

THE END OF URBANISATION? TRANSFORMATION OF THE URBAN CONCEPT

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Abstract

Cities and their environments are continuously changing. During the last two hundred years urbanization has replaced a predominantly rural landscape with an urban landscape. Although the urbanization apparently has transformed the western countries most, the pace of urbanization is now highest in economic less developed countries. However, this does not mean an end to urbanization or a stabilization of the urban landscape in more developed countries. In the second half of the 20th century growth of large cities ceased and medium sized and small cities went into a period of rapid growth. This new pattern of urbanization (counter urbanization) was strongly debated during the 1970s and onwards, in particular in relation to its practical implications. Decentralisation of political decision making and public service production was soon following the population and often used as an instrument to stimulate growth in less prosperous regions. The Scandinavian countries are cases in point. During the last decade still more examples points at a reversal of the trend; metropolitan areas have begun to grew again both due to net migration and natural increase of the population.

Key words: Urbanization, counterurbanization, Copenhagen, metropolization.

URBANISATION AND URBAN GROWTH

Throughout much of the period of modernization, urban places has been growing in patterns much similar from country to country thus reflecting parallel processes at work. These included first of all a structural change of production and a huge migration of workers to the rapid growing manufacturing areas.

Danish urban research has followed the general development described by O'Donoghue (2002); the general explanation of the Danish urban system has been sought in long terms, socioeconomic structures. This can be seen as an outcome of the economic and industrial structural changes (Christiansen 1984, Pedersen 1983, Matthiessen 1985). Specifi-

cally the relations between industrial structures, due to progressing technology have been highlighted. The long waves in the number of industrial innovations and their diffusion (van Duijn 1977, Schumpeter 1934) were considered as the explanation of economic and thus urban development. The recent upturn in urban studies is often related to the rise of the informational society hand in hand with globalization as basis for an understanding of the potentials of individual localities.

In this paper urban development is considered in a regional and national perspective and thus as one urban system. Yet, it is important to remember that parallel to the changes of the urban system significant transformations have taken place inside the urban areas i.e. changes of the urban structure. These processes are interrelated however, and major parts of the internal transformations of cities can only be understood in relation to external developments. Thus is an obvious point that urban structure and system analysis cannot be separated (cf. Berry, 1964). This leads to another point namely that the difficulties in many urban models of producing adequate explanations which can combine both internal and external urban relations stems from the understanding and definition of urban areas.

Two features dominate most urban studies; one hand they are usually based on the residential population of localities and on the other they are delimited in a simple way to ease the work of producing statistics. As long as the figures are taken for what they are this is without problems. However, when population growth alone is considered to be an indication on the economic performance of individual localities this can be misleading if cases where the in-commuting workforce is of substantial size compared to the resident workforce. Moreover, as many metropolitan areas are administratively divided into several districts or municipalities, further problems can arise when characteristics of the labour force are analysed. In the case of Copenhagen for example, a major part of the academics are resident outside the central municipality and analyses based on qualifications of residential population will thus be unable to measure the changing occupations and skills of the business services, research, finance etc. in the city as a whole.

An exact definition of urban areas is of course a fundamental problem when the performance of a city in economic terms as well as its growth in terms of population is calculated. Whilst central cities began to lose population in the mid 20th century, the urban areas as such continued to grow through suburban expansion. The shift from central city to suburban growth was triggered by the shortage of building sites and the urban development thus had to either to intensify existing land use or jump beyond the borders of the existing city. Yet, it is tempting to consider how much of the counter urbanization that stems from a real decentralisation compared to insufficient definitions of the urban areas. In some cases it can be argued that the rise of villages and small towns depended on improved infrastructure and increase rents in existing urban areas. In most studies are cities and towns considered as isolated localities, even among geographers is the relative location of individual cities analysed. In stead are explanations sought either in structural conditions, which also explain the size of a city, or in local preconditions, cf. above.

Moreover, the dominant position of the nation state has influenced studies of urban systems to be national in scope and thus ignoring the fact that most cities are tightly related

to an international division of labour. Thus the individual city cannot be understood alone on basis of national urban system, but have to include aspects of the wider economic circuits.

Urban growth can be considered as a cumulated specification of social changes, although with some delay due to the particular features of the built environment (Harvey, 1978). This includes local economic preconditions, highly attractive residential areas as well as accessibility. Urban development is closely related to industrial evolution as the embeddedness of business and institutions in the urban landscape, the labour market, the access to global networks of innovations and learning as well as the quality of these networks, produces the local and regional preconditions for the localities (Maskell & Malmberg, 1999; Storper, 1997).

