

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/318277029>

Class Conditions and Urban Differentiation – Applying Distinction’s Methodology to the Community

Article in *Bulletin de méthodologie sociologique: BMS* · July 2017

DOI: 10.1177/0759106317710847

CITATIONS

2

READS

3

1 author:



Lennart Rosenlund

University of Stavanger (UiS)

15 PUBLICATIONS 238 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Compas [View project](#)



Class Conditions and Urban Differentiation - Applying *Distinction's* Methodology to the Community

Bulletin de Méthodologie Sociologique
2017, Vol. 135 5–31
© The Author(s) 2017
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0759106317710847
journals.sagepub.com/home/bms



Lennart Rosenlund

University of Stavanger, Norway

Résumé

Conditions de classe et différenciation urbaine - Appliquer la méthodologie de *Distinction* à la collectivité. Cet article applique la méthodologie de l'œuvre majeure de Pierre Bourdieu, *Distinction*, à une communauté du sud-ouest de la Norvège, montrant que les forces de différenciation sociale opérant au niveau national et au niveau communautaire. L'espace des positions sociales et l'espace des modes de vie sont construites à l'aide d'une analyse de correspondance multiple des données d'enquête sur le mode de vie. Ces résultats sont ensuite discutés par rapport à une autre analyse, une analyse de cluster écologique des divisions démographiques dans l'espace physique de la ville. Ces analyses montrent que les mêmes principes de différenciation sociale, le volume et la composition du capital, structurent les trois univers de structure de classe, de modes de vie et d'espace physique de la ville.

Abstract

This article applies the methodology of Pierre Bourdieu's major work, *Distinction*, to a community in South-Western Norway. It argues that the forces of social differentiation analyzed by Bourdieu operate on the national level and are also manifest on the community level. The two space constructs – the *space of social positions* and the *space of lifestyles* – are constructed by a multiple correspondence analysis of data from a survey of lifestyle. The characteristics of these results are then discussed in relation to another analysis, an ecological cluster analysis of demographic divisions within *the physical space of the city*. The analyses show that the same principles of social differentiation, *volume* and *composition of capital*, sway all three universes of class structure, of lifestyles and of physical space in the city.

Corresponding Author:

Lennart Rosenlund, University of Stavanger, Postbox 4036, Stavanger, Norway
Email: lennart.rosenlund@uis.no

Mots clés

Méthodologie de Bourdieu, Espace des positions sociales, Modes de vie, Espace physique, Homologies, Volume et composition du capital, Analyse de correspondance, Analyse classificatoire

Keywords

Bourdieu's Methodology, Space of Social Positions, Lifestyles, Physical Space, Homologies, Volume and Composition of Capital, Correspondence Analysis, Cluster Analysis

Social space is an invisible set of relationships which tend to retranslate itself, in a more or less direct manner, into physical space in the form of a definite distributional arrangement of agents and properties

Pierre Bourdieu, *Physical Space, Social Space and Habitus* (1995)

Introduction

This article has a methodological focus. It introduces the methodology of Pierre Bourdieu's major work the *Distinction*, applied to a certain community. It explores the relationships between class conditions, patterns of lifestyles and spatial structures of the city of Stavanger, situated on the south-west coast of Norway. It presents empirical findings from studies undertaken over a period of almost two decades in this city. These have been modelled over the analytic framework of Bourdieu's major work: the *Distinction*. Presently, this work is carried out within the framework of the project *Prism - Rapid Social Change* an ongoing joint research project between IRIS (International Research Institute of Stavanger) and University of Stavanger financed by the Norwegian Research Council.

The purpose of the article is to contribute to the research of urban processes by introducing this particular mode of systematic class analysis. The article argues that Bourdieu's approach to the analysis of class conditions applied to a concrete, historically situated community may be fruitful to shed light on urban processes since these seem to be related to the particular processes of social differentiation that his model is capable of uncovering: *volume* and *composition of capital*.

The focus of the article unavoidably touches a widely researched and discussed theme of interest among geographers, sociologists and others about the phenomenon of gentrification. This strand of research efforts dates back half a century beginning with Ruth Glass's pioneering work when establishing urban sociology as an academic concern at University College in London (Glass, 1964). The article will argue that gentrification i.e. the multifaceted change process by which poor working class residential areas are transformed into more middle class dominated ones is, in fact, one of several identifiable, simultaneously ongoing processes of urban differentiation, i.e. segregation processes fueled by class oppositions and contradictions. In Stavanger, these processes are strongly influenced by the unsurpassed influx of economic wealth that has reshaped the class structure in a profound way. Its dominant and intermediate classes have expanded in sizes and become more internally more differentiated, while the working class has

diminished and transformed. One side effect of this fundamental social transformation process is a housing market in disorder. Since the beginning of the 1980s, the housing market has been de regulated in Norway and since then a shortage of affordable housing have prevailed in the city.

The article opens with a short presentation of the object of study, the urban community of Stavanger. This city is indeed situated remotely from the “global cities” that flourish in the literature of urban sociology, but still it is “a variant of the socially possible” and therefore worth analytic attention. It has undergone a profound process of social change during the last thirty-forty years, second to few communities. It transformed from being an overripe small town to become the oil capital of Norway. Four decades ago, it was one of the poorest communities situated in the periphery of Norway and it has now become a hub in the global oil economy and become the richest in Norway.

After this introduction to the studied city follows some short remarks on the ongoing debate over the state of affairs of current urban research, particularly the research on gentrification. It is argued that research devoted to such problems recently have undergone a remarkable change. It has lost its former critical edge and become more of a consultancy activity in service of town planners and entrepreneurs. The intention with this article is, in all modesty, to contribute to this debate by bringing the methodology of the *Distinction* to the fore.

The next section recalls the basics of Bourdieu’s conceptual framework in order to address questions about social structures; what are their natures and how is it possible to study them? The concern here is particularly the concepts of *space of social positions*, or briefly the *social space*, *habitus* and the *space of lifestyles* around which the empirical analyses in *Distinction* gravitate. The rest of the article contains accounts of two different empirical studies, undertaken in 2009 and 2007.

The first is a survey of lifestyles among the inhabitants. The analysis is based on Multiple Correspondance Analysis (MCA) Bourdieu’s preferred analytical tool. In this section, references are also made to a study of lifestyles from 1994, similar in content and design to the 2009 study. Both surveys show that the distributional patterns of different forms of capital and patterns of lifestyles follows Bourdieu’s model in *Distinction*. The two very different social universes are both structured by *volume* and *composition of capital*. Further they show how patterns of perception of various residential areas are related to lifestyles and social positions more generally; approval and disapproval of areas to live in, follows a simple principle: one appreciates areas where one’s own kind – in terms of lifestyles and positions in social space – are numerous and disapprove those where one’s own kind are rare.

In contrast to other English writing researchers who lately have taken up MCA (e.g. Bennett et al., 2009; Le Roux et al., 2008), I have here utilized MCA according to the “visualized regression” approach (Lebart et. al., 1984). This means that “independent variables” (capital indicators) function as the “raw-material” to build a space of social positions. This construction is then used to analyse lifestyle patterns.¹ MCA utilized according to the “reciprocal approach”, which is most commonly used, implies that “dependent variables” are used to unveil lifestyle patterns, which then are analyzed by the help of “independent variables”, or “structuring factors” (Le Roux and Rouanet, 2004).

The second analysis accounted for, in this article, is from 2007. The data consist of demographic descriptions of 68 residential areas in the city. The local authorities have produced these. This analysis tries to shed light on whether or not the principles of differentiation identified in the survey of lifestyles, volume and compositions of capital, also translate into spatial divisions and, in case they do, what kind of geographic patterns do they form. The approach connects both with the analytic strategies of the scholars of the classical Chicago School and their modern heirs (e.g. Sampson, 2011). This is an ecological study that, head on, addresses Bourdieu's remark about homology between *social space* and *physical space*, referred to in the ingress of this article (Bourdieu, 1995).

The last section is devoted to an effort to sum up and theoretically integrate findings from the two studies. What emerges from this analytic exercise is an identification of a fascinating correspondence between patterns of division within these three, entirely very different, social universes: a class structure with a specific distribution of classes and their resources (capitals), of lifestyle patterns (and habituses), and of objective patterns of spatial differentiation. The same principles of differentiation: volume and composition of capital, appear to be at work in all three universes.

The Object of Study

In the beginning of the 1970s, when the author arrived in town, it had a character and atmosphere of a sleepy small-town. It did not have the appearance what might be expected of the country's fourth largest urban area. The major portions of the built environment were constructed in wood, villas and two-family and detached four family houses. There were virtually no blocks of flats. In spite of its relatively large size – 85.000 inhabitants in 1974 – it had a very small downtown area close to the sea. Along the shoreline close to the Centre, old decaying canning factories were lined up as monuments from earlier periods of relative affluence. There were just a handful of restaurants, but these were greatly outnumbered by churches and houses of prayer. These material structures symbolically and conspicuously told the story of – at the time – a still viable and influential religious and puritanical subculture.

