

## Gennemsnitlig brugsstørrelse 1981

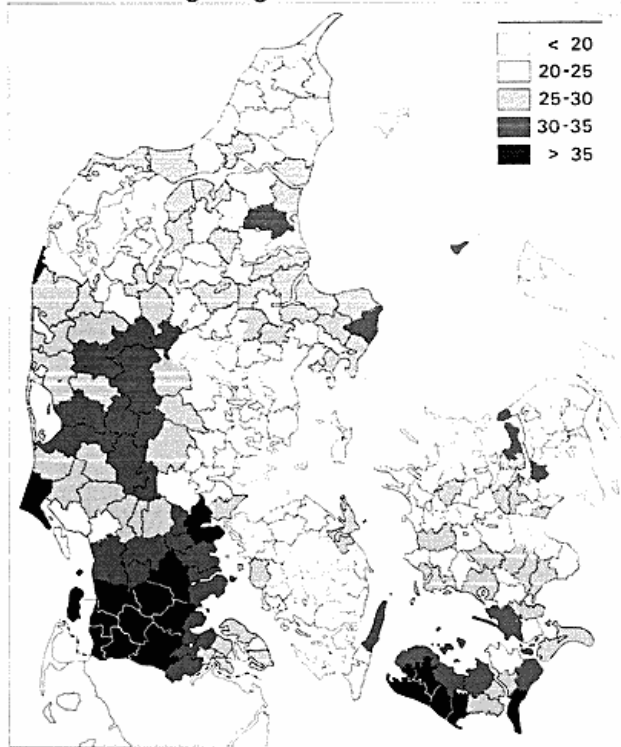


Fig. 5. Average farm size in hectares for municipalities in Denmark 1981 – the Copenhagen area excluded. The average figure for Denmark is about 25 hectares.

Source: Unpublished data from agricultural enumeration, Statistics of Denmark.

Fig. 5. Gennemsnitlig brugsstørrelse i de enkelte kommuner 1981 (Lands gennemsnit ca. 25 ha).

De seneste 25 års udviklingstendenser i retning af færre (fig. 1) men større brug udviser regionale forskelle, som i vid udstrækning skyldes, at udgangspunktet i 1960 varierede fra egn til egn (fig. 4), men også brugenes placering i forhold til større byer (især København) ses at spille ind (tabel 1).

På trods af at udviklingen har medført en vis udjævning af regionale forskelle, afspejler den gennemsnitlige brugsstørrelse i de enkelte kommuner tydeligt forskelle i naturgrundlag og historisk baggrund for egnens landbrug (fig. 5).

### References:

- Danmarks Statistik, København. Hartkornets og Jordejendommenes Fordeling. Stat. Tabelv. Ny rk. bd. 5, 3 rk. bd. 4, 32.  
Danmarks Jordbrug. Stat. Tabelv. 4. rk. nr. 5,9.  
Vurderingen til Ejendomsskyld. Stat. Tabelv. 5. rk. nr. 6, 12, 14.  
Vurderingen til Grundskyld og Ejendomsskyld. Stat. Tabelv. 5. rk. nr. 15, 17, 18, 21.  
Landbrugsstatistik, var. years  
Petersen, H. (1975): De Danske Landbrug, Copenhagen.

## Urban land-use in the Core Area of Medium-sized Danish towns

Sten Engelstoft

Engelstoft, Sten: Urban land-use in the Core-Area of Medium-sized Danish towns. *Geografisk Tidsskrift* 84: 47-50. Copenhagen, January 1984.

*The paper attempts to discuss the dual relationship between urban land-use changes and the social processes; examples from two medium-sized Danish towns are demonstrated.*

Sten Engelstoft, Senior lecturer. M.Sc. Geographical Institute, University of Copenhagen, Haraldsgade 68, DK-2100 Copenhagen Ø.

Keywords: *Urban geography, land-use.*

### THE CONCEPT OF LAND-USE

A central concept within geography is land-use. The concept of land-use may be analysed by splitting up the words (Andersson, 1971): Land, representing property, real estate, and physical resources; and use, referring to human activities as they take place on a given location due to constraints set by the social development. Land-use, and in particular urban land-use, may thus be regarded as an appearance of processes in society.

