Examples of plans and planning system change

Christian Wichmann Matthiessen

Abstract
This paper focuses on the framework for spatial urban planning for the larger Danish urban units and presents examples of high impact plans. The planning for the urban system, the organisational setup, and shifts in policy are discussed.

Keywords
Greater Copenhagen, Regional planning, Land use planning, Fingerplan, Urban system planning.

Outside Denmark only one large-scale plan is of reputation: the "Fingerplan" which was to guide the physical development of Greater Copenhagen for almost half a century. This famous plan was presented shortly after World War II, at a time when the planning system was immature and not geared for cross municipal boundary development. In the last decade of the 20th century a new cross boundary planning operation is again of international interest. The development plan for the Danish-Swedish Copenhagen-Malmö-Lund area is a strategy for improving position in the hierarchy of metropolitan Europe using building a bridge between Denmark and Sweden as the tool. Again this is an experiment because organization capacity for planning cross border development is not established.

Planning urban development in Denmark has been land use planning combined with structural planning until the 1970s when urban system planning was added. Another major change can be identified at the beginning of the 1990s when strategic planning for the larger urban units was put in operation as a consequence of a rise in international competition. The internationalization process was especially important for Copenhagen. Swedish membership of the European Union and the rise in interaction in the Baltic Sea area concentrated focus on this city.

This paper focuses on these events which set the framework for urban growth in the Danish capital region. It also discusses the organization of the planning system especially when the present system was organized around 1970. For place names see Figure 1.

Figure 1: Place names used in the text.
Planning history: system organization pre-1970

During the early phases of the suburbanization process 1950-70, urban policy consisted of zoning and land use planning. The growth of suburbs around the larger urban units was guided by master plans. During a period of economic growth and transformation around 1960, there was a clear need for establishing a modern planning system. This was formulated in a series of bills on planning and land policies inclusive of expropriation. In Parliament the minority Liberal side was against the proposed laws, the majority Social Democratic side was in favor. The minority claimed a referendum as expropriation bill proposals open for this possibility. The whole complex of bills was voted on in this referendum 1963, and the voters said no. This meant an effective barrier for political actions in the direction of improved planning, but also led to the subsequent necessary large-scale reformation of the whole system of government (Hovedstadsreformkommissionens Sekretariat 1970).

Until 1970, the administrative system in Denmark was rather complicated and worked according to tradition in a three-level arrangement topped by central government.

The second level was represented by three types of authority. The national capital and three regional capitals (Aarhus, Odense, Aalborg) had a special status with a high degree of self-governance. The boroughs (86), defined as the old urban units, had another special status also with self-governance. The rest of the country was organized in counties (25) with a combined state-appointed and locally elected county government.

The third level, municipalities, (about 1300) was as far as the old urban units are concerned identical with the second level, which implied special status also on the municipal level. Outside the urban units the counties were subdivided into urban or rural municipalities. One set of rules was exercised for urban municipalities, another for the rural units. Suburban municipalities too had their own type of organizational systems, and in the four largest towns again a different form of government was implemented.

The system was financed by taxes on all three levels and by proportional and automatic expenditure sharing by central and lower levels of government combined with a downward flow of special issue funding. National government interference in local policy was generally insignificant, and the way the system operated did not secure homogeneity in the framework for urban development.


Around 1970 a new national policy was introduced and implemented, namely that of planning for the pattern of settlement as a whole on national, regional, and local levels. This was the consequence of the ongoing, more and more widespread suburbanization (Matthiessen, 1980), which could obviously only be controlled by general rules. And it was the result of a recent formulated national policy favoring regional equality which should be achieved by zoning of land use for new development localized in selected parts of the nation, region or local area.

In 1970 a dramatic administrative reform was simultaneously formulated, soon followed by a massive increase in planning operations (Matthiessen, 1981). The policy was intimately linked to the construction and implementation of the welfare state (Jensen, Jørgensen & Nielsen, 1996). Spatial allocation principles should ensure an equal development of the entire country. Irrespective of geography, the aims were to guarantee citizens living conditions and welfare on equal levels. The new system was meant to be homogenous, functional, and democratic at all levels. The whole administrative reform was negotiated within the former system, and much was the result of compromises. This system is still in operation in 1998.

The first level was central government. The national plans have the form of directives, proposals on different matters, sector plans, land reservations, and control operations on lower levels.

