# DISTRIBUTION PATTERNS OF THE CREATIVE CLASS IN HAMBURG: "OPENNESS TO DIVERSITY" AS A DRIVING FORCE FOR SOCIO-SPATIAL DIFFERENTIATION?

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Summary: In urban and regional research, planning practice, and urban policy, the spatial distribution of creativity and openness to diversity is increasingly receiving attention. However, to date, there have been few empirical findings concerning the local distribution of these dimensions of socio-spatial differentiation hardly. Using the example of Hamburg, Germany, we try to measure the socio-spatial distribution of these dimensions by secondary data analysis and analyze the patterns of segregation. The socio-spatial development in Hamburg's neighbourhoods in the recent years is analyzed in order to address the issue of whether urban quarters that are very open to diversity in lifestyles show tendencies of revaluation. Our findings show that the socio-cultural symbols of the creative class do play an important role for the socio-spatial structure of the city today, but that a high rate of openness to diversity does not entail improvements in socio-spatial development.

Zusammenfassung: In Teilen der Stadt- und Regionalforschung sowie in der politischen Planungspraxis gewinnen Ansätze an Bedeutung, die auf die räumliche Verteilung von "Kreativität" sowie "Offenheit gegenüber Vielfalt" gerichtet sind. Allerdings sind bislang nur wenige empirische Erkenntnisse über die lokale Verteilung dieser Dimension sozialräumlicher Differenzierung vorhanden. Mit dem vorliegenden Beitrag wird am Beispiel Hamburgs der Versuch unternommen, die sozialräumliche Verteilung dieses habituellen Merkmals mittels sekundärstatistischer Daten abzubilden und in Hinblick auf Segregationsmuster zu untersuchen. Ausgehend von der Frage, ob städtische Quartiere, die sich durch eine hohe Offenheit gegenüber vielfältigen Lebensstilen und -formen kennzeichnen lassen, verstärkt Aufwertungstendenzen zeigen, wird die sozialräumliche Entwicklung Hamburger Stadtteile der letzten Jahre analysiert. Die Ergebnisse der Untersuchung weisen darauf hin, dass die soziokulturellen Zeichen der Kreativen Klasse zwar eine bedeutende Rolle für die heutige sozialräumliche Struktur der Stadt spielen, mit einer hohen Offenheit gegenüber Vielfalt aber nicht zwingend eine sozialräumliche Aufwertung einhergeht.

Keywords: Diversity, creative class, urban planning, urban policy, social area analysis

#### Introduction

In recent years, concepts that are based on RICHARD FLORIDA's ideas presented in "The Rise of the Creative Class" (2002) have become increasingly important for urban policy and planning practice. In the light of growing competition among cities in national as well as international contexts, regions that are capable of attracting and retaining creative professionals have an increased chance of developing prosperously. Although FLORIDA's approach received strong criticism from different scientific disciplines,<sup>1)</sup> his perspective has been readily qualified via the implementation of new crea-

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tivity-based political actions initiated by local and regional authorities. Moreover, the concept of a new and highly mobile "creative class", the members of which have the economic freedom to decide where they will live, is associated with the idea of a late modern urban shift that is characterized by the increasing importance of lifestyle aspects. Cities or regions have thereby normally been seen as homogenous units regarding their "creative potential", especially by urban planners and policy consultants.<sup>2)</sup> However, there are reasons to believe that the creative class is not distributed equally in cities or regions, and that instead, a process of in-

<sup>1)</sup> For a synopsis of the criticism of FLORIDA's concept see PECK (2005).

<sup>&</sup>lt;sup>2)</sup> See, for example, the study entitled "Creative Cities" (2008) by ROLAND BERGER, which compares the attractiveness of ten German cities to the creative class.

ner urban segregation can be presumed (see HESSE and LANGE 2007). At the time of writing, there have been few empirical studies on the socio-spatial distribution of the creative class in different urban areas. The main reason for that lack may be the absence of appropriate indicators for the creative class, which have at best been provided by local or regional institutions and could easily be used for secondary data analysis.

Using the city of Hamburg, Germany as an example, the study reported herein finds that the creative class segregates in cities. The reason for this segregation can be seen in an upcoming new dimension of inner-city social differentiation that has been observed since the 1990s: the so-called "lifestyle factor". Along with the persistence of other dimensions of social inequality, a process of inner-urban fragmentation, which can be understood as a small-scale juxtaposition of opposing developments in different dimensions (see POHL 2008, 7), is intensifying.

