Feminist Initiative	Feministiskt initiativ
The Green Party	Miljöpartiet de gröna
The Left Party	Vänsterpartiet
The Liberal Party	Folkpartiet liberalerna
The Moderate Party	Moderaterna
The Social Democrats	Socialdemokraterna
The Sweden Democrats	Sverigedemokraterna
tower block	punkthus
tradesmen’s and craftsmen’s blocks	handels och hantverkarkvarter
two storey row line housing	tvåvånings, radstående hus
type drawing	typritning
university education	universitetsutbildning
upper secondary school only	gymnasieutbildning
urban highrise block	urbant höghuskvarter
urban lamellar block	urbant lamellhuskvarter
wide building	tjockhus
working class routescape	småfolksstråk

# Sammanfattning

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## Segregation, utbildning och rum – en fallstudie av Malmö

Avhandlingen inleds med en framställning av arbetets kärnfrågor samt en överblick över innehållet: en fallstudie vilken bedrivs som en Bourdieu-inspirerad empirisk analys. Inledningen berättar även i korthet om den kvantitativa metoden som används i avhandlingen. Frågeställningarna är två: vilka sociala variabler beskriver segregation på bästa sätt? och om, hur och på vilket sätt har segregation rumslighet?

**Kapitel två** handlar om analysens sociala variabler, och inleds med en bred analys av segregation. I kapitlet ställs frågan vad det är som är problematiskt med segregation. Kapitlet pekar på tvetydigheterna som uppstår mellan begreppen segregation och polarisering i förhållandet mellan det rumsliga och det sociala. Kapitlet ger en inledning till Bourdieus tänkande kring distinktion och även av betydelsen av kulturellt kapital, och då inte minst utbildning, för frågan om segregation. Vidare diskuteras här olika mått på segregation. Kapitlet analyserar olika typer av sociala variabler som har använts för att mäta segregation och framställer då data för Malmö med t ex *Dissimilarity index*, det s k D-indexet (som beskriver vilken koncentration det är av en grupp i rummet), och även interaktionsindexet och isolationsindexet (som beskriver sannolikheten att råka träffa någon ur samma grupp). Avhandlingen innehåller en ansenlig mängd kartor och de första kommer i kapitel två och visar segregation enligt inkomst och utbildning. Kapitlet sammanför utbildning och inkomst till ett totalt kapital vilket sedan kartläggs. Då observeras skillnaderna mellan utbildningseggregation och inkomstseggregation och även hur segregationen ser ut när man sammanför dem. Kapitlet innehåller även kartor med förändringen över några års tid. Det framställs här också en hypotes: att ekonomisk segregation kan inte i sig själv säga allt om en stads segregation utan behöver kompletteras med bl a utbildningsseggregation. Detta är också en viktig slutsats i hela avhandlingen.

Avhandlingen genomför en typ av analys som är betydligt mer komplex än en envariabels- eller tvåvariabelsanalys: en typo-morfologisk analys, som försöker beskriva typer av miljöer genom att studera ett antal variabler och dra slutsatser kring kategorier av områden. Detta görs mer genomgripande i kapitel fem men det beskrivs redan inledningsvis i kapitel två.

Kapitlet innehåller också en Bourdieusk kartläggning med korrespondensdiagram som redovisar ett antal figurer med totalt kapital i vertikal led och fördelningen mellan utbildnings- och ekonomiskt kapital i horisontell led. Diagrammet möjliggör en analys av hur olika områden uppvisar liknande värden som gör att man på ett meningsfullt sätt kan tala om dem som kluster, kategorier av grannskap eller stadsdelar. Kapitlet kartlägger även här hur dessa områden har förändrats mellan 1999 och 2004.

I **kapitel tre** redovisas den empiriska analysen av de sociala variablerna. Först redogörs det för vilken data avhandlingen har haft tillgång till och hur data har hanterats. Här redovisas inkluderade och exkluderade variabler. Kapitlet redovisar en kartsamling där variablerna, framför allt utbildning, men även ålder, inkomst, etnicitet och politisk benägenhet redovisas i de olika grader av koncentration och mönster de uppvisar i Malmö. Dessa kartor utgör ett viktigt första steg, och materialet följer sedan med till de senare delarna av analysen. I kapitlet görs även korrelationsanalyser med de sociala variablerna. Kapitlet innehåller också en presentation av Bourdieus tänkande och vilka egenskaper som gör det speciellt: konstruktionen av det sociala rummet, relationer istället för substanser, sociala typer som indikatorer av habitus, samvariation istället för mest viktiga variabler, samt betydelsen av kulturellt kapital och utbildning. Avhandlingen söker inte de viktigaste variablerna utan ställer frågan hur variablerna samvarierar. Kapitlet betonar också att det handlar om ett försök att använda statistik inom arkitekturforskning på ett nytt sätt. Avhandlingen söker ett sätt att arbeta inom arkitekturforskningen för att utvidga vårt kunnande om städer. Med hjälp utav Bourdieus tankeapparat placeras olika delar av Malmö, både alla de mindre enheterna, och de kluster – de 17 sociala typerna – i ett