The dominant understanding of the urban development shifted in the late 1960s from single factors to more general or structural understandings. Structuralist explanations (cf. Harvey 1973 and 1978; Castells, 1977) managed to link general social changes with urban development. Thus, urbanization was both the outcome of and foundation for modern capitalism. Yet, structural explanations were unable to cope with the fact that the capitalist logic could produce divergent outcomes depending on local relations. This gave a renewed interest for local factors and their importance for economic and urban development. However, these local factors taken up in the 1980s were different from those earlier (O'Donoghue, 2002): Globalization, info tech, innovation, governance and the role of business services to mention a few. Nevertheless, the search for a grand theory able to relate the individual locality with global networks continues as O'Donoghue (2002) argues "*The current emphasis must be that each and every urban place is part of a wider urban system, and change at any point within the system (...) cannot be understood without understanding the respective roles of places within the system.*" This statement reveals a relational understanding of space and thus points to the need to study certain segments of cities in isolation from other localities. Consequently, localities can only be studied in relation to the surroundings in which they are embedded. Analysis based on urban size categories makes little sense unless they recognize the relative location of the cities and their mutual links.

The aim of this paper is twofold. Firstly it presents the overall pattern of urbanization in Denmark with particular emphasis to the period after 1960. Secondly it argues that the hitherto methods to analyze urbanization has proven insufficient. It is shown that the apparent reversal of population growth around 1980, from the larger cities to the smaller towns, was less a break with earlier trends in urban growth than it was inadequate definitions of existing urban areas. Thus, this paper will start by introducing general patterns of urbanization, then continue to discuss critical definitions and finally it presents a possible alternative approach to empirical urban analysis.

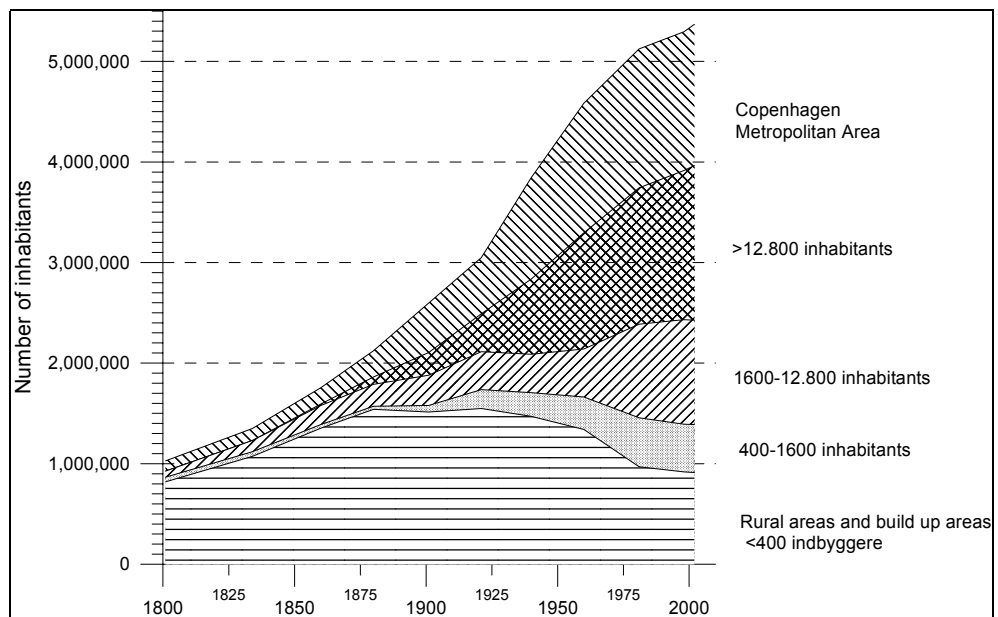
URBAN CHANGE IN DANEMARK

Denmark is a highly urbanised country where the vast majority (2002: 85 %) lives in urban areas. The urban system of today was established in the early stages of medieval time and

most larger cities were founded between the 8th and 11th century. Since then only a few and smaller cities have been established before the industrialisation during the 19th century. Until the early 19th century as much as 80 % of the population lived in the countryside, cf. figure 1. Copenhagen contained about 10 % of the national population at that time; the last 10 % lived in the other towns. Thus, Copenhagen had as many inhabitants as all other towns in the country all together.

The second half of the 19th century was a period of rapid economic and urban growth; industrialisation predominantly concentrated in Copenhagen and the population of the city increased by factor 5 before the end of the century: In 1901 lived nearly 19 % of the national population in Copenhagen. However, the provincial towns grew even faster than that and reached 23 % of the population 1901. This quick increase of the provincial towns was due to both the substantial improvement of transport (rail ways) but also the many new towns in the country side. Often between existing towns at rail line junctions, ferry towns or where major roads crossed the rail line (Hansen, 1976). Despite emigration from the rural districts to towns and abroad, the rural areas almost doubled their population 1801-1901. Until the 1920s, where the population of the rural areas reached it maximum, was the majority of the Danish population living in the country side.