The remainder of this paper is organised as follows. First, the relevant division lines in the late modern city are discussed. Then, the possibility of measuring "creativity in cities" by secondary data analysis is investigated. In particular, the issue of how a "creativity factor" can be integrated into the analysis of social areas in the cities is addressed. Subsequently, the socio-spatial distribution of the creative class in Hamburg is presented, followed by a discussion of the role that the creative class plays in inner city revaluation and its importance for the fragmentation of urban space.

### 1 Social inequality and urban space

The quantitative "social area analysis", mainly inspired by SHEVKY and BELL (1961), was regarded as the path-breaking instrument for identifying and analyzing socio-spatial differentiation in cities. The use of this approach peaked in the 1970s and the early 1980s. However, since the late 1980s, there has been a significant decrease in quantitative "social area analysis" studies. An important reason for this decrease can be seen in the debates about the differentiation of lifestyles and the diversity of values. The indicators and variables that are commonly provided by the local and regional statistics bureaus, seemed to be increasingly inappropriate for describing aspects of social change (e.g. new social milieus or lifestyle groups) in terms of their socio-spatial distribution (see HERMANN and LEUTHOLD 2002). Due to the broad tendencies of social groups to differentiate and the growing importance of "subtle differences" even in the spatial context (BOURDIEU 1991), the classic "social area analysis" came to be seen as inadequate.

Social area analysis-based concepts were not modified for urban development strategies. Rather, new perspectives in spatial planning, which were based mainly on aspects of social integration in late modernity, gained importance. A prime reason for this change of perspective on urban policy can be seen in the increasing competition between cities and the subsequent role of strategies for marketing them. It can be assumed that a shift in strategic governance schemes has taken place since the late 1980s, replacing the former policy of regional management by an entrepreneurial approach (see HARVEY 1989).

Although there are some newer studies on social inequality in cities (see Urban and Weiser 2006; Klagge 2005; Schwabe 2005), there is no indication that there will be a general renaissance of the social area analysis approach in a modernized guise. Nevertheless, there is still a need to observe sociospatial inner-city dynamics, because "there is no doubt that social and socio-spatial polarization is one of the main problems of our society today [...] but there is a lack of empirical, inclusive surveys on the socio-spatial development and structure of cities" (Zehner 2004, 54, original in German).

In addition to several studies on lifestyles in cities in a more narrow sense, the significance of the so-called "creative class" for urban and regional development has been discussed (see Fainstein 2005; Hesse and Lange 2007; Fritsch and Stützer 2007). Lifestyle perspectives, as well as studies on the creative class, assume that evaluative, symbolic/cultural and habitual references are of growing significance for the constitution of social spaces.

The analysis of the creative class by RICHARD FLORIDA (2002, 2005) had perhaps its greatest resonance for the field of planning practice. By means of examples, FLORIDA attempts to give reasons for the economic development of specific cities in the United States in the regional context. A central assumption of his approach is that the decisions made by creative people about where to live determine the economic development of a region, because "creativity has become the driving force of our economy" (FLORIDA 2005, 3). FLORIDA's concept of creativity can be understood as the ability to produce new knowledge and to apply extant knowledge in a prosperous way (see FRITSCH and STÜTZER 2007). These "creative workers" have an affinity for a varied ur-

ban cultural life. Furthermore, they have the economic capabilities to take this factor into account when deciding where to live.

FLORIDA shows that the creative class is concentrated in certain (mostly urban) places, at least in the regions in the USA that he investigated. These so-called "creative centres" are characterized by the highest rates of economic prosperity and the lowest unemployment rates. According to FLORIDA, the creative class did not migrate to these regions because of the concentration of jobs or in a vague hope of securing the best career opportunities. Companies that need a "creative" staff have to recruit according to where members of the creative class have decided to live:

"The Creative Centers are not thriving for traditional economic reasons such as access to natural resources or transportation routes. [...] They are succeeding largely because creative people want to live there. The companies follow the people - or, in many cases, are started by them. Creative Centers provide the integrated ecosystem or habitat where all forms of creativity - artistic and cultural, technological and economic, can take root and flourish." (FLORIDA 2005, 35)

According to Florida's perspective, none of the traditional reasons for choosing a place to live are crucial for the creative class. The availability of infrastructure facilities, such as sports stadiums, shopping malls, or entertainment districts seem to be mostly irrelevant for them; indeed, these facilities are even assessed as unattractive. What is important for creative professionals is to live in a creative environment: "What they [the members of the creative class, (TP)] look for in communities are abundant high-quality experiences, an openness to diversity of all kinds, and above all else the opportunity to validate their identities as creative people" (Florida 2005, 36).