Bourdieuiskt rum. Detta visar hur det sociala rummet och samvariationen kan åskådliggöras. Det är sedan möjligt att gå vidare med mer etnografiska typer av fältarbeten enligt modell efter Bourdieu. Den empiriska analysen av Malmö redovisas i ett långt avsnitt där alla de 17 sociala typerna beskrivs detaljerat. En mängd data framställs och korta försök att textmässigt betona vissa data resulterar i en indelning i 17 sociala typer i Malmö. Slutsatserna i kapitel tre innehåller ett försök att visa några av de viktigaste samvariationerna och här ser man t ex att det finns en viss samvariation mellan inkomst per invånare och högre utbildning. Dessutom visar datan hur självsegregation eller kongregation leder till ett aktivt eller passivt segregationsmönster mellan låginkomsttagare och höginkomsttagare. Kapitlet avslutas med en punktvis sammanfattning om vad som har framkommit ur analysen av sociala variabler.

**Kapitel fyra** betonar rumsliga variabler och sociala typer. Kapitlet redovisar de rumsliga variabler som exkluderades i kapitel tre. Det gäller variabler som utomhusrum, inomhusrum, centralitet, ägandestruktur och byggnadsålder. Här sker en analys som liknar den i kapitel tre såtillvida att den börjar med en översiktlig kartläggning av variablerna var för sig. I avhandlingen används inte bara data som den förelåg utan ett försök att höja kvaliteten hos underlaget görs. Efter den översiktliga kartläggningen görs en analys för alla 17 sociala typer av de rumsliga variablerna och hur de samvarierar med de sociala variablerna. En mängd kartor och cirkeldiagram visar hur de sociala typerna ser ut i termer av de rumsliga variablerna. I slutsatserna för kapitel fyra betonas det igen att här handlar det inte om att hitta den viktigaste variabeln utan syftet är att belysa hur variablerna samvarierar och vilka relationer de har med varandra.

**Kapitel fem** hanterar kvartersmorfologi och sociala typer. Här görs ett försök att bygga vidare på en tradition inom stadsbyggnad och arkitektur som går tillbaka på Geddes, Conzen mfl. Kapitlet introducerar begreppet *morf* som samlingsnamn för stadsmönster eller stadsbyggnadstyper och försöker att formulera en uppsättning *morfer* som bygger på en mängd empiriska variabler men som ändå hänger ihop på ett sätt som blir meningsfullt när man ska försöka förstå en stads variationer i rummet. Avhandlingen kommer fram till sex *supermorfer* och 18 *morfer*, och dessa beskrivs i inledningen till kapitel fem. Efter det följer ett avsnitt med en beskrivning och en redovisning av hur de olika morferna kan beskrivas med hjälp av data både från kapitel tre och fyra, dvs både med sociala och rumsliga variabler. Här följer också en omvänd framställning där sociala typer utgör kategorin och där man ser hur morferna samvarierar med de sociala typerna. Slutsatserna består av två avdelningar. Först, rumsliga slutsatser där morferna, alla 18, redovisas med utgångspunkt i hur de samvarierar och hur man kan beskriva dem i förhållande till de rumsliga variablerna. Sedan, sociala slutsatser, som beskriver morfer med utgångspunkt i de sociala variablerna.

**Kapitel sex** redovisar diskussion och slutsatser. Kapitlet är ett försök att knyta ihop en omfattande empirisk analys. Här återbesöks de två huvudfrågorna: vilka sociala variabler beskriver segregation på bästa sätt? och om, hur och på vilket sätt har segregation rumslighet? En av slutsatserna som avhandlingen kommer fram till är att socio-ekonomisk segregation inte kan jämföras med ekonomisk segregation eftersom att en analys av utbildnings- och inkomstsegregation inte ger samma resultat. Analyserna har visat att kulturellt kapital är av stor vikt när det gäller de dynamiska förändringarna som sker i det sociala rummet i en stad. Samtidigt dras slutsatsen att den starkaste sociala indikatorn är disponibel medelinkomst och den klaraste samvariationen är en hög disponibel medelinkomst, en hög nivå av ”svenskhet” och en hög nivå av sysselsättning som klart indikerar höga nivåer av utomhusrum etc. I slutsatserna görs ett försök att indikera de starkaste samvariationerna men inte vilken variabel som är den viktigaste, även om här finns ett försök att betona utbildning som en viktig variabel.

Här finns också en presentation av slutsatserna i tio punkter. Dessa slutsatser omfattar bl a det faktum att utbildning inte samvarierar med disponibel medelinkomst och att segregation kan betyda många saker: utbildningssegregation, ekonomisk segregation, ålderssegregation etc. Här påpekas också att avhandlingen har sina begränsningar, och att analysen inte kan dra slutsatser vad gäller att kunna peka ut verkligt rumsligt-sociala segregerade områden.

Till sist innehåller kapitlet en diskussion kring policyfrågor. Denna diskussion avslutas med två frågor: varför inte arbeta med att använda rumslig planering för att förändra förutsättningarna för segregation? och varför inte använda en bredare empirisk undersökning för att undersöka variablerna snarare än att fokusera all uppmärksamhet på etnicitet eller ekonomiska faktorer?

Till avhandlingen ingår **bilagor** med mer ingående beskrivningar av samtliga delområden samt av samtliga korrelationer som ingår i analysen.

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