Figure 1: Urban growth in Denmark according to size of urban place, 1800-2000



The recession of the 1930s and world war two caused a slower urban growth before 1950; as the economy began to grow in the 1950s the cities grew as well. A period marked by an extensive suburbanization and while Greater Copenhagen stagnated from the early 1970s and to the mid1990s, the provincial towns as a whole doubled their population 1940-81. By

1981 lived more than half of the Danish population in provincial towns. Since then has the urban system been relatively stable with few displacements between the different size classes.

URBAN DEVELOPMENT 1960-80

The urban growth that began in the 1960s and peaked in the mid 1970s before it ceased around 1980 took first of all place in smaller and middle sized cities. The larger cities and very small towns experienced a modest growth. Some of the largest provincial cities continued a relatively fast growth while others had no growth at all (Matthiessen, 1985).

As the largest city, Copenhagen had been the absolute dominating locality of manufacturing production until the 1960s. During the adjustment of the manufacturing sector to export markets did many 'older' kinds of production close while new types of production, the consumer industry, were set up. The regional effects were considerable as the older kinds of production were concentrated in Copenhagen and other larger cities. The new manufacturing firms were often set up in rural surroundings without previous manufacturing industry.

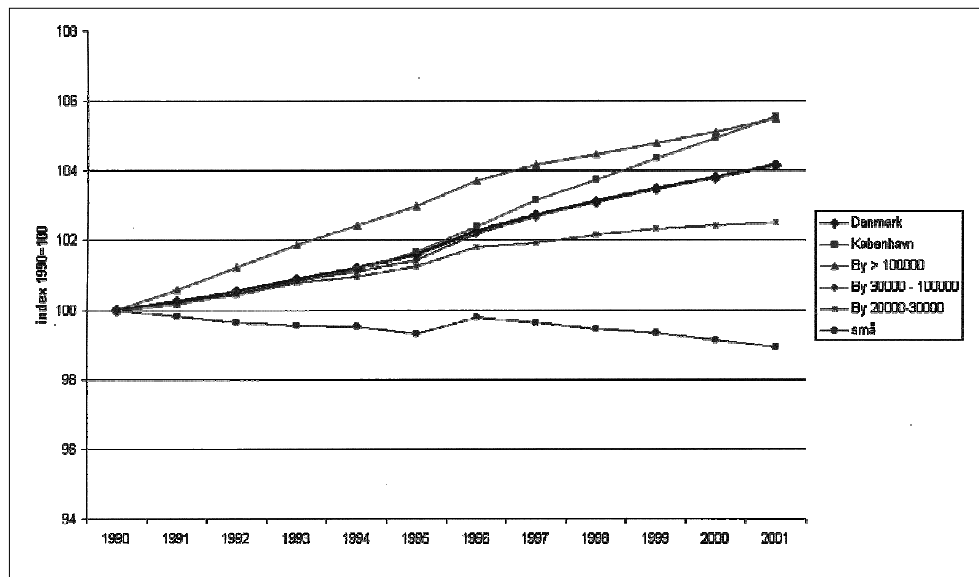
The main factor behind the newer urban development pattern was understood as stages of economic growth (Matthiessen, 1985) that changed the balance of the existing urban system as it favoured larger urban areas during the first part of modern urbanization and thereafter smaller towns and rural areas. An important improvement of transport technology from 'centralising' rail lines and steam ships to lorries, busses and private cars along the expansion of road net made a decentralised urban development possible from the late 1950s. Pedersen (1983) argues for a basic adjustment to the international market of manufacturing industry as the driving factor behind the decentralised urbanization. Clear improvements of roads and the export market orientation loose the tight relation between big cities and manufacturing industry and allow a further specialisation and division of labour.

The vast expansion of welfare services from the 1960s had a major regional impact, too. The economic boom during the 1960s led to a sharp increase in public spending; the increasing welfare services were decentralised to local governments and thus gave provincial regions a major boost. This expansion took place in parallel with a strong debate on the unbalanced or lopsided Denmark (Villadsen et al, 1976). From the start of the municipal reforms a general goal was to guarantee all citizens of the country, regardless of location, equal access to services and equal living conditions, interpreted as equal access to the labour market, private services and educational and cultural institutions *at the local level*. Thus central government had to improve provincial infrastructure, institutions and to relocate national governmental institutions to areas outside Copenhagen in order to meet these expectations. During the period 1960-80 the Danish urban system stabilized and living conditions in terms of income, employment opportunities and services was almost equalised however, impact of the expansion of the public sector became even more important as the country from the mid 1970s, had gone into a period of low growth and even stagnation.