FLORIDA emphasizes the role of cultural and social diversity in making a region attractive as a place of residence. Tolerance and a certain openness can be seen as prerequisites for a mixture of different lifestyles and urban (sub-)cultures. In order to measure such so-called "diversity", FLORIDA suggests using three variables: the "Melting Pot Index", the "Gay Index", and the "Bohemian Index". While the "Melting Pot Index" measures the proportion of foreign-born people in the resident population, the "Gay Index" tries to estimate the quota of homosexuals by counting the households in which two unmarried males live together. The "Bohemian Index" measures the number of designers, musicians, actors, artists, photographers, etc., who are summarized as

the so-called "super-creative core". The main idea behind this operationalization is that places that welcome marginal groups, such as immigrants, homosexuals, or those with divergent lifestyles, represent a climate of openness that creative people are looking for: an experimental field to try out new ways of life, to think beyond old conventions, and to generate new ideas.

Although the tactic of operationalizing the "diversity index" by using the quota of certain subgroups may be viewed with some circumspection, there seems to be nothing objectionable about the concept of diversity. From a more general perspective, it refers to the prime evaluative axis for the differentiation of lifestyles in our society: on the one hand, there is a conservative setting of beliefs and customs, which stands for a lack of openness to diversity, while on the other hand, there is a more liberal setting, which is defined by the desire for selfexpression and new experiences, best described as a high affinity to an open and diverse inner-urban environment. Thus, FLORIDA links habitual preferences that refer to social diversity on the one hand, and physical settings on the other. His concept of "openness to diversity" can be understood as a relevant dimension of current horizontal socio-spatial inequality - regardless of whether or not it really predicts economic prosperity.

Although the increasing importance of different lifestyles and attitudes for the stratification of Western societies in the late modern age seems to be unchallenged and the relevance of this dimension even for socio-spatial processes has been identified (e.g. Helbrecht and Pohl 1997; Zehner 2004; DANGSCHAT 2007), vertical patterns of social stratification (level of education, income) still persist. In particular, access to higher education in Germany seems to be transmitted intergenerationally (see Geissler 2002; STANAT 2002). Furthermore, the income differential between the poorest and the wealthiest groups is increasing, while the middle classes are shrinking (see Grabka and Frick 2008). Given this undeniable persistence of economic inequality, an analysis of today's socio-spatial differentiation in our cities needs to take it into account.

In addition, our cities are still divided into areas of different household structure, which are often linked to different types of urban lifestyle (see HEYE and LEUTHOLD 2006). While families tend to move to the suburbs, single households still represent the majority in urban quarters. Different household types may become more relevant in the future, due in particular to women's increasing participation on the

job market, even if they are tied to family structures. The persisting division along the axis of "family vs. single households" (family status) remains important for social area analyses.

### 2 Measuring the socio-spatial differentiation - an empirical approach

In the light of the above, our study of sociospatial differentiation in Hamburg focused on three relevant dimensions: social status, family status, and an evaluative lifestyle factor. Fourteen indicators were selected from the data set provided by the local statistics office, according to the considerations presented above. Typical indicators for measuring social status in urban areas were used (average living area per person in square metres, average apartment size, cars per 1,000 inhabitants, unemployment rate, etc.), as well as different indicators for family status (persons per household, proportion of inhabitants aged below 18, proportion of single-family homes).