This distinctive atmosphere and character of its architecture was a very tangible reflection of the town's birth process as an urban community in the late 19th century and the beginning of the 20th century. Stavanger was never an important player in the process of industrialization of the country. In the 19th century when the community grew – and it grew quite quickly – it was the catch, curing and exportation of salted herrings that was the engine of growth. The herrings arrived regularly in the late winter in huge quantities and were caught and cured with traditional methods and then exported on sailing ships. The demand for unskilled labour was great, and was satisfied by immigration from the surrounding countryside. Some of these immigrants brought their houses with them and re-erected them in the town. They worked for small wages or independently. Capitalist relations of production were thus established, but no capitalist means of production.

Towards the end of that century (1873) and onwards the herring failed to arrive. This caused a long period of economic crisis and stagnation, when many families of the affluent merchant bourgeoisie were ruined and the poor people of the town starved. The

crisis lasted well into the next century when capitalist means of production began to emerge: the canning industry. The raw material was once more a fish, this time the brisling, a small herring type of fish, which was exploited producing canned sardines.

This industry grew for a couple of decennia and peaked around 1920. However, it was a feeble economic venture with few spinoffs in other branches and was only to a minor degree capable of changing the social structure of the community. The work was seasonal and the workforce was to large extent women, giving its particular mark on the emerging working class. The incomplete capitalistic development left a prominent place for the petty bourgeoisie, which formed a viable social basis for a strong counter culture (Rokkan, 1967) related to the low-church laymen's movement and the temperance movement, giving a particular flavour to the public life of the town as late as in the middle of the 1970s. Most Norwegians knew of the "Dark main land" which referred to the "narrow mindedness" designating the mentality of the south-west of Norway, where Stavanger is the "capital".

The same slow economic development relates directly to the particulars of the architecture of the town. Stavanger is the wooden house town of the country. The construction of homes was organized by many small contractors. There were no big entrepreneurs or co-operations that built large-scale home complexes, nor were there the capital necessary for such ventures. Instead, the building contractors built one, two or even more two-family house at a time. In the period before WWII, these were normally separated horizontally, with one family apartment on the first floor and one on the ground floor. When building more than one house it was quite common that the building process was rationalized by building them simultaneously. Then the contractor had arranged with the sawmill to cut the necessary material in standardized sizes, a pre-fabrication production process in its infancy. In 1994, 57 percent lived in detached houses, 15 percent in semi-detached houses, 16 percent in two-family houses, while only 13 percent lived in blocks of flats.

This picture of a poor and backward laying community changed dramatically during the last quarter of the last century. Stavanger is undoubtedly the Norwegian city that has undergone the most profound processes of change (Rosenlund, 1996, 2002, 2009). The city has been subjected to the same overarching forces of change as the rest of Norway: rapid urbanization, expansion of the educational system with an increased level of schooling among its population, emergence of a large public sector, re-structuring of the industrial sector; it shrinks relatively and converts from low-productivity canning industry to a high tech one, adapted to changing needs of the oil industry. Further, this is the period when women massively entered the labour market. In addition, the city has been exposed to the establishment and the massive presence of the oil industry for almost four decades. It has become embedded in the most international, capital-intensive, and technological industry there is, which includes managerial cultures with influences far beyond the offices of the oil companies.

The municipality has now grown to 120,000 and simultaneously become intertwined with surrounding municipalities and become one large urban area with a quarter of a million inhabitants, the third in size in Norway.

This profound change process has had its costs. Presently, the city and the surrounding area suffer from a severe housing crisis – record high prices on houses and

apartments and shortage of affordable dwellings – and an overcrowded communication infrastructure, with an under-developed, but expensive public transportation system.

A careful analysis of census data (1970, 1980 and 1990) shows that the social structure underwent a profound metamorphosis in the mentioned period. The working class diminishes in relative size and the intermediate classes and the dominant class increase dramatically. Simultaneously, with this reshaping process of the social hierarchy, another process takes place; the Bourdieusan *capital composition principle* emerges and grows in force as a source of social differentiation. The intermediate and the dominant classes become increasingly internally differentiated between class fractions whose capital assets are dominated by economic capital (CEOs, financial workers, technicians and economists in oil firms, platform workers etc.) and those whose capital balances are dominated by cultural capital (artists, professors, teachers, nurses, social workers etc.). (Rosenlund, 1996, 2002, 2009). This is a phenomenon of the last quarter of the last century.

Bourdieu and the Urban Space

Bourdieu's oeuvre has certainly been source of inspiration, controversies and has contributed to set the agenda of many areas of social and cultural studies. In urban studies his ideas has indeed been fertile. In gentrification studies, for instance, there is a substantial vein of studies focusing on the role of cultural capital, habitus and the workings of lifestyle pursuits of segments of the middle class. They are the gentrifiers transforming inner city working class areas into more middle class dominated ones. They are the products of the de-industrialization process of Western societies; a new segment of the population emerges that is loaded with cultural capital, less so with economic capital. They are in search of affordable housing. They may be artistically inclined or at least appreciate culture and love the seething urban way of life as opposed to live the squared, boring suburban way of life. Their particular culturally dominated habitus guide them to value the heritage and architecture of the old industrial society (see for instance: Ley, 1980, 1994, 1996; Zukin, 1982, 1991, 1995; Bridge 1994, 1995, 2001, 2005).

The ways these gentrifiers and their different roles in the gentrifying process are described resemble very much the "the new petit bourgeoisie" that Bourdieu analyzed in *Distinction*. This class fraction replaces the "old petit bourgeoisie" (shop keepers, artisans etc.) in social space which, at the time of *Distinction*, was dwindling. With them they brought a new type hedonistic lifestyle to the social scene that was, in substance, an inversion of the lifestyles of the old petit bourgeoisie dominated by protestant ethics.

In this slightly caricatured form, this line of thought has emerged as one of the main type of explanation of gentrification, leaning directly or indirectly on Bourdieu. The other and opposing way of explaining gentrification is the so-called "rent gap" theory. This mode of theorize this phenomenon is emphasizing more economical aspects. It is about the movements of capital, capital accumulation rather than movement of people (the gentrifiers). With the de-industrialization process the inner city industrial areas are gradually abandoned and decaying. Thereby the land is becoming de-valorised and do not return rent in line with its real value taken into account the centrality of it. A gap

between actual return and real value is widening and narrows again with the gentrification process (Smith, 1979, 1987, 1992, 1996).

Much of the research in this vein of study has gravitated around these two types of approaches. In 2006 Tom Slater published an informative article based on thorough reading of the vast literature on gentrification of the last couple of decades. He describes an academic tradition in a process of decay. He accuses his current fellow researchers of having abandoned the once critical and activist perspectives that characterized this vein of studies. It is not exploring anymore the role of rent increases, landlord harassments and working class evictions. Instead it is dealing with various brands of middle class gentrifiers and has more and more become protagonist agents for their new trend in urban living, "loft-living" (Zukin, 1982) in the gentrified old working class residential area. Here one now finds social diversity, street theatre, trendy bars and cafes etc. The evicted working class themselves has vanished from the research agenda and with them the critical perspectives.

The article resonated remarkably and sparked reactions among his fellow researchers (Watt, 2008; Shaw, 2008; Wacquant, 2008), all of whom seem to agree with his account of the "surprising and troublesome trend in recent studies of gentrification" (Wacquant, 2008: 198). Slater means that the attention given to the documentation of actually occurring evictions of low wage residents in inner city areas has been overshadowed by a perpetual theoretical quarrel over the forces that drive the gentrification process.

This state of affairs of urban studies, if correctly identified, comes as no surprise. It has its parallels in several other areas of social studies; stalemate with regard to theoretical positions (neo-Marxist, neo-Weberian or postmodernist) combined with a degradation of the academic autonomy in developing the research agenda. Wacquant's intervention in the debate above makes this as its main points. He agrees strongly with Slater's description of the turn the research has taken, but disagrees with his analysis of the causes and of the remedy, he is proposing (reclaiming the concept of gentrification to include the eviction theme). The analysis of Slater does not go far enough, according to Wacquant. The eviction of the evicted from the research agenda is a part of a much broader change process characterizing the late post-industrial society with the marginalization and fragmentation of the working classes, which relegate them to invisibility in public sphere and in research. This development is further accentuated by a simultaneous development in academia with a gradual loss of autonomy in defining and developing the research agenda.

Wacquant's remedy is to "revive and revise class analysis. . . within the overall structures of social and urban spaces and their linked makeovers" (Wacquant, 2008: 203). In an article Mike Savage connects well with Wacquant's suggestion in an article named "The Lost Urban Sociology of Pierre Bourdieu" (Savage, 2011). He uses the article to highlight the references Bourdieu makes on the issue of the relationships between the social space and the physical space, from his first analysis of the Kabylean house to his later work on the Field of Economy (Bourdieu, 2005).

Savage suggests that Bourdieu's contribution may be helpful in coming to terms with the dilemmas characterising current urban sociology. In Savage's view there is a paralyzing divide within this field of inquiry between the proponents of the now abundant and popular theoretical framework (postmodern) emphasizing fluidity, mobility, networks,

flows of money, objects and people etc.,² on the one hand and those occupied with more traditionally oriented empirical studies of “spatialization of class”, on the other. The latter is still being contained in conceptualisation of classes in term of occupational categories. By putting emphasis on Bourdieu’s field analysis, instead of the habitus concept, which is a common feature of the Anglo-Saxon reception of Bourdieu’s work according to Savage, he means that it would be possible to “staging a more effective dialogue between these two currents”.