The social development or processes of society and the human activities may be regarded as decisive for the land-use; however it is important to stress that land-use as such, should not merely be regarded as a reflection of the social processes (a deterministic view); on the contrary, land-use has to be seen as dialectically tied to the human activities and the social processes, (Engelstoft, 1982a).

Investments in a given type of urban land-use, once carried out, may to a certain extent act as a constraint imposed on a future use of the land.

A disproportion may thus occur between an actual land-use and actual social conditions, as the land-use may reflect earlier stages of the social development. A sufficiently large disproportion between actual land-use and actual social development may in turn create the necessary conditions for a change in the land-use. The dual relationship between social processes and land-use is reflected in the qualities observable in a given piece of land, as those qualities may be characterized as either absolute or

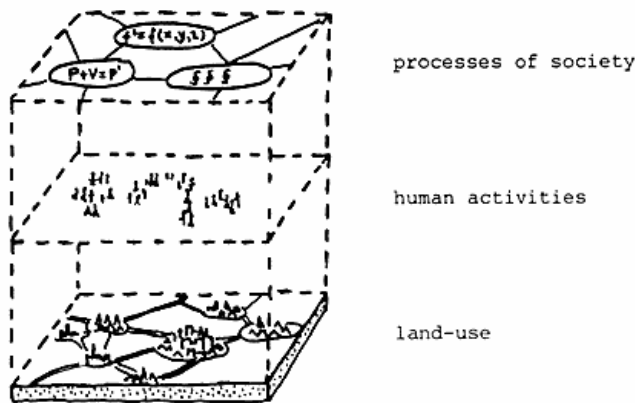


Fig. 1. The figure attempts to illustrate the dual relationships between the processes of society, human activities, and land-use (see text).

Fig. 1. Figuren antyder dobbeltforholdet mellem samfundsudviklingen, de menneskelige aktiviteter og arealanvendelsen.

relative. The absolute qualities of land-use are associated with physical and morphological aspects of the area, whereas the relative qualities are associated with social, economic and cultural features i.e. characteristics related to an interplay between space and the social world.

#### LAND-USE IN MEDIUM-SIZED DANISH TOWNS

The rapid economic development in the late fifties and throughout the sixties and the resulting suburbanization has increased the pressure on the core areas of most towns. By a number of regulations it has simultaneously been attempted to improve the accessibility and the capability of the core. In this context a number of general features should be mentioned (Engelstoft, 1980): Through construction of ringroads regional traffic has been led around the core; inside the core a number of street regulations have been carried through and local traffic in general has been restricted through one-way streets and the establishing of pedestrian areas.

The growing pressure on the core, primarily as a service center, has greatly increased the need for parking space. This has primarily been achieved through demolishing buildings inside blocks situated close to the main shopping streets.

Construction, apart from infrastructure, has been relatively restricted, although where this has taken place, it has been on not fully-exploited land and with increasing plot ratios as a result.

The new buildings have primarily been designed to comply with demands for increasing needs of office space, however. In general, the result of the above-mentioned has been a land-use development in the core areas, from mixed to differentiated land-use. While the total floor space of the core has been virtually constant, studies have shown (Harrild et al, 1981, Engelstoft, 1982) that the over-

LAND-USE IN CENTRAL SLAGELSE

	1970 (m <sup>2</sup> )	1981 (m <sup>2</sup> )	1970-81 (m <sup>2</sup> )	Table 1 1980-81 (%)
retail sale	84.484	78.795	-5.689	-7
private and public service	105.373	120.097	14.724	14
manufacturing and wholesale	46.564	34.957	-11.607	-25
residential	207.065	208.177	1.112	1
vacant	19.622	30.165	10.543	54
total	463.108	472.191	9.083	2