Following FLORIDA's idea of the rising relevance of the creative class, we tried to measure the sociospatial distribution of creative lifestyles in Hamburg with the "openness to diversity" concept as an indicator for their preferred environment. According to SHEVKY and BELL (1961), the classic social area analysis approach focuses (among other dimensions) on the extant segregation of different ethnic groups in cities. Seen in the light of diversity concepts, the presence of different subcultures and the mixture of ethnicities in a quarter can be considered to be a prerequisite for a high rate of "openness to diversity". Variables that capture the prevailing major values and attitudes are also needed. While strong agreement with the policies of the conservative party (CDU) can indicate a negative attitude towards social change or embracing new or more liberal values, agreement with the policies of the Green party (GAL) can be understood as an expression of the desire for a multicultural and open society. While the conservatives' integration policy aims for an assimilation of people with different ethnic backgrounds into a so-called "German mainstream culture" ("Deutsche Leitkultur"), the Greens' policy aims for more plurality in cultures, thereby viewing Germany as a country of immigration. KLEIN and FALTER (2003) point out that Green voters' antipathy towards conservative ideas and the accompanying "right-wing authoritarian values come from their experiences in the labour market in post-industrial society" (ibid., 34, original in German): The knowledge society has to be open to new ideas and even to multiple cultures if it is to compete in today's disembedded world. According to these deliberations, the proportion of Green voters as opposed to conservative voters promises to be a good indicator of the degree of "openness to diversity". Furthermore, it should be possible to identify openness to diversity by determining the proportion of foreigners in a neighbourhood. Using the mixture of people with different ethnic backgrounds as a measure of diversity follows FLORIDA'S "melting pot index".

This set of fourteen indicators was used to measure three underlying dimensions of socio-spatial differentiation in a late modern city (see Fig. 1). In so doing, we tried to reconstruct the three dimensions by an inductive method, the factor analysis. The factors extracted can be interpreted as abstract dimensions, which are, from an analytic perspective, responsible for the values of the observed variables ("factor loadings"). The advantage of this approach is that the number of observed variables can be reduced to a small number, thus making the results easier to interpret. Furthermore, the intercorrelations between the fourteen indicators show how they relate to each other. Lastly, by using Varimax rotation, the variance of the different extracted dimensions can be maximized.

In order to analyze the development of the significance of the three dimensions, the factor analysis was executed for five different dates, starting in the mid-1990s. In each case, the temporally closest election results were used. Figure 1 shows the results of the factor analysis (factor loadings, eigenvalues) for the different years. The three factors were stable over the years 1995-2007 (the minimum correlation between consecutive years is r = 0.91).

In addition to the first two factors, which are well-known from former social area analysis studies and may be termed "social status" and "family status", a third factor was extracted. The proportion of people who vote for the Green party, the proportion of foreigners, and the number of relocations of households (mobility) load positively on this factor. The number of cars per 1,000 inhabitants, the proportion of people who vote for the conservative party, and the proportion of retired persons generate negative factor loadings on the same factor. Further, according to the Varimax criterion, this dimension is independent of social status. Urban neighbourhoods in which the openness to diversity factor is high can be described as areas in which there are many people of working age and many foreigners, and there is high mobility and strong agreement with the values

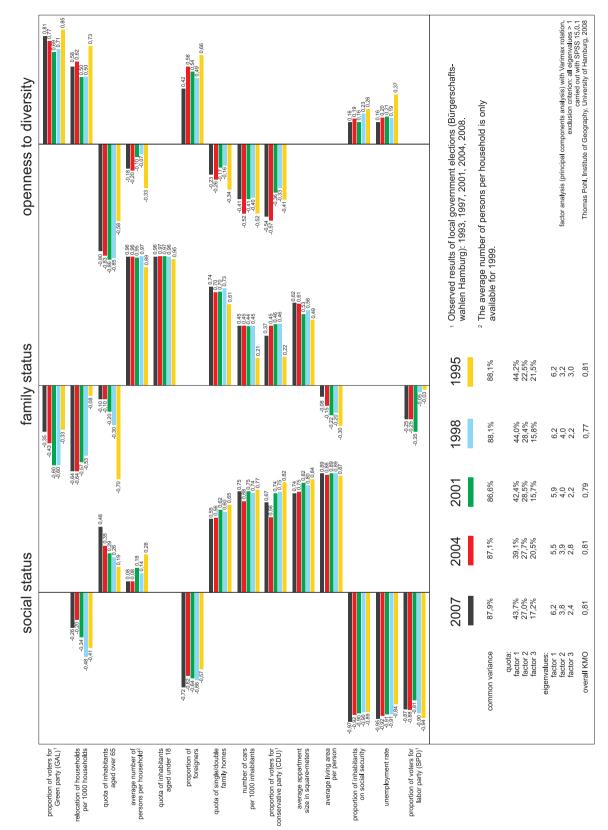


Fig. 1: Time-lapse factor analysis

of the Green party (and an aversion to conservative values). This appraisal has some common ground with FAINSTEIN'S (2005, 12) assessment that diversity is associated with left-wing ideas.