Savage advocacy for Bourdieu’s field analysis may be apprehended as a call for application of the methods and analytic framework developed in *Distinction* to study the community. This is precisely what I will try to do in the coming pages. By doing so, it should be possible, to explore in full, the potentials of Bourdieu’s theory based on the interrelationships between the basic concepts of fields (and spaces), habitus and capital, and connect these to the concrete manifestations of physical, spatial realities of a specific community. This approach could work as an antidote to flawed or partial use of these concepts, which hampers their effective use. Habitus makes no sense without the concept of fields (or spaces); cultural capital is nonsensical without considering economic capital.

The Methodological Starting Point - The Two-Folded Nature of the Social

One important aspect of Bourdieu’s methodological approach, which often has been overlooked in the reception of his work, is the assumption on what may be labelled “the double nature of social reality”. According to him, there exists an objective social structure consisting of a system of social positions in which the members of a society are positioned. By that, they are related to one another in relations of dominance and subordination. This is the *objectivity of the first moment* (Bourdieu and Wacquant, 1992: 26 ff.). This particular social structure reflects resemblances and differences with regard to social, cultural and economic conditions of existence among social agents. It catches the distribution of socially valuable assets and resources, i.e. *different forms of capital*. This structure has an existence which is “independent of the consciousness and desires” of the social agents. Even so, it is capable of guiding and/or constraining the practices and representations of these agents. In his theory this form of reality is conceptualised by the help of the term *the space of social positions* or *the social space* in its abbreviated form.

Social reality consists, however, also of different forms of human practises; it has a subjective, expressive and symbolic aspect. This form of social reality is made up, and constructed by social agents engaged in interaction, in struggle and competition. This is the *objectivity of the second moment*. People are judging and evaluating, they interpret the world they live in and classify and judge; they develop habits of various kinds and sympathies and antipathies. As an analytic aid for coming to terms with this form of reality, Bourdieu has introduced another conceptual invention: *the space of lifestyles*.

Theoretically, these two universes are linked together by the *habitus* concept, which we as human beings and members of society are supposed to be equipped with. This mental structure is formed and moulded by the conditions of existence we are subjected

to – in a certain position in the social space – and the experiences we have gained on the social journey to this position. The habitus is structured by the conditions of its production. The external social reality becomes incorporated and becomes a personal inner reality.

However, the habitus is also *structuring*. It is simultaneously a generative and creative tool that we use when taking stock of the realities we encounter in the social world. The habitus is the instrument we are using when expressing ourselves on the various social arenas we occupy. A certain position in the social space makes likely a certain set of dispositions towards adopting certain categories of perception and classification, certain stances on political and ethical values, certain practices, certain inclinations, etc. Another position in the social space makes likely another set of such dispositions.

When bringing the sociological perspective into a particular community we are faced with a problem: How do we theorize the relationships between these “invisible” entities, the realities that the two space-constructs aim to objectify and describe, and the physical world of the community in question. Apart from its inhabitants, a community consists of an assembly of identifiable institutions, authorities and companies, schools, nurseries, residential areas, work places, communication networks, in short: various physical entities. For instance, what exists as the educational system in the abstract world of sociology is comprised in the world of the community of a finite number of identifiable schools and colleges, each having its geographical location, size, appearance and its own unique history. They may be immersed in representations with certain meanings and content, often conflicting ones among the population. Similarly, the field of culture in a specific community consists of sets of institutions and persons, all with their specific loyalties and histories. What the community perspective does is to impose on sociological thinking an awareness of the locality and thereby open up new dimensions, which call for attention and analysis. To be fully able to grasp these realities in all their diversity, however, the methodological approach presented here should be supplemented by qualitative studies.

The Local Social Space and the Space of Lifestyles of Stavanger

The studies, which this article is based upon, involved the constructions of *the local social space* and *the space of lifestyles*. The aims have been to unveil the major forces of social differentiation that are swaying the community, and try to establish how these forces manifest themselves in divisions and oppositions in lifestyle patterns among the citizens. Then, in the next step, we will follow how these forces translate themselves in the physical space of the city.

The “raw material” for these constructions have been collected from a survey of lifestyles carried out in 2009 in the greater urban area of Stavanger and Multiple Correspondence Analysis (MCA) was used as the tool of construction.

MCA is founded on multidimensional geometry. Its purpose is to unveil and visualize underlying patterns and structures in large amorphous datasets. It starts out with the respondents profiles of attributes (or values on the chosen active variables) and calculates the distances between the categories (and individuals) in a multidimensional space. Then, the analysis proceeds by extracting the dimensions, which optimally “fit” the

dispersion among the analyzed categories and individuals. The first dimension “explains” the greatest part of the total variance; the second dimension explains a somewhat smaller amount, the third still less and so on.

The construction (from 2009 data) presented here is based on an analysis of the two forms of capital, *economic* and *cultural capital*, and variables *related to work*. As it was pointed out earlier, I apply MCA according to the “visualized regression” approach (Lebart et. al., 1984) the method that Bourdieu most likely used when he constructed his famous model (Bourdieu, 1984: 128-29). Altogether eleven “independent variables” were chosen to be included as active variables in this analysis. Bourdieu seems to have used twelve (Bourdieu, *ibid*).

Four indicators of economic capital were included: household income, ownership and value of summerhouse, and idem of car(s) and of boat(s), sixteen categories in total. Four variables were indicators of cultural capital: the educational backgrounds of the respondents themselves (eleven categories, describing level and subject area) and of the educational backgrounds of fathers and the two best friends, twenty-one categories in total. Three variables related to work, consisting of fourteen categories: the vocations of the father (social trajectory), the vocation of the respondents themselves, and their type of employment (public/private). Altogether, fifty-one active categories were analyzed.

The results from an MCA-analysis are given in graphs and tables containing parameters of analysis. Thus, the present analysis gave the result that the first two dimensions of the social space explain all together 73 percent (51 percent+22 percent) of the total variance. In Figure 1, I present an outline of the constructed social space. In it, categories that are situated close to each other are correlated, the closer the stronger, and, similarly, the more distant they are located, the more negatively correlated they are. A glance at Figure 1 reveals the social logic of the extracted dimensions. The first and most important dimension (the horizontal axis) has a hierarchical structure and reflects a capital volume dimension. Thus, it is rotated 90 degrees clockwise compared to Bourdieu’s model.³ When moving horizontally from the left to the right, all indicators of both cultural and economic capital increase in value. The lines that join categories belonging to the same variables highlight this feature. Thus, the variables *Father’s education* and *Household income < 399.000 NOK* both begin with their lowest values on the left-hand side. Then both increase when moving rightward and end to the right side with their highest value (*Household income > 1.000.000 NOK*, *Education of father univ. > 4years*). Further, attributes associated with low social positions are found to the left (*Father unskilled worker*, *Skilled worker*) and those common in high social positions are found to the right (*Manager*, *Top manager*, *Father manager*).

The logic of the second axis – the vertical one – is of a different nature. It discloses the capital composition dimension. This “two-component” dimension depicts the “relative weight” of the two forms of capital. In the top domain of the space, cultural capital outweighs economic capital; in the bottom domain, the reverse is true: economic capital outweighs cultural capital. At the top end we find the highest values on the indicators of cultural capital (top right: *Education univ > 4 years (hum)*, *Education of father univ. > 4 years*, *Education of 1st and 2nd friend university > 4years*) together with the lowest on economic capital (top left: *Household income. < 399.000*, *No car*, *Car value < 100.000*).

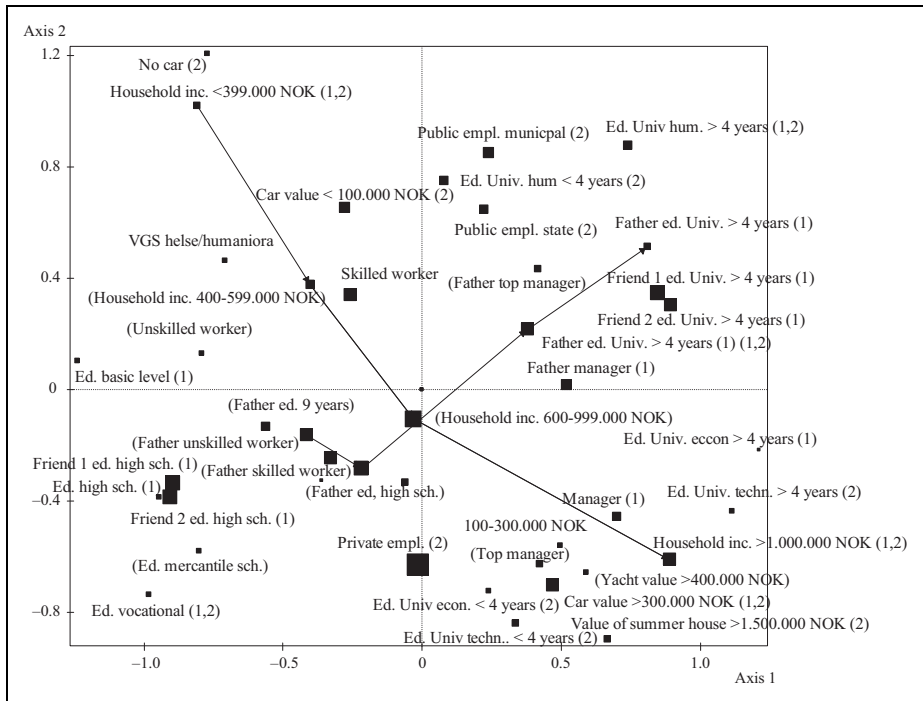


Figure 1. The social space in Stavanger, the space of categories. Plane 1- 2. Note: Categories contributing above average to the two first axes (Ctr-values >2%). Numbers in parenthesis (1 or 2, or both) indicate to which. The sizes of the markers are proportionate to the frequencies of the category they represent. Full print-out from the analysis is obtainable from the author.