URBAN DEVELOPMENT AFTER 1980

The early 1980s became a new period of economic growth which continued the regional decentralisation. Copenhagen in particular suffered from the process of deindustrialisation, while smaller and medium sized towns in the province benefited from the industrial change. However, the population growth distributed by city size showed a much more equal pattern compared to the former period. The population of Greater Copenhagen and the rural districts was slightly diminished, while the larger and medium sized cities saw a growth. A major share of the total increase in population 1981-2001 at 224.000 people came from immigration. This is nearly half the level of the former period (Nielsen, forth).

Figure 2: Urban growth according to size of labour market, 1990-2001 (Nielsen, forth.)



The regional balance and the urban system remain unchanged until the beginning of the 1990s when economic growth replaces stagnation. Industrial restructuring increased unemployment in the larger cities and especially City of Copenhagen suffered from the restructuring. Yet, at the early 1990s is employment rising in business services, trade, public and other private services, a growth pattern which have favoured the cities and first of all Copenhagen.

The urban population increases during the 1990s in general, but from the mid1990s is the Greater Copenhagen population growing faster than most other cities: About every second additional citizens settles in Greater Copenhagen. Internal in Copenhagen it is both central parts (19th century districts) and the outskirts of the existing urban area which experiences growth. Conversely, a number of smaller towns on islands as well as towns in peripheral parts of the country (North Jutland and Lolland-Falster) have had a constant or

even declining population in this period. Some cities are in crisis due to industrial restructuring; the closure of the main employer in Nakskov 1987 has turned that city in to an evil spiral of high unemployment, out migration of younger people and steady job loss. Others depending on fishery and related industries at the west coast of Jutland have faced the same type of problems.

In relation to regional policy does the 1990s mark a decisive shift from hitherto agreed endeavour for equal development and opportunities all over the country? Instead attention is drawn to differences and potentials of the individual locality. The historical changes in Europe - the collapse of the Soviet Union and the Single Market of EU - in the same period poses a stronger focus on the big cities. This focus is further strengthened by the debate on globalization and the importance of national strongholds in relation to globalisation and European integration.

Recent urban development in Denmark clearly demonstrates two important breaks or shifts: The larger cities passed through a phase of deep industrial restructuring in the mid70s that strongly reduced traditionally urban industries such as construction, manufacturing and transport. An analysis of structural changes of the manufacturing sector showed that decline in employment was biggest in Greater Copenhagen and larger provincial cities while smaller towns as whole experienced a substantial increase in employment (Maskell, 1984). This manufacturing change involved a large number of closures and job losses in the bigger cities while new firms were started in the small towns. Thus, the structural change involved a regional shift as well.

The relocation of manufacturing industry affected urban growth and therefore the existing urban system. However, this was not a specific Danish phenomenon but could be found in most West European countries (Vining & Kontuly 1978; Geyer & Kontuly 1993). This shift in urbanization was seen as a deep break with hitherto social logic and as a support for further decentralization. As such the shift challenged the existing understanding of urban development and its general social position. Moreover, in Denmark was the shift taken as a proof of the new regional policy that favoured an equal and decentralised development. Compared to other parts of West Europe, this growth of the big cites came quite late, cf Cheshire 1995. Later research has shown that the regional change in employment was due deindustrialisation in Copenhagen and growth in all industrial sectors in Jutland (Illeris, 1994).

The second shift in regional development took pace at the start of the 1990s when the economy was kick started by a new government: An expansive financial policy triggered a marked boom. In particular business and advanced services were pulling employment and economic growth back to the big cities (Winther forth.). This structural change raised the demand for highly qualified labour that mostly could be found in the university cities, i.e. the big cities. Furthermore, the government introduced in the late 1980s a broad programme in order to assist Copenhagen. The programme included major infrastructural investments such as expansion of the rail system, construction of a new metro, a complete renewal of regional and local train systems, improvement of the motorway network, new cultural institutions and improvement of existing ones and finally a large programme for refurbishment of the inner city districts all together gave Copenhagen a huge boost.

The urban decentralization can, as shown by Matthiessen 1985, in many respects better be explained as an intensive dispersal around the biggest cities rather than by regional equalization: The expanding small towns are generally located within the commuting zone of big cities; smaller towns located beyond the commuting zone experienced often decline or stagnation. Thus, by linking urban growth with spatial location instead of size, is the so-called des-urbanisation (van den Berg et al 1982) eliminated. The National Planning Report 2002 demonstrates that the clear improvement of transport systems during the period after 1960 has made possible a steady expansion of the commuting zones (Miljøministeriet, 2002): During the last decades has the commuting zone of Copenhagen expanded to cover nearly the whole island of Zealand, i.e. at distances up to 100 km. Thus, it has become irrational to consider urban growth and employment of the many medium sized towns at the island in relation to the size of the cities.