LAND-USE IN CENTRAL HERNING

	1969 (m <sup>2</sup> )	1981 (m <sup>2</sup> )	1969-81 (m <sup>2</sup> )	Table 2 1969-81 (%)
retail sale	56.016	56.405	389	1
private and public service	87.605	103.993	16.388	19
manufacturing and wholesale	65.924	47.704	-18.220	-28
residential	136.856	120.670	-16.186	-12
vacant	8.177	19.384	11.207	137
total	354.578	348.156	-6.422	-2

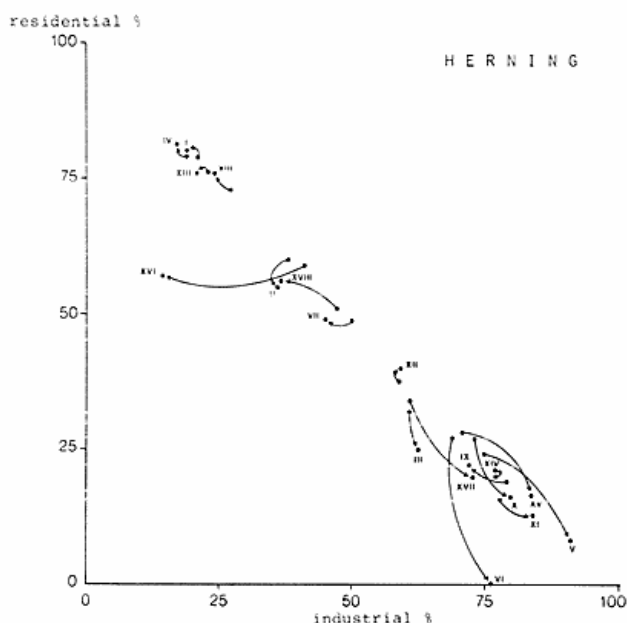
Table 1. Land-use development in central Slagelse and Herning. Tabel 1. Udviklingen i arealanvendelsen i Slagelse- og Herning bymidter.

all picture has been a general trend towards a constant or stagnating land-use for retail sale, and a small increase in land-use for other services (½% annually). Residential land-use has decreased (½% annually), and land-use for manufacturing industry has had an even larger decrease (2½% annually).

Land-use surveys carried out in two medium sized Danish towns: Slagelse with 28.000 inh. and Herning with 30.000 inh., show the same overall trends as mentioned above (Magnussen, 1969, Magnussen, 1970, Engelstoft, 1982b), however with some individual variations.

The glaring features of the land-use figures of the core are the huge reduction of land-use for whole-sale and manufacturing, the increase in land-use for public and private services and above all the very marked increase in vacant space. In general it may be maintained that the land-use trends are the trends of a land-use pattern in transformation, a fact that the following remarks attempt to study more thoroughly. Urban development and the resulting land-use may be seen as the ultimate result of private and public investments and their ability to pay off.

Investments in new buildings, street regulations, parking space etc. are reflected in generally rising land-values in the core area as such. Consequently the pay-off of the remaining economic activities is reduced. If the marginal difference in pay-off between the existing land-use and a possible future land-use is sufficiently large, a land-use shift may take place. Often, however, the remaining buildings may not be suited for an immediate change of activity, and by reducing the costs of maintenance of the buildings, the existing landuse may be preserved provisionally. Sooner or later, however, the buildings will be worn out,



Figs. 2 and 3. Land-use development within central Herning and Slagelse. Each pair of numbered and interconnected dots represents a »sub-area« within the core, and shows the changing proportion of residential and industrial land-use, respectively, within an 11 to 12-year period.

and a stock of buildings may remain vacant until the economic conditions in society can ensure the necessary profit on investments in new buildings- and consequently a new land-use (Andersen & Engelstoft, 1982). Vacant urban land as such, may thus be regarded as an indication of land-use transformations, and in the actual case, a transformation from land-use representing secondary economic activities (i.e. manufacturing industry), to a land-use representing tertiary activities (i.e. private and public services).