At the bottom we find the opposite: the highest values of economic capital indicators (bottom right: *Household income* > 1.000.000, *Value of boat(s)* > 400.000, *Value of summer house* > 1.500.000) go together with the lowest on cultural capital (bottom left: *Education*, *vocational school*, *Education mercantile school*, *Education High school 1st and 2nd friend (the lowest category)*).

The construction of the *space of lifestyles* was performed by using the constructed social space as an “analytic frame” into which various lifestyle components are inserted in the form of “supplementary” or “illustrative” points. (“visualized regression analysis”, Lebart et. al., 1984). This operation does not affect the characteristics of the space. The location of the points in the space indicates in which domain certain lifestyle elements are frequent or rare. The space of lifestyles was so to say “derived” from the social space. Figure 2 gives an overview of the locations of lifestyle characteristics chosen from wide-ranging variety lifestyle universes, which illustrate the versatility of Bourdieu’s social space model.

A quick excursion in the constructed space of lifestyle in Figure 2 – following a path indicated by the greyish arrows – reveals the logic that governs it. Starting in the low-volume area, to the left, where the inhabitants are poor with regard to both cultural and

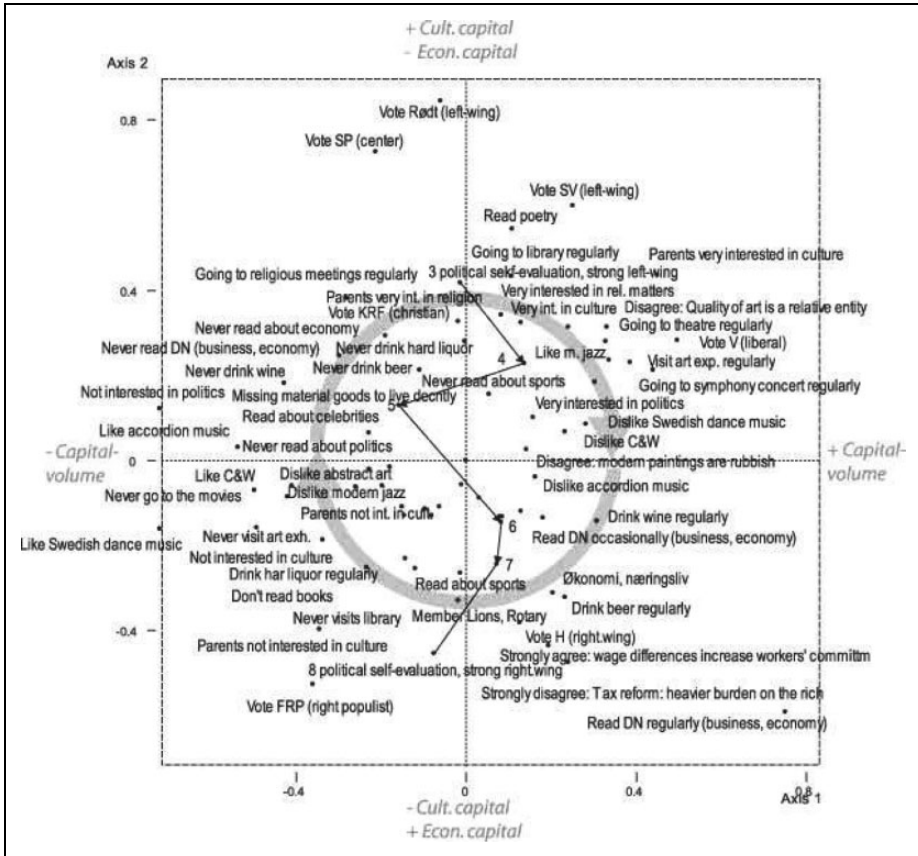


Figure 2. The Stavangerian social space (2009) and (a derived) space of lifestyles. Political self-evaluation, 6 categories (3 – 8) are connected with arrows

economic capital, we find signs of this predicament: *Missing material goods to be able to live decently* and: *Certainly not interested in culture* (and in politics!). In general terms, we note that many of these lifestyle components are denials and refutations of positive choices found on the right-hand side in the high-volume domain: *Never go to the cinema*, *Do not read books*. However, a couple of positive choices are also found here: *Like Swedish Dance music* and *Like Country and Western*, both genres being typically low-brow forms of music.

Moving up a bit in the space, still in the low-volume domain, but now in the domain where cultural capital out-weighs economic capital – following the arrow – we find further components of refutations: *Never drink wine* and *Never drink beer* and *Never read about economy* and *Never read DN (business, economy)*. One is not interested in the capital form that one has least of, it seems. (The opposite principle is also true as we shall see). A little further up we find the locations of the remains of the formerly so influential religious lifestyle in the city: *Go to religious sermons regularly*, *Vote KRF (Christian)*

and, further to the right *Very interested in religion*. The current followers of the Christian fate are clearly positioned in the cultural domain of the social space.

Moving further to the right, in the direction of the high volume domain, but still in the cultural area we find a plethora of signs of cultural distinctions: *Parents very interested in culture, Go to symphony concerts regularly, Go to theatre (and art galleries) regularly*. We also find examples of what they do not like: *Dislike Country and Western (and Swedish Dance Music)*, the music taste of the lower classes.

Moving further down (along the capital composition) (still) in the high volume area into the economic domain, we find many elements reflecting the dominance of economic capital: *Read DN sometimes (and regularly), Read about economy, business in the paper*. A similar line of thought could be argued (although farfetched) about the positions of two other attributes: *Drink wine (and beer) regularly*. Drinking alcohol is extremely expensive in Norway. *Drink hard liquor regularly* is situated somewhat lower on the capital volume dimension, but still in the area where economic capital out-weights cultural capital.

In the south-west quadrant (intermediate or low volume of capital, economic capital dominates) we find many indications of lack of and disregard of cultural capital: *Certainly not interested in culture (both respondents and parents), Don't read books, Never visits art galleries, Never go to cinema*, etc.

One feature of the current space of lifestyles of great importance (and of a similar based on data from 1994), which differs somewhat from Bourdieu's analysis almost forty years ago, is that there is strong component of political opinions linked to the capital composition dimension, which run vertically on the graph. In Bourdieu's analysis this pattern is not that clear-cut. The points that are connected with a line represent political self-evaluations according to a simple ten-point scale (in the analysis simplified to a scale from 3 (strong left) to 8 (strong right)). They are ordered monotonously along the vertical capital composition dimension. Those who judge themselves as left-winger are concentrated at the top of the graph, in the cultural domain, while those who consider themselves right-wingers are mostly found at the bottom in the economic domain. The distribution of categories representing the electorates of the various political parties accentuates this pattern. We find the voters for the left-wing parties (*Rødt, SV*), at the top of the graph where also *KRF (Christian-democrats)* and *Sp (centre party)* are positioned. At the bottom in the economic domain, we find the two right-wing parties, *H (Conservative)* – bottom-right in the high-volume area – and *FRP (populist)* – bottom-left in the low-volume area. The voters for the largest party – Labour – are situated in the middle of the graph, but are excluded from it, due to lack of space.

The Sense of One's Place in the City

So far, the results presented give general support for the usefulness of Bourdieu's model in analyzing processes of social differentiation and its relation to the formation of lifestyles in our type of society. In many instances, it works better than neo-Marxist or neo-Weberian approaches. In our type of society, it is indeed worthwhile to apprehend social differentiation as (at least) a⁴ two-dimensional phenomenon: volume of capital and

capital composition are the principles at work. The two principles are creating and reproducing the main social differences in contemporary society.

The question to address now is: is it possible and meaningful to use this model also to analyse divisions related to locations in space and geography? Are divisions with regard to residential areas of the city, the characteristics of the people who inhabit them, their environmental and aesthetic characteristics also related to the main dimensions of the social space, as Bourdieu himself suggests?

In general terms, Bourdieu's theory proposes that there is a process of adaptation between the characteristics of a particular habitus and the particular position in the social space that has produced it. The possibilities and constraints that objectively connect to a particular position are transposed and become inner realities, built into schemes of perceptions and systems of evaluations. "Objective limits become a sense of limits, a 'sense of one's place' which leads one to exclude oneself from the goods, persons, places and so forth from which one is excluded" (Bourdieu, 1984: 471ff.).