THE POST-INDUSTRIAL URBAN LANDSCAPE – AN ALTERNATIVE APPROACH

Traditional perception of an urban-rural dichotomy and the understanding of urban places as individual and independent entities in a system of cities has so far been the vantage point of any analysis of urbanisation. It does not however, suffice when analyzing the modern, ever increasing heterogeneous urban landscapes. Their spheres of influence are stretching far beyond administrative or statistical boundaries into the rural landscape. In many countries this problem has been tackled by defining the extent of metropolitan regions and for research purposes those have been subdivided in core, inner and outer ring areas (e.g. van den Berg et.al. 1982). At the 1970 census the Danish bureau of the census (Statistics Denmark) attempted to define specific trade areas and districts and for analytical purposes the Danish national planning agency established a nationwide division of the country in 52 commuting areas. This latter later served as model for the other Nordic countries and was used as basis for a comparative analysis of the Nordic urban systems (Engelstoft 1977). Using commuting regions as a foundation for urban analysis has recently been revitalized and several new attempts has been made establishing a suitable division with a varying number of areas (Kaag Andersen, 2000 and Nielsen 2001).

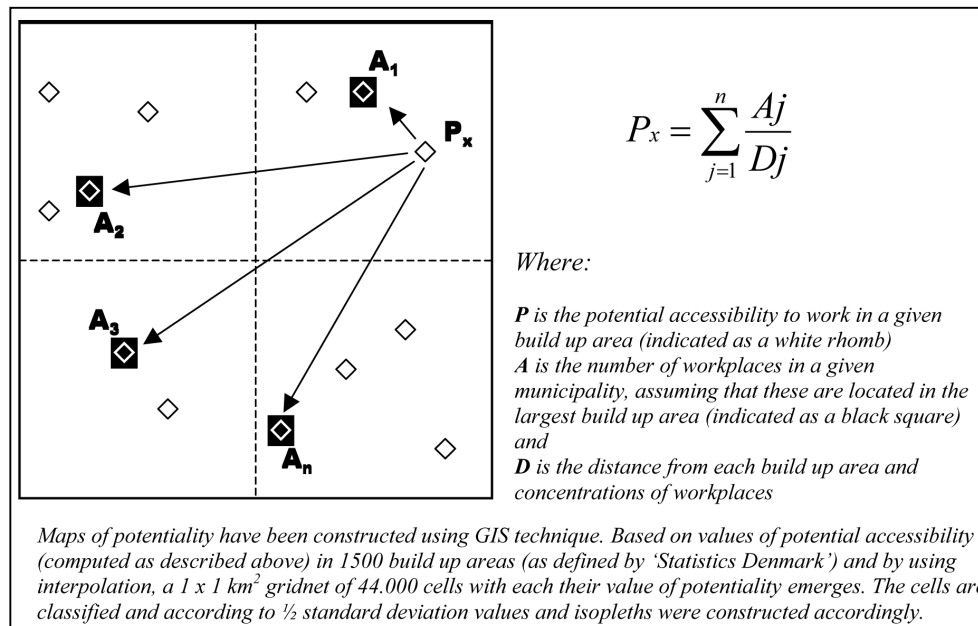
The above mentioned attempts to redefine a proper basis for urban analysis however, have shown that it is not only a question of scale. Working with one core and surrounding areas does not reflect the different types of problems involved in studying the modern urban landscape where hinterlands for housing, workforce, service and leisure does not coincide. Even though in general, commuting distances are increasing the individual travels from home to work seems to be highly variable, depending on type of industry, family structure, education, gender and other social and economic factors and analyzing this highly complex pattern of overlapping and variable geometries that constitutes the modern urban landscape requires a whole new way of thinking.

The challenges to planning, urban and industrial policies are that the physical structures of today are a result of yesterday's urban structure and it is only gradually and slowly

adjusting to the ways of a modern world. Increasing mobility combined with new technologies, IT, flexible organization and employment has completely changed hitherto geographical hierarchies and divisions of labor. The traditional concept of urban places representing individual entities in a hierarchical urban system is no longer valid. To day the urban is a set of complex relations between several superimposed networks or landscapes of work, home, shopping, leisure etc. Each of the landscapes is based on social, demographic or industrial factors as well as differences in regional income and training and together they constitute one large dynamic urban landscape of variable geometries. In a small country like Denmark for instance, we may thus no longer speak of individual cities but rather of one or a few large urban landscapes surrounded by marginal areas of low economic activity (metropolization cf. Ascher 2003). This post-urban process at the same time implies the dissolution of individual cities and the amalgamation of these former cities to larger and heterogeneous landscapes of various economic, social and political activities. Size wise the urbanized regions or landscapes exceeds most existing large cities. They are characterized by physical separation of the various elements and daily activities of its population are no longer constrained to one build up area, and movements' takes place across larger regions.