The openness factor seems to capture the lifestyle of the creative class within the knowledge society. Furthermore, the socio-spatial distribution of that creative class can be measured by using data made available by the regional offices for statistics. The spatial distribution of the creative class should thereby be understood as an outcome of their values and preferences regarding their lifestyle and living conditions.

### 3 Neighbourhoods that the creative class prefers: the distribution of openness to diversity across the city

A socio-spatial analysis of the previously extracted dimensions "social status", "family status" and "openness to diversity" was carried out. While the distribution of social status tends to reveal a sectoral pattern, the proportion of families in households increases from the inner city to the outskirts. The residents of the old-town quarters near the city centre show an affinity for the values described by the factor "openness to diversity". The popular parts of town, known in German as "Szenestadtteile", namely St. Pauli, St. Georg, Altona, and Ottensen, stand out in particular (Fig. 2).

To illustrate socio-spatial similarities, social status, family status, and openness to diversity were analysed in a cluster analysis. Following the "elbow criterion", a solution of eight clusters was selected. By this means, an optimum between a small number of clusters on the one hand, and a high cluster homogeneity on the other hand is supported.

Initially, the structural resemblance between a large proportion of the neighbourhoods was obvious. Those urban quarters that border the Central Business District (CBD) show the highest values in openness to diversity (more than two standard deviations above the average of the city in total). The share of family homes (family status) in these neighbourhoods is below average compared to the city in general. The quarters near the city centre contain a large number of old buildings that underwent structural and social revaluation during the waves of Gentrification in the 1980s and 1990s. Furthermore, these city regions, which can be described as urban areas of high diversity, exhibit a large functional mixture and a diverse facility structure (see POHL 2006).

In addition, companies that are considered to be part of the knowledge-based service economy are highly concentrated in this area.

In addition to these central areas where the openness to diversity factor was strongly manifest, several areas of secondary importance were found, especially in the old building quarters near the city centre. A few neighbourhoods in the suburbs are an exception. New housing estates were built in these areas, which led to an influx of young families. Nevertheless, openness to diversity appears to be an inner-urban phenomenon, although its spatial distribution develops independently of the patterns detected for family status and social status.

### 4 Socio-spatial change in Hamburg

The empirical analysis of inner-city fragmentation requires that the three previously determined dimensions of socio-spatial differentiation for different years be reproduced on the basis of a factor analysis. By this means, the various city quarters should not only be characterized by the results of socio-spatial analyses, but also by detecting significant changes in the specific social structure (for methods on detecting socio-spatial changes, see Warmelink and Zehner 1996).<sup>3)</sup>

According to FLORIDA's hypothesis, places that show a high rate of openness to diversity should have developed more prosperously during the last decade, and economic prosperity should even lead to an increase in the social status of the resident population. In the following analysis of inner-city fragmentation, the components "social status" and "openness to diversity" will primarily be considered, to determine whether FLORIDA's predictions have come true even for small-scale inner-urban differentiation. Note that the openness to diversity factor says nothing about the social status of the neighbourhood.

Socio-spatial changes in the neighbourhoods can be represented as a vector in a two-dimensional coordinate system. Ideally, fragmentation and consolidation scenarios would follow the pattern shown in figure 3. In the scenario that illustrates how the living conditions in different neighbourhoods begin to approximate each other, the factors would shift towards the arithmetic mean (consolidation version). By contrast, an increase in the distance between the neigh-

<sup>&</sup>lt;sup>3)</sup> If this development is to be illustrated, the factors need to be stable between the different years covered by the study.