Translated into the universe of this particular community this lead to a hypothesis about "sensing one's place" may imply that the citizens of Stavanger's not only have acquired practical knowledge about its geography, but also a sensibility about where in the city they would "fit in" socially and where they do not.

Analyses of our 1994 data showed clearly a tendency that those respondents who perceive a certain residential area as an attractive one, share lifestyle profile with those who actually live there. They have similar political perceptions, similar ethical orientations and world outlook, they look similar, and their homes are decorated similarly, in short: they have matching tastes and they live under similar conditions of existence. They choose their preferred residential areas where their own kinds are already living in great numbers (Rosenlund, 2009: 288 ff.).

Further, the analyses showed that respondents perceive and recognize the areas where they would not fit in. The *practical knowledge* that is at play embraces both attraction and rejection. Respondents who reject living in a certain area were positioned in an "opposing" position in the social space, far away compared to the point, which represents those actually living there. They tend to have balance sheets of capital (volume and composition of capital) which are inverted compared to those who actually are living there.

The spatial differentiation of the city's social landscape results from the socially differentiated appropriation of it: by the socially differentiated patterns of habitation and the creation and reproduction of differentiated accompanying social imageries of the various residential areas and their inhabitants, past and present.

Social and Spatial Differentiation of Residential Areas in 2007

These findings lead up to the following research question: Are the two principles of social differentiation: volume and composition of capital translated into identifiable patterns of habitation? In addition, if so, how do these patterns materialize in the physical/geographical layout of the city, what types of geographical patterns do they form in the city's landscape? Thus, we are now changing the focus of interest to the residential areas themselves; they are the units of analysis in the forthcoming.

Data

The study to consider now is based data of a completely different nature than we dealt with above. It consists of aggregated information on 68 different “zones of conditions of living” in Stavanger. The Norwegian Central Bureau of Statistics (SSB) produced the data on the behalf of the Social Department of the Municipality of Stavanger in 2007. The data describes income, social and health conditions, mobility and growth, educational level etc. of 68 different residential areas as percentages and means. All in all some 40 descriptive variables have been collected. The residential areas have been constructed in such a manner that a little more than 1,600 persons inhabit them, averagely.

In the present analysis, eight variables were selected for a principal component analysis (PCA) with a subsequent cluster analysis (Hierarchical Classification Analysis). The analyses were performed with help of SPAD, a statistical software French of origin, which sticks to the analytic spirit of geometric data analysis founded by Jean-Paul Benzécri (1969, 1992). It put emphasis on the graphical representation of the results.

The analyses followed the following steps: First, with the help of PCA the basic differentiating mechanisms among the 68 residential areas were unveiled and, in doing so being on the lookout for traces of the two dimensions of the social space. This procedure also unveiled how the chosen variables are related to each other. Secondly, based on this analysis, a subsequent cluster analysis was undertaken that brought together residential areas into groups or clusters with similar demographic characteristics. In a third analytic step, these groups of areas with similar characteristics were described and localized on a geographical map completing the analysis.

Active Variables

When choosing variables for analysis we were on the outlook for variables that could represent the two forms of capital. The final selection of variables included the following:

- *median income per consumer unit in the residential area* (EU-scale) (economic capital)
- *index of income homo/heterogeneity in the residential area* (P90/P10), (The 90-percentile of the income distribution divided by the 10-percentile).
- *percentage of poor people in the population in the area* (EU-scale) (economic capital)
- *percentage of family head with low education in the area* (cultural capital)
percentage of persons with university education in the area (in the age category 30 – 39 years) (cultural capital)
- *percentages of large, medium and small apartments in the area* (three variables) (economic capital)

In addition, a number of variables were included in the analysis as supplementary to shed further light on the solution.

Results

The principal component analysis was performed and the following basic results were obtained: The two first dimensions obtained Eigen values of 3,62 and 2,44, clearly above the threshold value. The first dimension accounts for 45 percent of the total variance in the data, the second 30 percent. Together they account for 75 percent of the total. Table 1 contains the factor loadings.

The factor scores show that the variables of economic capital are loading the first dimension (*big and small-sized dwellings, percentage of poor people and median income*). The index of *homo/heterogeneity of income* and the two indicators of *prevalence/absence of cultural capital* load the second dimension, in addition to *median income*.

This solution has been utilized to construct a “social map” of Stavanger, which is found in Figure 3. Here the 68 areas have been projected according to their coordinates along the two dimensions constituted by the PCA-solution. The variables analyzed are represented as vectors in the so-called correlation circle.

Distances between areas in this map represent economic and cultural distances between them (according to the chosen eight variables) in the physical world. Areas that are situated close to each other are similar, the closer the more similar they are. Conversely, the greater the distance, the more different they are.

Big dwellings are found among areas on the right-hand side in the direction of the vector *Big sized dwellings* and small among those on the left hand side, in the direction of *Small sized dwellings*. The length of the vectors indicates the strength of the tendency. Further, the proportion of poor people and high-income people are also related to the first dimension, the poor to the left-hand side the rich on the right.

The second dimension on the other hand strongly “explains” the variation with regard to economic homo/heterogeneity: the income difference between the ten percent poorest and the ten percent richest. These are greatest among the residential areas at the top of the graph and smallest among those at the bottom. At the top, we also find areas where we find the highest concentrations of people with higher education. At the bottom, we find the residential areas with the highest proportion of people with low education.

Hence, there are two different principles at work creating differences among the residential areas, one reflecting access to economic resources. The other is reflecting economic homo/heterogeneity and the distribution of educational (cultural) capital among the inhabitants.

The Hypothesis about the Homological Relationship between the Social Space and Physical Space

The two principles of differentiation among the areas are not optimally adapted to the dimensions of the social space, we discussed above. However, a slight rotation of the coordinate system gives support to advocate that the revealed structure is indeed congruent – homological – with the dimensions of the social space, volume and composition of capital. When rotating the coordinate system, as I have done in Figure 3, the total

Table 1. Active variables-factors correlations

Label variable	Axis 1	Axis 2
Median income per consumer unit EU-scale	0,70	0,66
Poor EU-scale %	-0,83	0,24
Homo/heterogenity of income, P90/P10	-0,32	0,86
Low education %	-0,54	-0,73
Small sized flats %	-0,87	0,29
Medium sized flats %	-0,45	-0,37
Big sized flats %	0,95	-0,03
High education % (30-39 years)	-0,4	0,68

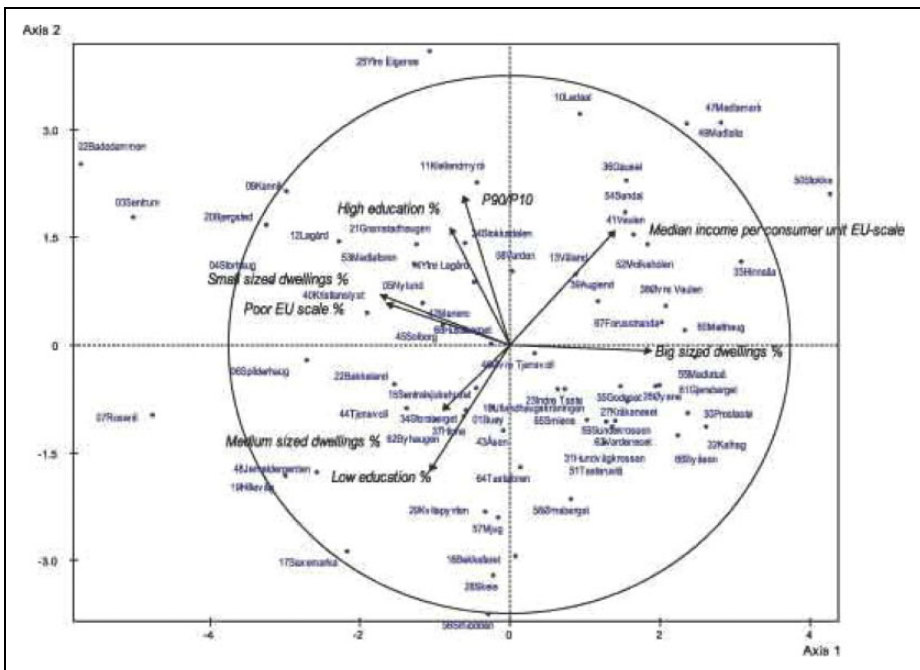


Figure 3. The social map of residential areas in Stavanger

amount of explained variance in the plane remains the same ($40 + 35 = 75$ percent), but the proportions explained by each of the axes will differ.