The second level of government was defined as regions with a major city as a node and with geographically and economically defined boundaries (labor market, traffic system, hinterlands of higher education, hospitals and cultural activities). 14 regions (or 16 when also counting the two metropolitan municipalities of Copenhagen and Frederiksberg as regions) were established in Denmark. Regional planning deals with the urban system, land zoning and regional infrastructure. Control with municipalities within the region is important, and so are decisions on assignments of quotas for growth (different types of land uses: housing, manufacturing, etc.).

The third level was constituted by the 1970-established municipalities (then 277 units later reduced to 275). The units were defined as a city and its daily hinterland. This was in many cases impossible to fulfill for reasons of tradition, policy, lack of cities at a proper distance, and so
forth. The municipalities elaborate master plans for the local urban system, structure plans for the function of this system, and zoning plans for detailed development.

The post-1970 system operates to assure homogeneity in the framework for land use development, but regional and local decisions define real development. The administrative system is financed by taxes on all three levels and by reimbursement of some law-defined expenditures from national to lower levels of government.

In the 1970s national government persuaded each municipality to point at one settlement as a growth pole for services and manufacturing. This resulted in a deconcentration of public services because the new centers outside the old towns rapidly developed public services of their own.

The principle of "one city one local government" was not carried through in the Greater Copenhagen area (1.7 mio. inhabitants), which was excluded from the reform (although some municipalities in the outer parts were amalgamated) because a unified local government organizing 33 percent of the national population would be politically unacceptable (Bruun, 1995). It was also argued that it would mean a total abandonment of the local democracy.

The consequence of the 1970-reform has been a major standard improvement of public services and infrastructure in the more sparsely populated parts of the nation. So the fact is that the implication of an organizational policy has played an important role as an instrument of relative decentralization away from the larger urban units and especially away from Greater Copenhagen.

The 1990-reform was in 1979 combined with the policy of developing the settlement hierarchy. Outside Copenhagen (1,396,000 inhab. in the urban area) four cities Århus (183,000), Odense (138,000), Aalborg (115,000), and Esbjerg (69,000) were given the status of regional centers and were favored by national investment policy. This further assisted the deconcentration tendencies away from the capital region.

Early greater copenhagen planning experience: the "fingerplan"

Comprehensive planning in Greater Copenhagen started in the 1940s, largely inspired by British town planning. The initiative was private and the 1947 regional plan for the structure of Copenhagen and the location of different land uses never attained legal status (Bredsdorff et al., 1949).

Nevertheless, the "Fingerplan" played a major role, because practically all decision makers concerned with urban development agreed to the plan. The plan called for an outward growth of Copenhagen along five fingers, each in the direction of other towns, with settlement structured by new commuter train lines and highways (Fig. 2). The 15-year population prognosis was from 1.1 to 1.3 million inhabitants. Economy was foreseen to be unchanged. Land uses were controlled such that jobs were centralized while housing and local services were decentralized. Strict zoning was meant to secure that the green areas between the fingers would remain rural or recreational.

In time reality eroded the plan. Economic growth seemed inevitable, growth in business land consumption was rising, families decreased in size and increased in area consumption, immigration from rural areas turned out to be higher than expected, business activities started to decentralize to the fingers, and local politicians gave way to industrial land use in the green areas between the fingers. By 1960 the Greater Copenhagen population had reached 1.5 million and the national government made a new and revolutionary plan for the region. This was a high growth plan which called for the establishment of a new hand with center 20 km to the south-west of the existing Copenhagen hand. One million new inhabitants and large-scale urban renewal were major elements of the new plan, which were to have very little impact due to the 1963 referendum on planning laws. Growth continued nonetheless and instead of a new south-west hand, a new south finger was added.

![Figure 2: The "Fingerplan" for Greater Copenhagen 1947. The hand represents the idea (length of hand is 25 km). Diagrammes illustrate traffic structure, employment location, and residential areas (in shading). After Bredsdorff (1949).](image)
and developed by national laws and by nationally appointed agencies.