In the medium-sized Danish towns this development has been particularly significant, in that the general trends have been strengthened by the fact that these towns function as regional service centers within the urban and administrative systems (Magnussen, 1979). As for land-use within retail sales and residential purposes the pattern is a bit more complicated. The size of areas with land-use for retail sale has been rather constant throughout the period; it must be noted however that this is a gross result. A re-structuring process of retail sales in the core has gradually taken place, and as a general result land-use within retail sale of convenience goods has decreased, while retail sale of shopping goods has increased within the core. This development is due to the fact that retailing – particularly within convenience goods – is able to gain advantages of scale-economies. The new larger units are preferably located outside the core areas, and as this takes place, a basis is created for speciality shops, primarily within shopping goods (Agergaard, et al, 1968).

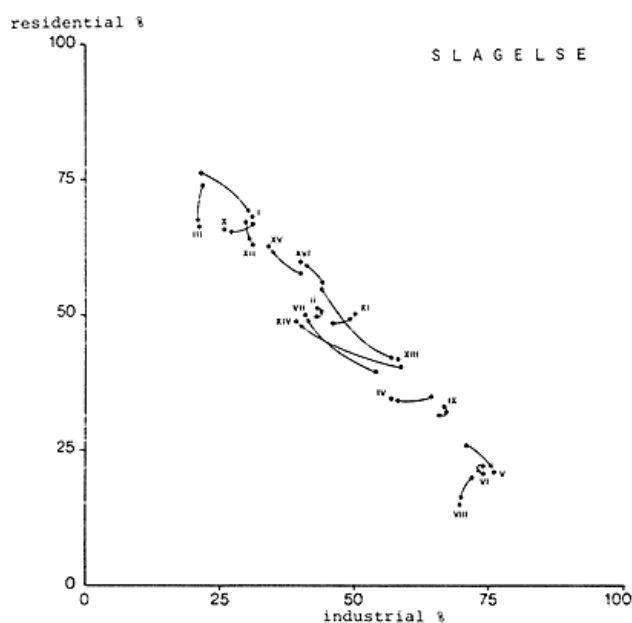


Fig. 2 & 3. Udviklingen i arealanvendelsen i Herning og Slagelse bymidter. Hvert sæt af nummerede og forbundne prikker viser udviklingen i forholdet mellem bolig- og erhvervsarealer i delområder i bymidten i løbet af en 11-12 årig periode.

In land-use terms residential areas have been rather constant; however, it must be noted that a certain improvement has taken place within the housing stock and, in general, the number of inhabitants within the central urban areas has decreased. The land-use development trends as described above may be regarded as valid for the total core areas in general. However, as mentioned earlier, within the individual core areas, a tendency of land-use development towards a differentiated, rather than a mixed land-use has been prevailing; this trend is demonstrated by the land-use figures of subdivided areas of the individual cores.

Each pair of two numbered and interconnected dots on the figures represents a »sub-area« within the core, and shows the changing proportion of respectively residential and industrial land-use within a 11-12 year period. The percentage of residential and industrial land-use, as represented by each dot, does not sum up to a total 100%; the remaining share thus represents vacant land in each of the »sub-areas«. Studying the land-use development pattern as derived from the figures, the above mentioned tendencies towards differentiated land-use is evident.

## CONCLUSION

Land-use and structure of Danish towns are a function of to-day's as well as earlier social conditions. In general, the medium-sized Danish town can trace its history back to the Middle Ages. Up to the middle of the 18<sup>th</sup> century,

only few changes took place, and today's town centre is almost identical with the pre-industrial town. However, the economic and social development, which has taken place during the recent 100 years has left its trace.

Two distinct periods of restructuring may be identified: Firstly, a re-structuring period tied to the industrialisation and the improved transport facilities, primarily the development of the railway systems, in short a re-structuring closely related to the urbanization process. Secondly, a period tied to the post-war economic boom, with its immense changes in the social conditions as well as within housing, manufacturing, public- and private services, a re-structuring closely related to the suburbanization process.

The latter of the two periods has resulted in a spatial differentiation of production-, circulation-, and reproduction functions within the urban areas in general as well as within the urban areas as such.