If this analytic operation is valid, we should find residential areas with high concentrations of people belonging to the working class in the area at the bottom-left (1.). Likewise, we ought to find areas where the inhabitants are fairly well bestowed with economic capital, but less so with cultural capital in the right-bottom area (2.). Further, at the top-right area (3.) high concentration of people belonging to the dominant class (high volume of both economic and cultural capital) should be prevalent. Finally, in the top-left area (4.) we should find residential areas where inhabitants have smaller economic

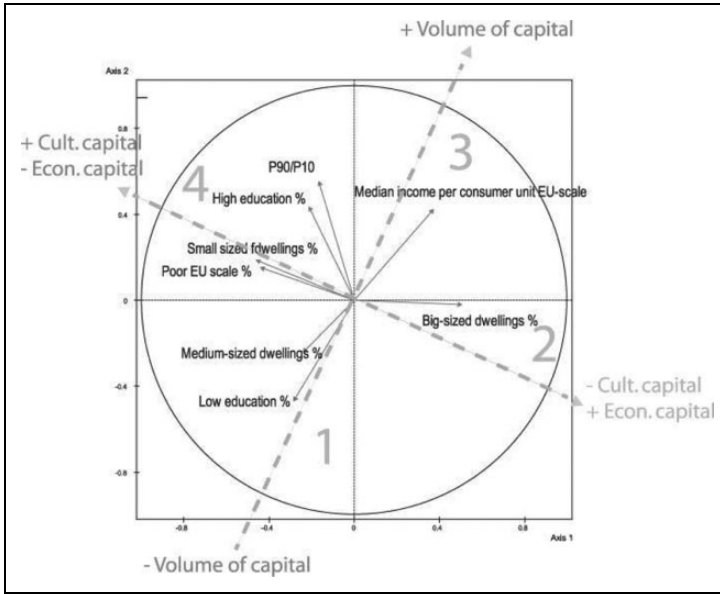


Figure 4. The hypothesis about the homological relationship between the social space and physical space in graphical form

resources and at the same time a higher amounts of cultural capital (higher education). These assumptions will be investigated in the following section.

Results of the Cluster Analysis

Cluster analysis is a technique that brings together statistical units that share the same characteristics into clusters; they have similar values on all (eight) active variables.⁵

The parameters of analysis (the index levels) show that the optimal division into such clusters occurs when seven clusters is chosen for analysis. This is the division where the homogeneity within the clusters is optimal and the heterogeneity between them is as great as possible. Figure 4 contains the resulting clusters in the form of concentration ellipses and their location in the social map. The ellipses are constructed so that they contain approximately 86 percent of the units belonging to the clusters are circumscribed.

In Figures 5 and 6, we shall explore the variation pattern of the characterizing active variables, to see whether they stick to the logic of the social space. When a variable appears in a table with a plus sign it is significantly overrepresented ($p < 0.02$) – it constitutes a “characterizing variable” – of the population in the residential areas, and with a minus sign they are significantly underrepresented. If a variable is not present in the tables, the characteristic it represents is averagely represented; it is not a significant feature of the areas included in the cluster.

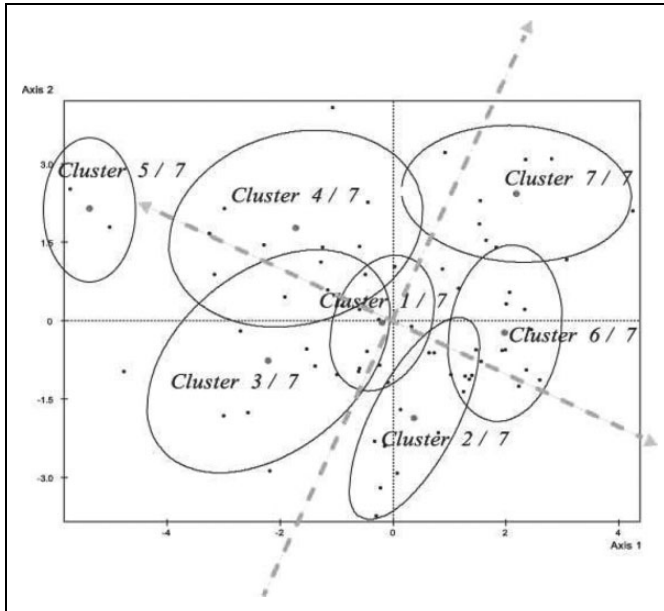


Figure 5. The homology hypothesis and the seven clusters.

The presentation that follows starts at the bottom (Cluster 2/7) and proceeds anticlockwise.

The Two Suburbia

Cluster 2 includes 13 residential areas, and Cluster 6 includes 16 residential areas. They are both placed in the bottom right quadrant of the social map (Figure 5). Cluster 2 is located in the domain where the volume of capital should be low and with (a relative) surplus of economic capital. Cluster 6 is also located in the domain where economic capital should dominate, now however, on higher level of the volume of capital dimension.

The statistical results support the hypothesized social space structure (dotted lines). In both clusters, people with high education are significantly underrepresented; in Cluster 2 the proportion of people with low education is also overrepresented. The two clusters differ however with regard to economic level. In Cluster 2 the median income is significantly below the average for the city, in Cluster 6 it is significantly higher. Here large dwellings are also overrepresented. Looking at the results from the supplementary variables (not accounted for here) for Cluster 6 we note the poorest 10 percent (the 10 percentile) is quite high, implying that the 10 percent with lowest income is not that poor in these areas.

In both clusters, the income differences between rich and poor are small; both clusters are economically homogenous, but on different levels. The two clusters have also the geographical location in common. (See Figure 6) Residential areas that belong to them are situated far away from the city centre in the periphery of the town, to the north, west and south. They may be considered as two versions of a local suburbia. Comparing the

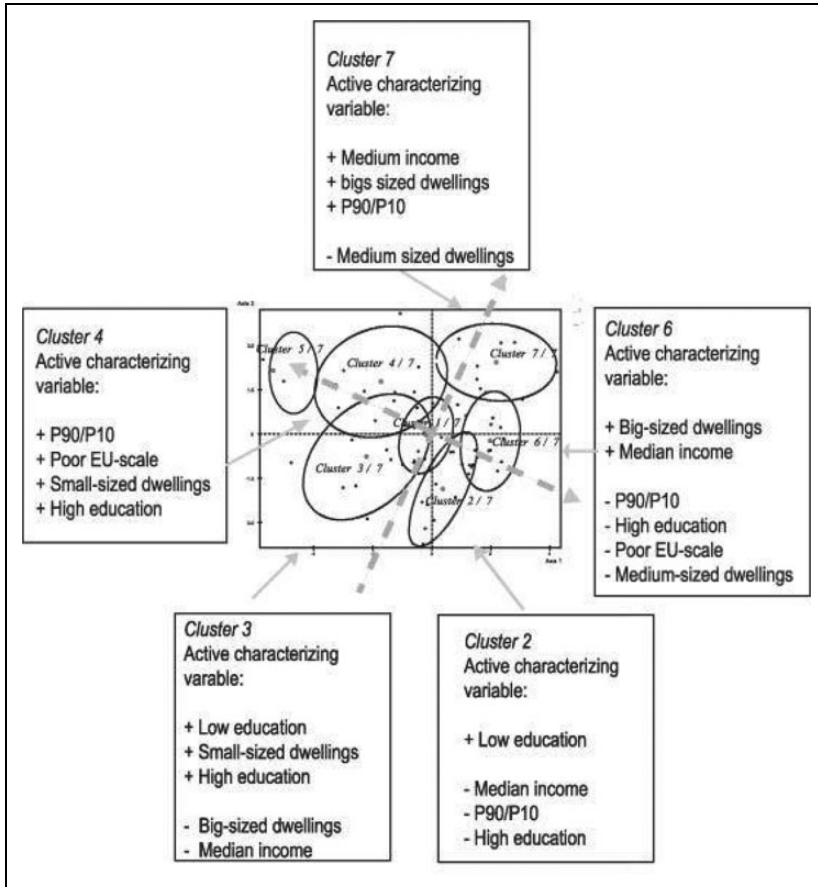


Figure 6. Characterizing variables of five clusters of residential areas. The dimensions of the social space are superimposed

areas in the two cluster it become clear that Cluster 6 include the “best” and the most attractive areas; better views and/or better protected from weather and wind. Both clusters are finally characterized by many families with small children.

The two clusters differ in another respect that does not emerge from the tables. The residential areas in Cluster 6 are more recently developed, while the residential areas in cluster 2 were developed after the war well into the 1960s. Here we find overrepresentation of old people and of semidetached houses, which was a common feature in the building programs in the post-war reconstruction period.