While the urban landscape on the one hand has blurred and equalized the differences between traditional urban and rural as well as between city and hinterland, on the other hand new differences are emerging. Some areas undergo modernization and experience social and economic upgrading while others stagnate and fall into decay due to out migration and lack of investments.

Figure 3: On the construction of potentiality maps

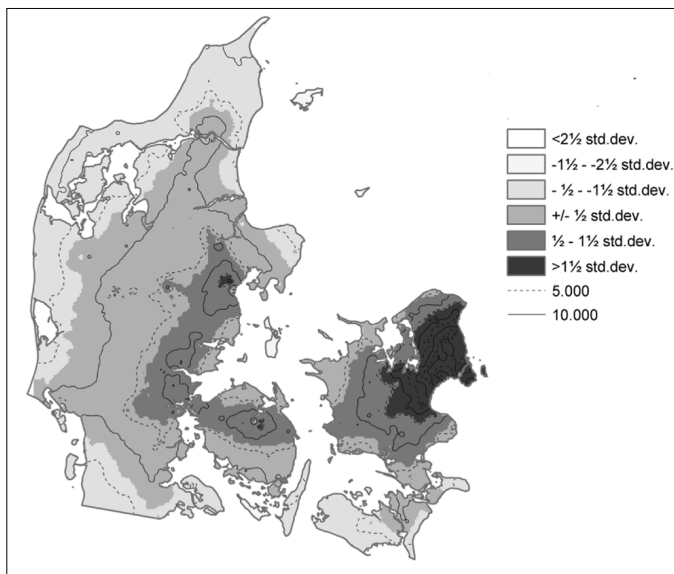


We may thus conclude that the Berry's concept of individual cities as systems within systems of cities (Berry 1964), which for almost half a century has been the foundation of most urban research, is no longer valid. A distinction between the structure of individual urban places and the way in which they form a part of the whole, can no longer be sustained thus the traditional distinction between urban system and urban structure can not be maintained. Empirical studies of the modern urban landscape thus raise a number of methodological problems, primarily concerning delimitation. When performance of the system is longer is related to individual cities and hinterland, but rather to interaction and relationship between different parts of this, as Amin and Thrift (2002) calls it, porous urban landscape.

To analyze post-urban urban development there is a need to replace the traditional framework with a new one in order to establish a tool for analysis that reflects the fact that to day we live in an integrated urban maze, comprising a large number of material as well as immaterial factors. Prospects and challenges of individual localities are closely related to their geography rather than their size and traditional status in a hierarchy.

A solution to the problem of delimitation would be to relate possible performance to potential possibilities something which may be achieved by using GIS technique based on distance related networks. The idea being that any given locality has a potential for either: work, housing, leisure etc. which is proportional to its size and inversely proportional to the distance. Each of these sets of potentials is thus ascertained to reflect different types of overlaying urban landscapes.

Figure 4: Potential accessibility to workplaces (cf. text and figures 5 & 6)



In order to illustrate a possible framework of such a new analytical approach, a map of potential in Denmark is shown in figure 4. The map comprises total number of work-places within all industries and reveals the total dominance of Copenhagen. Only Odense on the

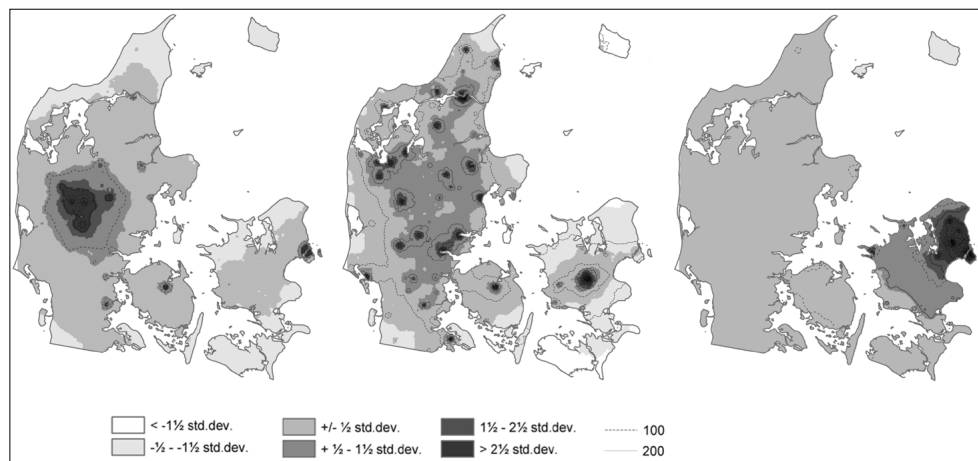
island of Funen and Århus in Jutland obtains scores which are comparable to those of sub-urban Copenhagen. But the map also reveals the outline of one large Danish urban landscape comprising the Copenhagen Metropolitan Region and reaching across the islands of Zealand and Funen to eastern Jutland from Kolding to Randers. On the other hand Danish marginal areas appear as distinctly on the map. Potentiality values from $-\frac{1}{2}$ to $-1\frac{1}{2}$ std. dev. below the national average are found in Northern, Western and large parts of Southernmost Jutland as well as on the islands of Lolland and Falster south of Zealand. And even more distinctly, potentiality values lower than $-1\frac{1}{2}$ std. dev. below average is found on the islands of Bornholm, Ærø and Samsø and Læsø all of them municipalities unconnected with bridge to mainland Denmark.