The problems of making the Greater Copenhagen area function increased during the 1960s and it seemed a must to form some kind of regional government although the national policy was clearly negative towards this issue. In 1974 the Greater Copenhagen Council was established for the 1.7 million residents of the metropolitan area, and a relatively weak type of regional government was introduced. Indirectly elected representatives from the county councils formed the council. The council never gained independent taxation rights but relied on transfers from the counties. The tasks included public transportation, regional planning and environmental control. The council was in fact primarily a transportation body. Around 97 percent of its budgets were on public transport. A new regional plan was activated (Fig. 3). It was a structural plan, a land use plan and a zoning plan, and entailed yet another revolution. Halfway out in the fingers a new infrastructural zone around Copenhagen was to be established with major motorways, railroads and other new networks. Growth was to be concentrated to the nodes where this zone and the fingers intersect (Hovedstadsrådet, 1976). But Greater Copenhagen’s population stagnated: the population remains 1.7 million today. The regional plan did influence the location of some new activities, but space in the older areas was abundant and the significance of the regional plan dwindled in time.

Greater Copenhagen has for centuries been the richest part of Denmark. The since 1970 nearly fixed 33 percent of the Danish population creates a tax base of 42 percent. This has had the consequence that the provincial parts of Denmark have forwarded a policy of redistribution of wealth from the rich metropolitan region to the rest of the nation. Year after year parliament and the national government taxed the rich municipalities and transferred the resultant sums (1996: 6 billions of Danish kroner) to poorer municipalities. Together with discriminating hierarchical transfers and national investment policy (sums up to 14 billions per year in favor of the provincial areas), these flows have almost totally balanced out the differences in wealth. It has become a major policy toward growth in the Greater Copenhagen area because the flows of money across the regional border efficiently blocked the potential migration flows the other way.

Inside the Greater Copenhagen region, the same policy of transfers from rich to poor municipalities has meant flows of money from rich suburban areas to the poorer central city thus in fact acting as a social conflict moderator within the functional urban region.

The urban area of Copenhagen outgrew the still existing territorial boundary 100 years ago. Series of discussions have focused on incorporation of suburban municipalities (of which many today must be considered urban), local amalgamation or superstructures in the region (Matthiessen, 1996). It seems that everybody agrees that some kind of regional authority has been and is a necessity. However, when it comes to realizing such a body, everybody loses decision power. Even the weak Greater Copenhagen Council (1974-89) was discussed, undermined and at last given up. The decision to abolish the council was sudden and surprising but in accordance with European trends (Bruun 1995). Regional Greater Copenhagen plans are subsequently made by five regional units sharing the metropolitan area. The current regional plan for Greater
Copenhagen is an enlarged version of the "Fingerplan" combined with a reorientation in the direction of the coming bridge to Sweden (see below). The lack of regional government is evident. A new discussion in 1995-96 (Indretningssministeriet 1995) pointed out alternative types of metropolitan government but nothing was decided upon in parliament. A majority of existing establishments are not interested in giving away any power to a new regional government. National politicians elected in the provinces are not in favor of changes that would strengthen Copenhagen at the national level. It is in fact interesting to observe the contradiction between the introduction of a new metropolitan policy (see below) parallel with the absence of any regional superstructure.

Strategic planning: cross border metropolitan development in the Öresund region

The pre-1992 policy was intimately linked to the construction and implementation of the welfare state (Jensen, Jægensen & Nielsen 1996). Spatial allocation principles should ensure an equal spatial development of the entire country. Irrespective of geography, the aims were to guarantee citizens living conditions and welfare of equal levels. This policy terminated abruptly in 1989-92. The shift was almost sudden, and was argued very little although it represents transformations from politics to economics, from welfare orientation to market orientation, and from spatial equalization policy to a focus on metropolitan competition according to Bruun (1995). The recent policy change has mostly had its impact on infrastructural investment policy in favor of Greater Copenhagen also pointing out a new potential metropolitan reality in the Öresund area. It also gives rise to new focusing on the regional capitals. The shift is probably a consequence of the ongoing internationalization of economy, which 1989-91 expressed itself by the establishment of the European Inner Market. With this background it is clear that the Danish urban policy could only point out one internationally known city with potentials in the international competition, Copenhagen.