The Golden Ribbon

The residential areas that belong to Cluster 7 consist of seven different areas. Six of them form a ribbon of adjacent areas on the “waist” of the city, starting just west of the city center, pointing south-west. (See Figure 6) *Eiganes* is the old “west-side” of the city, situated closest

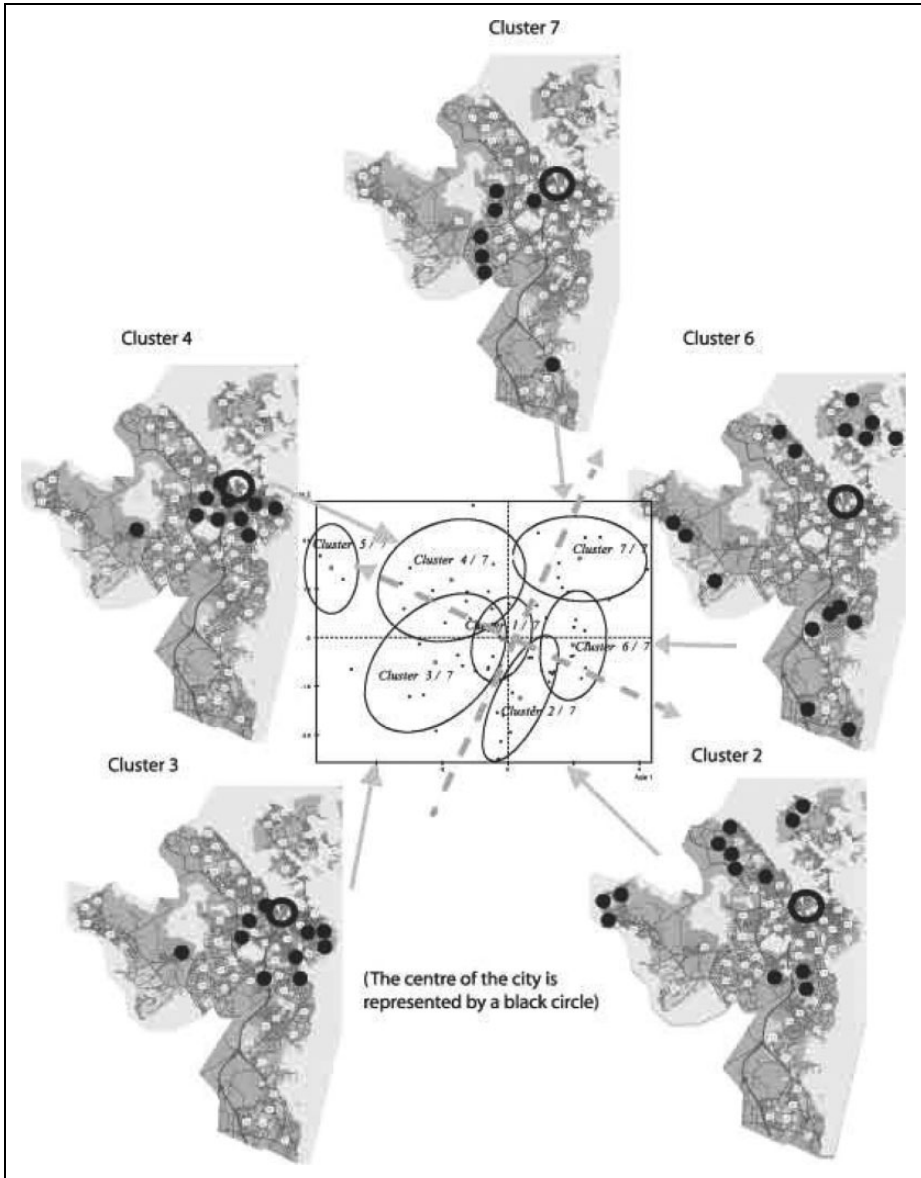


Figure 7. Geographical locations of the residential areas belonging to the five clusters.

to the city center, with its park-like appearance and atmosphere. Here, the bourgeoisie of late 19th and the beginning of the 20th centuries built their spacious villas, some of them mansions, in the splendor that the town could offer at the time. Further to the west, we find *Stokka* that was developed in the 1960s adjacent to *Eiganes*. Here, we find large villas partly hidden by high hedges that deny the gaze of the curious stranger. In some parts of it, you have

to leave the same way as you came in, if you enter the area by car. In parts of the area, you have a good view of either of the two lakes *Stora* or *Lilla Stokkavannet*.

When moving further to the south-west we enter three additional residential areas belonging to this cluster. They are lumped together under a common name: *Madla*. Here the dominant type of dwelling is the villa, often drawn by established architects. On the slope facing south-west, towards the bay of *Hafrsfjord*, we find the largest and the most expensive houses of the city. Probably this is the most attractive area of the whole city, if you want to see the sunset and have the money for it. The residential areas belonging to this cluster constitute a golden belt in the physical layout of the city.

The position in the social map of this cluster is concurrent with the hypothesized social space structure. This is the site of the local dominant class. Opulence is conspicuous. The median income is the largest among those living here. It is 25 percent above the average for the whole city. Big sized villas is the predominant house type, people with low education are rare. The statistics further suggests that there are great differences in salary and that the ten percent richest (P90) indeed are rich; it is almost 25 percent higher than the city average.

The Transforming Working Class Residential Areas

With one exception (*Madlaforen*) the residential areas belonging to Cluster 4 are located in the vicinity of the city centre. These eight residential areas are all old working class or petty bourgeois areas. They were, largely, developed before the WWI or right after it.

The statistics show that these residential areas are characterised by stark differences between the poor and the rich. The concentration of poor people is significantly above the average and small sized dwellings dominate, and so do traditional two-family houses. We noted that people with higher education was underrepresented in “the two suburbia”, in the golden belt they were averagely represented (not mentioned). They are represented above average in these residential areas. Hence, the location of this cluster also sticks to the homology hypothesis.

The ten areas constituting Cluster 3 have a more recent history than the previous ones; they were erected for a large part in the 1980s-1990s. They consists of areas with blocks of flats, flats in detached houses, and some villas. The statistics show that these are generally small. Paradoxically, we note that both people with low and higher education are overrepresented. This means that people who do not fall in these categories are under-represented. The median income is below the average for the city as a whole and big-sized flats are rare. The statistics further show that these are areas with a comparatively large segments of the population out of work, social beneficiaries are over-represented and so are non-western immigrants. On the whole the position of this cluster in relation to the social space hypothesis, together with cluster 2 are the residential areas of the least bestowed inhabitants, the current popular classes.

The Water Front

The last cluster – Cluster 5 – is an “outlier”; it is situated to the far left in the social map. It consists of two areas situated in the centre of the city close to the water. This is the

gentrified area of the city par excellence. This is the area where the new waterfront of Stavanger now rises. Old warehouses, factories and worn-out residential houses have been demolished in this process. In their places, modern high-rises (6-10 floors) have been erected surrounding small enclaves of old and often poorly maintained family houses. These are the areas of stark social contrasts. Here we find the newest apartments in blocks flats together with old and worse maintained two family houses. The index of economic homogeneity is one of the highest. The proportion of poor people is the highest among the 68 areas, three times the average for the whole city and this is the area with the highest concentration of non-European immigrants.

Conclusions - Social Structures, Mental Structures and Spatial Structures

In this article, I have utilized Pierre Bourdieu's analytic "tool-box" to examine one particular community. Unlike other community studies, my point of departure first addressed general social processes. I identified two different, and independently, operating principles of social differentiation - volume and composition of capital - and examined how they manifest themselves in two entirely different universes of the social reality. *The first moment of objectivity*, the objective social structure, was addressed by constructing the local social space with the help of MCA based on "objective background variables" (indicators of capital) from our lifestyle surveys. The *second moment of objectivity* was approached by constructing a space of lifestyles by the help of a selection of lifestyle attributes from our surveys. The results show that both universes are swayed by the same principles of differentiation, volume and composition of capital, the two principles that Bourdieu identified in his analyses in *Distinction*.

Then patterns of spatial divisions related to 68 different geographical areas were examined with the help of PCA. The result showed that two independently operating principles were underlying the revealed patterns and that these principles had affinities with the differentiation principles of the social space. With a slight modification of the resulting graph from the PCA - a minor rotation of the coordinate system - a graphical hypothesis about homology between the structure of the social space and the structure of spatial division of the city was proposed. The last part of the article was devoted to a systematic examination of this hypothesis with the help of cluster analysis. The result of this exercise showed that the location of the constructed seven clusters sticks to the pattern of the social space; both domains of reality - both the social and the physical - are structured by volume and composition of capital.

The way these tangible and very physical structures of the community have been and are transformed is related to the social practices its citizens. As members of different classes and class fractions, social agents are appropriating the city; they are buying or renting dwellings and they make use of the various amenities of the city. By that, they are imposing their different lifestyle insignias on the establishments and places they occupy or visit regularly. These insignias are recognised, appreciated or refused by members from other classes and class fractions, who either are repelled or attracted to them - or leaving them indifferent. By this mechanism, the various universes of located objects - residential areas, but also schools, restaurants, cafés and pubs, shops, parks, etc. -

become patterned and socially differentiated. The physical structure of urban life appears as a symbolic battlegrounds; territories that are fought over where the lines of demarcation are at stake. There is, truly, a struggle going on to appropriate space where the lifestyles are the prime weapons (Bourdieu, 1999: 126 ff).

The construction of lifestyles is, according to Bourdieu, a work of labour where the social agents are putting together their specific lifestyle figuration according to the principles and dispositions laid down in their habituses. These operate in conjunction with their specific capital holdings when they “compose” their lifestyles with elements collected from various “stylistic possibles”: literature, politics, travel resorts, food, type of education, spouse, etc. The various residential areas constitute one such locally designed universe of “stylistic possibles” for the citizens’ construction of lifestyles. The various areas are socially differentiated by creation and reproduction of differentiated social imageries of who their inhabitants are, past and present. Moreover, the citizens know; they have acquired “practical knowledge” in their habituses of where they “fit in” and where they do not; where they themselves are welcome and where they are not. They appreciate those residential areas and public places where their equals are numerous, both in terms of positions in the social space and in terms of lifestyles, and they tend to exclude themselves from areas and places where their own kinds are few and where they are unwanted. These unwanted sites are the ones frequented and inhabited by citizens whose balance sheets of capital are inverted, compared to their own. Thus, members of the dominant class reject the idea of living in an area where the working classes are numerous and vice versa. Members of fractions whose capital balance is dominated by economic capital reject living in areas where members of cultural fractions are in the majority and vice versa.