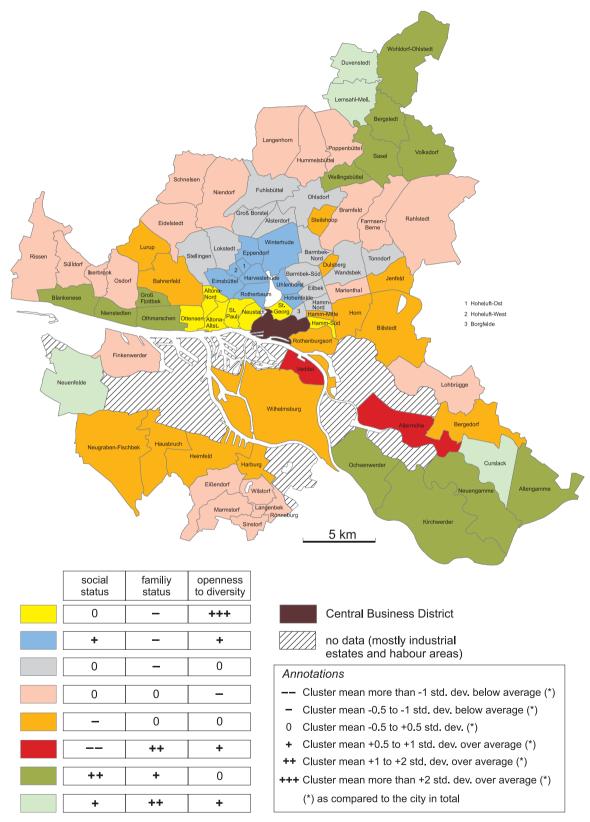


Fig. 2: Hamburg – social area analysis

# scenario of socio-spatial consolidation (outliers converge to the city in total)

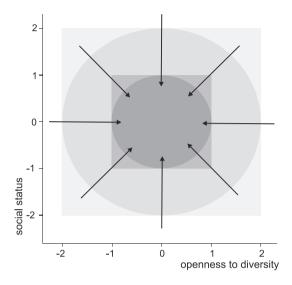
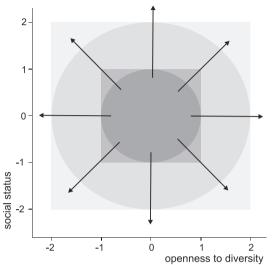


Fig. 3: Ideal types of socio-spatial development scenarios

bourhoods' factors and the arithmetic mean would indicate an incremental disparity in the city (fragmentation version).

Vertical changes display the fragmentation and consolidation of social disparity. Horizontal changes permit interpretations of the dynamics of diversity and lifestyle segregation in the city. Note that the changes in individual neighbourhoods are always measured relative to the possible development of the total city and they therefore quantify "elevator effects", without quantifying absolute changes in the living conditions in the city. Neighbourhoods that vary to a degree about the size of one standard deviation from the arithmetic mean can be interpreted as "average" neighbourhoods compared to the city in total (dark grey areas in figures 3 and 4). Neighbourhoods that vary between one and two standard deviations in at least one of the observed dimensions are extraordinary concerning "social status" or "openness to diversity" compared to the city in total (light grey areas in figures 3 and 4). Neighbourhoods that are more than two standard deviations from the arithmetic mean can be seen as "outliers". Scenarios of multi-stage revaluation such as the process of gentrification, beginning with a substandard social status, should first of all show an increase in the horizontally indicated dimension openness to diversity (pioneer phase). In the second phase of the gentrification process, an increase in social status with a synchronous decrease in openness to diversity is expected.

## scenario of socio-spatial fragmentation (neighbourhoods diverge from the city in total)



As seen in figure 4, the socio-spatial change within Hamburg's neighbourhoods between 1995 and 2007 is far more complex than the ideal development scenarios of "fragmentation" versus "consolidation" show. Therefore, if the processes of consolidation and fragmentation in Hamburg are to be evaluated, a finer-grained analysis is required.

For clarity, the vector changes in figure 4 were recorded only for those neighbourhoods that were estimated to be "dynamic", i.e., when they showed a change of at least 0.5 standard deviations towards either fragmentation or consolidation over a user-defined space of time. These 16 dynamic neighbourhoods stand out from the remaining 69. Several neighbourhoods showed only marginal changes over the given period of time.

Considerable revaluation tendencies in the dimension "social status" can only be found in Rothenburgsort, a quarter that cannot considered to be a very creative place. Note that openness to diversity in Rothenburgsort is very little above average. This upswing can traced back neither to any strategy of planning for diversity, nor to an unplanned immigration of the creative class. However, very classic urban development strategies were implemented in Rothenburgsort.