The bridge in the construction 1995-2000 between Copenhagen and Malmö on the Swedish side of the Öresund, combined with Swedish entrance 1992 into the European Union, opens for development of the first cross-national integrated large-city region outside the European center (Andersson & Matthiessen, 1993). New interplay between Greater Copenhagen and the Malmö-Lund agglomeration gives the two hitherto non-interdependent urban economies access to more specialization and opens for co-operation as yet unforeseen. Synergy and further new specialization will be the obvious consequences. To these changes in growth potential will be added the effects of optimism and of increased world interest associated with the event itself. Large-scale engineering and construction projects are of international interest, and so is a new interrelation between two agglomerations, which cooperate very little at present. In many respects Copenhagen together with the South Swedish centers are expected to experience increased economic growth. Two systems towards a new situation as one system are illustrated in Figure 4.

The construction of the 15 billion Danish kroner bridge is a large investment, but using the project as a tool in strategic planning is a challenge. Development of the large cross-boundary infrastructure is going to alter the spatial organization of the territory, which again will encourage cross-border collaboration in institutional planning processes. This will activate creative and innovative new arrangements regards industries, institutions, procedures, management or any public action tool. Already in 1998 the principal investment decision has been followed by a series of other investment decisions altogether adding up to 75 billion Danish Kroner. Most of them being public like a new mini-metro, intraurban motorways, railroads, an airport railroad station and large scale urbanization, some being private like a new airport terminal, etc.

Marketing (demand) orientation and strategic planning have been brought to the fore during the late 1980s and are playing a growing role (Andersen & Matthiessen, 1995).

Figure 4: The Öresund area before and after system integration. Dots represent activities, lines major links. The dotted lines in the north-east direction indicate Stockholm's dominating position in relation to South-Sweden. Scaling indicates the large Copenhagen system versus the smaller Scania one, but no precision is pursued. From Matthiessen (1996).
To traditional urban marketing, regional issues with the main goal of increasing the international competitiveness of the region in question have been added. The Øresundsplan of Copenhagen is the first and only example of a comprehensive development plan for an area subordinated to strategic objects. The strategic object is formulated as advancement of regional productivity in order to give Copenhagen a better platform in international competition with other metropoles. To that end, a large area of highly accessible open land in physical proximity to both the city center and the airport is in the process of being developed. Large investments in infrastructure including a new light rail system are in progress, and a mixture of metropolitan functions with residential land use is planned for according to a comprehensive plan derived from an international architectural competition.

Strategic planning: the national level

The Danish Government has found it important to mobilize strategic networks and urban system planning. A series of reports on these challenges was published in the early 1990s (Miljøministeriet, 1992a, b & c - summarized in: Ministry of the Environment, 1992). In the reports development potential of the larger urban units is considered in detail: Which are the factors (labor force supply, education, facilities, services) supporting the local companies? What is the actual role within the international economy? Which are the structural advantages? How are the infrastructural position and the international links? Is the environment in jeopardy and can actions to improve the environment be taken? How are the cultural resources of the urban region in question? On this background the potentials of Danish towns are evaluated by the ministry. Potential here means the ability of the towns and their trade and industry to generate earnings for owners and employees now and in the future.

The reports about the urban regions of Denmark aggregate the strengths and structural characteristics of each urban region in six broad themes under the headings: network, production, creativity, international orientation, social merits and tourism. The metropolitan region of Greater Copenhagen is in a class of its own with regard to accessibility to international networks, creativity and international orientation. The region clearly distinguishes itself from all other regions in the country. In addition to the metropolitan region, Århus, Triangle City (three close neighboring towns in East Jutland, Vejle, Kolding and Fredericia), Odense and Aalborg make their marks in several areas. All get top marks for creativity, Århus and the Triangle City furthermore for networks and international orientation. Odense for international orientation and tourism, and Aalborg for tourism and networks. An important geographical feature is that the metropolitan region overshadows all other urban units on the islands of Zealand, Lolland and Falster, where the other urban units present weak profiles. It is also clear that the regions with high marks in production almost all are located in the Jutland peninsula and that all units with significant profiles in regard of international orientation apart from Greater Copenhagen and Odense are found in the same peninsula.

The actual national plan presents two north-south and one east-west international traffic axes, and in addition a number of major links to neighboring nations (Ministry of the Environment, 1994). The Øresund area plays a crucial role in this superior structure. The national plan is further a reference framework for the decisions taken by Danish authorities, which have physical and functional consequences. The perspective is Denmark’s basis for participation in European cooperation on physical planning and decisions on land use, location and urban development (Noordwijk Document 1997, Berg, Braun & Meer 1998).

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