An implication of the lesson learnt from this exercise is that the patterns of division among residential areas correspond to distributions of lifestyles. The areas themselves – their architectural and esthetical features – have affinities with lifestyle features of those who occupy them. There is a statistical tendency that inhabitants of a certain areas agree with regard what residential areas are liveable what are not; they tend to agree in basic political orientations; they agree when it comes to judging attributes of good friends; their homes are described in similar ways and they themselves, too, appear much the same (they dress alike at work and they agree when it comes to preferred type of furniture, etc.). The residential areas tend to become homogeneous with regard to the lifestyles profiles among their inhabitants.

The members of different classes and fractions seem to strive to establish some kind of autonomy over certain territories where their own kind, by positions in the social space and by lifestyle attributes, prevail. The dominant classes have occupied “the best areas”, the working class has been left to “the worst areas”. The fractions whose capital balances are dominated by economic capital have populated suburbia and the cultural fractions the old working class areas close to the city centre, all oppositions and contradictions concurring with the dimensions of the social space, volume and composition of capital.

This is the temporary outcome of battles going on and previous ones where the various classes and fractions develop strategies and counter strategies based on their specific holdings of capital and their habituses. In this “birds-eye” perspective

(Sampson, 2011), these strategies themselves are not possible to get an eye on, though. They demand another type of studies, qualitative studies, for instance, such as those of Butler and Robson (2003).

In this perspective the gentrification process, in all its various forms, with all its agents (residents and prospective residents, real estate agents, housing developers, oil and other companies, regulators etc.) referred to in the beginning of this article is played out on a stage, which fruitfully can be approached as a particular social field (Savage) in the very Bourdieusan sense of the term.

The theory says that a social field has a double existence. It has an “objective” character, as a structure with dominant and dominated position and heterodox newcomers and a dominant orthodox establishment. Further, it has a “symbolic” existence in the form of representations and social practices (lifestyles) and now, based on the findings presented, we may claim that this particular field also has a physical existence that “takes the form of the spatial structure of the distribution of agents and the spatial distribution of goods and services” (Bourdieu, 1999). Moreover, these are structured by the social powers that flow from the two principles of social differentiation: volume and composition of capital.

The data analysed here were produced in 2007. A more recent follow-up study (2012) concludes that the observed patterns of identified differences between the areas have become more pronounced. According to optimistic commentators, the high rates of relocation in the city would have an equalizing effect, but that does not happen. Instead, the report concludes that: “Persons who are moving out of an area are replaced with persons with similar resource-profiles”, which underscores that we are dealing with strong social forces.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. The first constructions of the social space and the space of lifestyles conforming to Bourdieu’s model based on these data were published in Rosenlund (1996, reprinted 2000, 2002 and 2009). In addition, the methodological approach was further explored in the COMPAS-project at Aalborg University 2003-2007, documented in Harrits et. al. (2010), Prieur et. al. (2008), Prieur and Rosenlund (2007). Lately, it has been applied to a British dataset in Atkinson and Rosenlund (2014).
2. His references here are Amin and Thrift 2002, Graham and Marvin 2001, Urry 2007.
3. This is a choice of convenience; the software SPAD used in the analyses proposes to show the first principal axis as the x-axis, the second as the y-axis as the default option.
4. Bourdieu’s model in the *Distinction* contain three dimensions. The third is *social trajectory*, which underline the transient character of the social space; it should be studied historically.

5. The method is described by LeRoux and Rouanet (2004: 106) under the name of Euclidean Classification.

References

- Atkinson W and Rosenlund L (2014) *Mapping the British Social Space - Toward a Bourdieusian Class Scheme*. SPAIS Working Paper No. 02-14, University of Bristol, available at <http://www.bristol.ac.uk/spais/research/workingpapers/>.
- Benzécri JP (1969) Statistical Analysis as a Tool to Make Pattern Emerge from Data. In: Natanabe S (ed.) *Methodologies of Pattern Recognition*. New York: Academic Press.
- Benzécri JP (1992) *Correspondence Analysis Handbook*. New York: Marcel Dekker.
- Bennett T, Savage M, Silva E, Gayo-Cal M and Wright D (2009) *Culture, Class, Distinction*. London: Routledge.
- Bourdieu P (1984) *Distinction - A Social Critique of the Judgment of Taste*. London: Routledge and Kegan Paul.
- Bourdieu P (1995) *Physical Space, Social Space and the Habitus*. Vilhelm Aubert Memorial Lecture. University of Oslo.
- Bourdieu P, et al. (1999) *The Weight of the World. Social Suffering in Contemporary Society*. Cambridge. Polity Press
- Bourdieu P (2005) *The Social Structures of the Economy*. Cambridge: Polity.
- Bourdieu P and Wacquant L (1992) *An Invitation to Reflexive Sociology*. Chicago: University of Chicago Press.
- Bridge G (1994) Gentrification, Class and Residence - A Reappraisal. *Environment and Planning D - Society and Space* 12: 31-51.
- Bridge G (1995) The Space for Class? On Class Analysis in the Study of Gentrification. *Transactions of the Institute of British Geographers* NS 20: 236-47.
- Bridge G (2001) Estate Agents as Interpreters of Economic and Cultural Capital - The "Gentrification Premium" in the Sydney Housing Market. *International Journal of Urban and Regional Research* 25: 81-101.
- Bridge G (2002) Bourdieu, Rational Action and the Time Strategy of Gentrification. *Annals of the Association of American Geographers* 70: 238-58.
- Butler and Robson (2003) *London Calling - The Middle Class and the Re-making of Inner London*. Oxford: Berg.
- Glass R (1964) Aspects of Change. In: Centre for Urban Studies (ed.) *London - Aspects of Change* London: MacGibbon and Kee.
- Lebart L, Morineau A and Warwick KM (1984) *Multivariate Descriptive Statistical Analysis - Correspondence Analysis and Related Techniques for Large Matrices*. New York: John Wiley & Sons.
- Le Roux B, Rouanet H, Savage M and Warde A (2008) Class and Cultural Division in the UK. *Sociology* 42(6): 1049-71.
- Le Roux B and Rouanet H (2004) *Geometric Data Analysis*. Dordrecht: Kluwer.
- Ley D (1980) Liberal Ideology and the Postindustrial City. *Annals of the American Association of Geographers* 70(2): 238-58
- Ley D (1994) Gentrification and the Politics of the New Middle Class. *Environment and Planning D: Society and Space* 12: 53-74.

- Ley D (1996) *The New Middle Class and the Remaking of the Central City*. Oxford: Oxford University Press.
- Rokkan Stein (1967) Geography, Religion and Social Class - Crosscutting Cleavages in Norwegian Politics. In: Lipset SM and Rokkan S (eds) *Party Systems and Voter Alignment*. New York: Free Press.
- Rosenlund L (1996, 2000) Cultural Change in a Norwegian Urban Community - Applying Pierre Bourdieu's Approach and Analytic Framework. *International Journal of Contemporary Sociology* 33(2): 211-36. Reprinted in Robbins D (ed.) (2000) *Pierre Bourdieu*. London: Sage.
- Rosenlund L. (2002): Pierre Bourdieu on a Visit to Stavanger. In *Nordisk kulturpolitisk tidsskrift, nr 2, 2002*
- Rosenlund L. (2009): *Exploring the City with Bourdieu; Applying Pierre Bourdieu's theories and methods to study the community*. Foreword by Loïc Wacquant. VDM Ferlag, Saarbrücken.
- Sampson R (2011) *Great American City*. London: University of Chicago Press.
- Savage M (2011) The Lost Urban Sociology of Pierre Bourdieu. In: Bridge G and Watson S (ed) *The New Blackwell Companion to the City*. London: Blackwell, 511-20, Chapter 45.
- Shaw K (2008) A Response to "The Eviction of Critical Perspectives from Gentrification Research". *International Journal of Urban and Regional Research* 32(1): 192-94.
- Smith N (1979) Toward a Theory of Gentrification - A Back to the City Movement by Capital not People. *Journal of the American Planners Association* 45: 538-48.
- Smith N (1987) Of Yuppies and Housing - Gentrification, Social Restructuring and the Urban Dream. *Environment and Planning D: Society and Space* 5, 151-72.
- Smith N (1992) New City, New Frontier - The Lower East Side as Wild West. In: Sorkin M (ed.) *Variations on a Theme Park - The New American City and the End of Public Space*. New York: Hill and Wang, 61-93.
- Smith N (1996) *The New Urban Frontier - Gentrification and the Revanchist City*. London: Routledge.
- Wacquant L (2008) *Urban Outcasts - A Comparative Sociology of Advanced Marginality*. Cambridge, UK: Polity.
- Watt P (2008) The Class in Town? Gentrification and the Middle-Class and the City and the Urban Imagination. *International Journal of Urban and Regional Research* 32(1): 206-11.
- Zukin S (1982) *Loft Living - Culture and Capital in Urban Change*. Baltimore: Johns Hopkins University Press.
- Zukin S (1991) *Landscapes of Power - From Detroit to Disneyworld*. Berkeley CA: University of California Press.
- Zukin S (1995) *The Cultures of Cities*. Oxford: Blackwell.