Most outstanding concerning the openness to diversity factor are the so-called "Szenestadtteile" (St. Pauli, St. Georg, Altona-Nord, Altona-Altstadt, and Ottensen) and the working-class quarter Veddel.

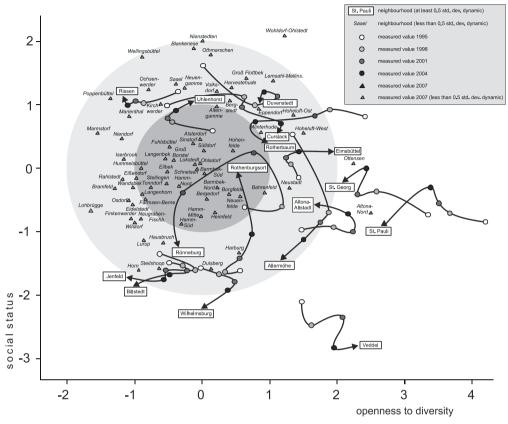


Fig. 4: Socio-spatial change in Hamburg's neighbourhoods from 1995 to 2007 (neighbourhoods with more than 2,000 inhabitants, units measuring z-values)

While Altona-Nord and Ottensen show no significant changes during the last decade, the other aforementioned quarters do.

It can be assumed that gentrification occurred in St. Georg and St. Pauli from 1995 to 2004; that is, there was a decline in openness to diversity accompanied by an upswing of social status. However, a decrease in the dimension "social status" from 2004 to 2007 indicates a stagnation in social status. Although St. Georg and St. Pauli were marked as highly creative places by both those who marketed Hamburg as a city and the local media, the high rate of openness to diversity in these neighbourhoods did not lead to a significant upswing of social status. Nevertheless, the decline in openness to diversity in St. Pauli and St. Georg during the recent years can be interpreted as a basic adaptation process in which these two "Szenestadtteile" moved towards norms of the city taken as a whole.

The growing increase of openness to diversity in Altona-Altstadt between 1995 and 2001 was followed by a very slight increase between 2001 and 2007 that can be described as a gentle form of gentrification.

The dynamics of development towards a clear socio-structural decline can be seen in Veddel, as well as in Wilhelmsburg and Allermöhe. While the changes in Allermöhe are basically the result of newly founded living space for social welfare housing during the period of observation, which led to the number of residents quadrupling between 1995 and 2007, the decline in Veddel is astonishing with respect to FLORIDA's thesis: although the quarter shows a high rate of openness to diversity, social status in Veddel declined overall. Openness to diversity taken by itself is no sufficient condition for improvement in social status.

Besides these considerable changes in individual neighbourhoods, the importance of the relevant dimensions of socio-spatial differentiation can be assessed by considering the modification of the intervals between the first and the third quartile. Comparing each of the three differentiation criteria and the expectancy value with a normal distribution (which is assumed in the ideal scenario of a well-balanced city) shows that for all three dimensions, a tendency towards socio-spatial polarization can be observed in Hamburg's neighbourhoods.

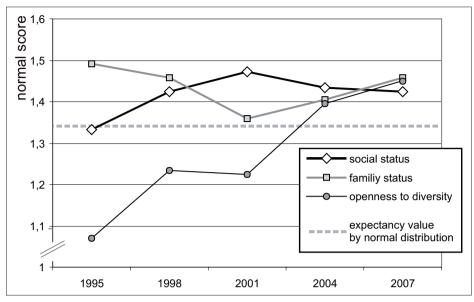


Fig. 5: Change in relevance (measured by the interval between the first and the third quartile) for the dimensions social status, family status, and openness to diversity from 1995–2007

As figure 5 illustrates, the quartile interval (between the first and the third quartile) for the "openness to diversity" dimension increased between 1995 and 2007, while the other dimensions tended to stagnate on a high level of polarization. Even though the quartile interval for the dimension "social status" declined slightly between 2001 and 2007, this most classic of all disparity criteria is still an important indicator for socio-spatial polarization today.