A DIFFERENTIATED URBAN LANDSCAPE

As mentioned the potentiality values mapped on figure 4 comprises work-places within all types of industry. However, not all industries are of equal interest to all potential employees. On the one hand there are large differences in qualifications required by and salaries paid to employees in various industries. On the other hand many employees have very specialized qualifications and only few and selected industries can offer a job relevant to their training. Thus a high work-place potentiality does not in itself signify economic activity it is even more important that the actual work-places involved are within growth sectors of the economy, and finally it is of course important that the work force needed is in fact available. A matching workforce potentiality must so to say correspond to the jobs in question.

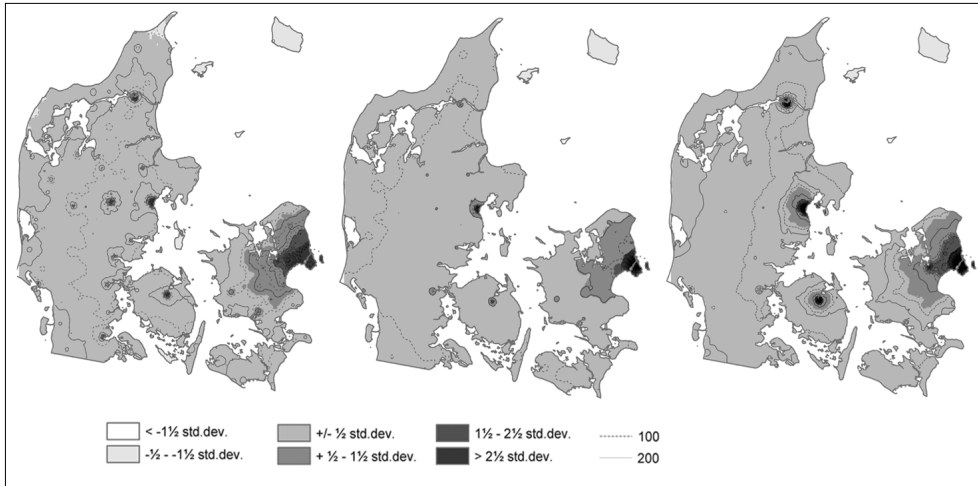
To further illustrate this point a set of maps illustration work place potentiality for selected trades has been constructed parallel to the one discussed above. These maps are shown in figures 5 and 6 and show a much differentiated pattern which will be discussed further below.

Figure 5: Potential accessibility to workplaces within selected manufacturing industry



From left to right: Clothing (NACE: 180 000 – 189 999), Meat processing (NACE: 151 000 – 151 999)
Medicinal (NACE: 244 000 – 244 999)

Figure 6: Potential accessibility to workplaces within selected service industry



From left to right: Banking (NACE: 651 000 – 651 999), Lawyers (NACE: 741 100 – 741 199), Higher education (NACE: 803 000 – 803 999)

Clothing industry (NACE: 180 000 – 189 999) is a traditional Danish manufacturing industry which has its roots in wool production of central Jutland and has survived due to its relations to Danish design and fashion industry. Traditionally the industry has mostly employed a un-skilled low-cost labour force which during the latter years has caused the industry keen competition from low-cost areas in eastern Europe and the far east. The origins of the industry is still reflected in its geographical dispersal and mid-Jutland could be described as one urban-industrial landscape dominated by clothing industry next to which only Odense and Copenhagen ha any significant work-places within the industry.