### Resumé

#### *Arealanvendelsen i danske provinsbyers bymidte*

Et centralt begreb indenfor geografi er arealanvendelse. Begrebet analyseres gennem en opsplitning af ordet: areal, der repræsenterer fast ejendom og fysiske ressourcer, samt anvendelse, der refererer til den samfundsbestemte stedbundne menneskelige aktivitet.

Dobbeltforholdet mellem samfundsudviklingen og arealanvendelsen søges dernæst eksemplificeret gennem arealanvendelsens udvikling i to mellemstore danske provinsbyer: Slagelse og Herning. Det påvises, at der gennem de seneste 11-12 år er sket store forskydninger i bymidternes arealanvendelse, og at disse forskydninger er tæt knyttet til efterkrigstidens økonomiske boom, suburbaniseringen og den deraf følgende adskildelse af bolig og erhverv. Endvidere søges det påvist, at de ubenyttede (tomme) byarealer er en nøgle til forståelsen af arealanvendelsesændringer.

### References:

- Agergaard, Erik, Olsen, Poul Anker & Allpas, John, 1968: The Interaction between Retailing and the Urban Structure. A theory of Spiral Movement. København.
- Andersen, H. T. & Engelstoft, S., 1982: Bykerne og baggårdserhverv i danske provinsbyer. København.
- Andersson, H. O., 1971: Markklassificering for fysisk planering. Stockholm.
- Engelstoft, S., 1980: Ændringer i de centrale ældre byområder. København.
- Engelstoft, S., 1982a: Arealanvendelse og arealklassifikation, teori og praksis. København.
- Engelstoft, S., 1982b: Etagemeterundersøgelser; Herning 1969-81, Slagelse 1970-81. København.
- Harrild, J. et al., 1980: Provinsbyernes fornyelse. København.
- Magnussen, J., 1969: Herning bymidte. København.
- Magnussen, J., 1970: Slagelse bymidteundersøgelse. København.
- Magnussen, J., 1979: Urban Policy and Change in Denmark. København.

## Urban industrial Areas

Hans Thor Andersen

Andersen, Hans Thor: Urban industrial Areas. Geografisk Tidsskrift 84: 50-52. Copenhagen, January 1984.

*The development of the large cities has been closely connected with industrialization. However, the decentralization of industry and manufacturing jobs has accelerated from 1970. This process has left a huge stock of old, derelict industrial buildings and a pool of unemployed workes.*

Hans Thor Andersen, M.Sc., research scholarship, Geographical Institute, University of Copenhagen, Haraldsgade 68, 2100 Copenhagen Ø.

Keywords: *Inner city decline, industrial areas, physical obsolescence.*

Manufacturing has been crucial for the transformation of the Western European countries from agricultural societies to the present industrial and service based societies. Industry produces the material base of the society and, through creation of jobs and production of commodities, manufacturing influences consumption and the conditions of living. The spatial distribution and development of manufacturing industry are important for the urban structure.

Policies towards industry have been concentrated towards physical and environmental problems, which were solved by separating industry from other urban activities. Economic factors were seen to be industry's own problem. This separation has been the basic tenet of planning (Architects Journal, 1979).

The problems of the inner urban areas in Britain have showed the importance of the economic base in relation to regeneration of inner cities: Economic regeneration is an essential prerequisite of physical and social regeneration. The realization that industry provides both jobs and service has led to policies capable of promoting urban industry. Such a realization has unfortunately not occurred among authorities in Denmark.

The urban development is integrated with the development of the society and its underlying structures, especially the accumulation of capital (Harvey, 1981): In the built environment as a whole, capital represents itself in the form of a physical landscape, created in its own image and as use values to enhance the progressive accumulation. The specific relations of the built environment -

only few changes took place, and today's town centre is almost identical with the pre-industrial town. However, the economic and social development, which has taken place during the recent 100 years has left its trace.

Two distinct periods of restructuring may be identified: Firstly, a re-structuring period tied to the industrialisation and the improved transport facilities, primarily the development of the railway systems, in short a re-structuring closely related to the urbanization process. Secondly, a period tied to the post-war economic boom, with its immense changes in the social conditions as well as within housing, manufacturing, public- and private services, a re-structuring closely related to the suburbanization process.