Before 2004, the distribution of the factor "openness to diversity" was well balanced across the city. Since 2004, openness to diversity can be considered to have been a factor of increasing importance for segregation in the city. While the city remains divided with regard to social inequality and different household structures, the dialectic reference of habitus and habitat has become more and more important over the past twelve years. This progression to today's three differentiation dimensions indicates an incremental socio-spatial fragmentation of socio-cultural environments. The dimension "openness to diversity" marks a significant axis of social-spatial inequality in the city nowadays.

Though nothing is said about the distribution of creative professionals in Hamburg by our analytic approach, in fact, according to the inner-urban segregation of openness to diversity, the city cannot be viewed as a homogeneous place for the alignment of the preferred lifestyle of the creative class.

#### 5 Conclusion

Our understanding of the socio-spatial organization of the late modern city was increased with the aid of an enhanced social area analysis approach. In addition to the two dimensions of socio-spatial differentiation already well-known from other social area analysis surveys (social status and family status), a third habitus-based dimension was developed on the basis of the analysis of secondary data that was made available by the regional offices for statistics. This dimension was labelled "openness to diversity", because it measures the degree of tolerance to those with different lifestyles and it operates as an indicator for the values and attitudes of the urban "creative class" in the knowledge society.

Social status, family status, and openness to diversity in the late modern city can be reproduced by the inductive method of factor analysis. The three dimensions proved to be stable for different dates from the mid-1990s, so they can be used to monitor tendencies of socio-spatial development. The analysis of the present-day socio-spatial structure in Hamburg shows that social status is linked to a sector model of the city, while family status follows a model of concentric circles. A high openness to diversity can primarily be found near the inner city areas, mainly in neighbourhoods where there is a high functional mix and many old buildings are located. Many of the quarters that show high openness to diversity are also known as gentrification areas. The suburban middle-class areas are considered to be the

socio-spatial counterpart of the inner-urban diverse and creative quarters. Therefore, it is fair to say that modern and late-modern ways of life coexist in different parts of the city. This segregation pattern is based on different values, preferences, and everyday activities and can be considered as a form of lifestyle segregation that influences the socio-spatial structure. The lines of social division in today's cities are also characterized by a lifestyle factor, which constitutes an "extra colour" in the inner-urban socio-spatial mosaic that has become more and more important for the social-spatial structure of the city in recent years. In the light of these findings, concepts that focus on diversity promise to help in analyzing the inner differentiation of cities today.

Considering the meaning with respect to fragmentation, it has to be said that most of the observed urban areas in Hamburg showed little or almost no change over the last twelve years, especially the areas in which openness to diversity is below average. Urban areas in which openness to diversity is above average tend to be even more dynamic in the other socio-spatial dimensions, but not all of them develop in a prosperous way. According to FLORIDA (2002), regions that show a high level of openness to diversity will exhibit a higher level of economic development than other regions. This prosperity should even be accompanied by an improvement in the social status of the inhabitants. At least on the scale of inner-urban differentiation, FLORIDA's forecast could not be validated by the Hamburg data. As the example of "Veddel" explains, a high openness to diversity is not a predictor for revaluation, and also other quarters that show strong openness to diversity does not result directly in an improvement in social status. Therefore, attempting to nurture openness to diversity cannot be seen as a planning strategy or as a solution for social or economic problems.

On the contrary, the quarter that showed the greatest upswing in social status is Rothenburgsort, which is not distinguished by high openness to diversity and where the creative class is not concentrated at all. It was not any strategy to plan for diversity that caused Rothenburgsort to develop in this way in recent years, but very classic approaches to urban redevelopment (Quartiersentwicklung). Even if planning for diversity were possible (see Fainstein 2005), it is doubtful whether the implementation of such strategies would generate social improvements. In comparison, classic strategies in urban planning promise to do better.

With regard to the openness to diversity factor, the most outstanding quarters (St. Georg and St. Pauli) show tendencies towards consolidation, but overall an increasing importance of socio-cultural milieus for inner-city fragmentation can be observed since the late 1990s. Nowadays, each of social status, family status, and openness to diversity shows a more or less fragmented pattern of distribution (see Fig. 5). In particular, the inequality in social status between different urban areas did not decrease from 1995-2007. A two-digit number of neighbourhoods are less than two standard deviations below the city average. The majority of these quarters can be described as monofunctional residential areas, which tend to develop as a "spatial trap" for their inhabitants (see Ossenbrügge 2003). This very classic dimension of socio-spatial inequality continues to exist in present-day Hamburg.

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