Meat processing (NACE: 151 000–151 999) is one of the two important and traditional export industry related to the large Danish agricultural production (the other is Dairy industry). The industry originated from the co-operative movement of the early 20th century and has traditionally had a close tradition with the producers. As with the clothing industry it primarily employs a low-cost un-skilled labour force, but contrary to the clothing industry the association with the primary production has been maintained. International competition however, has meant that slaughterhouses and bacon-factories has had to rationalise and they are now concentrated in much fewer and larger units. As a result a considerable concentration has taken place to mid and east Jutland and the main island of Zealand only one slaughterhouse is still in operation. Still workplaces within this traditional industry is almost ubiquitous except from in Copenhagen.

Contrary to the above mentioned manufacturing industries which are both characterised by a low-cost, mainly unskilled labour force, medicinal industry (NACE: 244 000 – 244 999) next to its production is characterised by research and development. This means that significant segments of the industry are related with traditional urban services. The

concentration in the Copenhagen Metropolitan Region together with a similar concentration of medicinal industry in Malmö and Lund in Southern Sweden are in both cases closely related to the universities, research and other institutions of higher education. In connection with the Ôresund development this has, with reference to Silicon Valley, lend itself to market the region internationally as 'Medicon Valley'.

While the job-types mapped on figure 4 and discussed are all of them within manufacturing industry with production the industries whose potentiality for work is illustrated in figure 5 are all within the service industries.

Banking (NACE: 651 000 – 651 999) shows the typical work-place potentiality for an almost ubiquitous service almost mirroring the traditional urban system. A high concentration in Copenhagen and the bigger cities and a fairly evenly distributed potentiality between $-\frac{1}{2}$ and $\frac{1}{2}$ std.dev. in almost all the rest of the country. In this respect there are two points worthwhile noting: Firstly banking like other financial services and insurance, has been susceptible to fusions and mergers, and today all nation-wide banks except one, have their main offices in Copenhagen. Secondly during the latter 15-20 years banking has undergone a dramatic computerization with for instance home-banking as a result and this in turn has lead to rationalisations and a decreasing number of local branches and employees. Still banking is a service addressing more or less everybody thus the ubiquity.

As with banking Law firms (NACE: 741 100 – 741 199) is a private service. Even though lawyers are addressing a very wide segment of the population it is a particularly important service rendered to other firms and businesses. Because of that the trade shows a clear orientation towards the metropolitan region and to a lesser extend to Århus. Here firms with more than 100 lawyers employed are not uncommon. In the rest of the country access to jobs within law firms is under average.

The five so far mentioned types of industries are all within the private sector. Contrary to this higher education (NACE: 803 000 – 803 999) is almost exclusively publicly financed. This means that localisation of the work places is politically rather than market determined. The distribution does clearly reflect the old university cities of Copenhagen, Århus and Odense but also the newer university centres of Ålborg and Roskilde established in the 1970s, are clearly visible as areas with over average potentiality for jobs within higher education. On the other hand it is obvious that a political struggle some 25 years back, which led to the fact that no university centre was ever established in southern Jutland is still reflected in the low potentiality of jobs within higher education found there.

As illustrated by the six examples described above, analysing potentiality of individual industries reveals a varied and detailed picture of one part of the urban landscape, different from the one we are used to when studying traditional urban places. In much the same way it should be possible to identify urban landscapes of for instance human resources differentiated according to qualifications, level of education etc., but also urban landscapes of housing, mobility and leisure. All these landscapes are superimposed on one another as well as they are penetrating and influencing each other. Together they represent of the modern post-urban urban landscape.

CONCLUSIONS

It has proven to be a difficult task to understand progress of urbanization appearing as reflection of general social developments in a spatial setting. A number of models have attempted to describe and explain common patterns of urban change. These models have moved from single factor to structural explanations and back again. However, the factors in question are not constant and as the basic unit of analysis, the city, has usually been treated as an isolated locality independent of relative location, problems has arisen. The key question is whether the changing growth rates of urban localities reveal real change in economic and social processes and structures or rather simply reflects an outdated definition?

In post industrial society involving global divisions of labour distinct localities should be replaced with network relations. Studies of urban growth and decline in relation to classes of sizes without considering their relative position and linkages are unable to explain contemporary patterns of urbanization.

Denmark has recently experienced two major shifts in urbanization; the first (1970s) involved de-industrialisation and decentralisation which was a manifest as counter urbanization. The second took pace from the early 1990s as a renewed centralization, in particular in relation to big cities. However, these apparent shifts become much less distinct (if real at all) when urbanisation is analyzed as a network of interrelated commuting areas.

The method presented here represents a first and relatively simple approach. However, it does bypass the dominance of isolated localities in favour of job accessibility. The potential growth of cities is thus linked to employment opportunities in their proximity. The results points at more coherent and stable processes of urbanization that existing analysis have found. The potential accessibility of workplaces clearly shows the labour market concentrations and their location at the population concentrations. A further development of the approach will imply an attempt to involve other indicators than job accessibility

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