The latter of the two periods has resulted in a spatial differentiation of production-, circulation-, and reproduction functions within the urban areas in general as well as within the urban areas as such.

### Resumé

#### *Arealanvendelsen i danske provinsbyers bymidte*

Et centralt begreb indenfor geografi er arealanvendelse. Begrebet analyseres gennem en opsplitning af ordet: areal, der repræsenterer fast ejendom og fysiske ressourcer, samt anvendelse, der refererer til den samfundsbestemte stedbundne menneskelige aktivitet.

Dobbeltforholdet mellem samfundsudviklingen og arealanvendelsen søges dernæst eksemplificeret gennem arealanvendelsens udvikling i to mellemstore danske provinsbyer: Slagelse og Herning. Det påvises, at der gennem de seneste 11-12 år er sket store forskydninger i bymidtens arealanvendelse, og at disse forskydninger er tæt knyttet til efterkrigstidens økonomiske boom, suburbaniseringen og den deraf følgende adskildelse af bolig og erhverv. Endvidere søges det påvist, at de ubenyttede (tomme) byarealer er en nøgle til forståelsen af arealanvendelsesændringer.

### References:

- Agergaard, Erik, Olsen, Poul Anker & Allpas, John, 1968: The Interaction between Retailing and the Urban Structure. A theory of Spiral Movement. København.
- Andersen, H. T. & Engelstoft, S., 1982: Bykerne og baggårdserhverv i danske provinsbyer. København.
- Andersson, H. O., 1971: Markklassificering for fysisk planering. Stockholm.
- Engelstoft, S., 1980: Ændringer i de centrale ældre byområder. København.
- Engelstoft, S., 1982a: Arealanvendelse og arealklassifikation, teori og praksis. København.
- Engelstoft, S., 1982b: Etagemeterundersøgelser; Herning 1969-81, Slagelse 1970-81. København.
- Harrild, J. et al., 1980: Provinsbyernes fornyelse. København.
- Magnussen, J., 1969: Herning bymidte. København.
- Magnussen, J., 1970: Slagelse bymidteundersøgelse. København.
- Magnussen, J., 1979: Urban Policy and Change in Denmark. København.

## Urban industrial Areas

Hans Thor Andersen

Andersen, Hans Thor: Urban industrial Areas. Geografisk Tidsskrift 84: 50-52. Copenhagen, January 1984.

*The development of the large cities has been closely connected with industrialization. However, the decentralization of industry and manufacturing jobs has accelerated from 1970. This process has left a huge stock of old, derelict industrial buildings and a pool of unemployed workes.*

Hans Thor Andersen, M.Sc., research scholarship, Geographical Institute, University of Copenhagen, Haraldsgade 68, 2100 Copenhagen Ø.

Keywords: *Inner city decline, industrial areas, physical obsolescence.*

Manufacturing has been crucial for the transformation of the Western European countries from agricultural societies to the present industrial and service based societies. Industry produces the material base of the society and, through creation of jobs and production of commodities, manufacturing influences consumption and the conditions of living. The spatial distribution and development of manufacturing industry are important for the urban structure.

Policies towards industry have been concentrated towards physical and environmental problems, which were solved by separating industry from other urban activities. Economic factors were seen to be industry's own problem. This separation has been the basic tenet of planning (Architects Journal, 1979).

The problems of the inner urban areas in Britain have showed the importance of the economic base in relation to regeneration of inner cities: Economic regeneration is an essential prerequisite of physical and social regeneration. The realization that industry provides both jobs and service has led to policies capable of promoting urban industry. Such a realization has unfortunately not occurred among authorities in Denmark.

The urban development is integrated with the development of the society and its underlying structures, especially the accumulation of capital (Harvey, 1981): In the built environment as a whole, capital represents itself in the form of a physical landscape, created in its own image and as use values to enhance the progressive accumulation. The specific relations of the built environment -