1.

LIVING PATTERNS IN THE BALTIC REGION - MOVING TO THE CITIES

by Harri Andersson

1.1 Our house and home

(1.1-1.2 by Lars Rydén) Where we live and the way we live, habitation, is for each one of us at the core of our physical and social well-being. It is a question of home and workplace.

A home is, in the first place, a flat or a house, but also, in a wider context, it means neighbourhood, village, city and community. Habitation refers both to the more narrow perspective of housing, and also to the larger context of community life.

In the context of sustainable development habitation has a special role. Our home is the hub around which our use of material resources and energy turns. Our home and community are also the places where each one of us most easily and uncontroversially may influence our lifestyle and resource use. It is the obvious starting-point for the path towards sustainability.

Habitation has, like many other aspects of our society, undergone dramatic changes in the last one or two generations. The most important of these changes is a massive movement from the countryside to cities. The latest great expansion of towns and cities has taken place since the 1950s. In Europe, the proportion of the population living in cities doubled between 1950 and 1970. The cities have not only swallowed the entire population increase but also a major proportion of those who earlier lived in the countryside. In the Baltic region today the degree of urbanization, city-dwelling, has reached some 70 per cent in the east and 85 per cent in the west.

This change is not without problems. Huge suburbs of the

"Sometime around the turn of the millennium an urban baby will be born whose birth will tip the balance statistically, for humanity, from being a predominantly urban species. In this culminating move to full urbanization, will humanity be fulfilling its destiny? Or will we be entering the final stage in decline toward chaos and collapse?" *(Girardet 1992: 11)*

(Giraraei 1992: 11)

growing cities are troubled by, for example, transport difficulties. The buildings themselves in these suburbs are often of low quality and planning does not always address the social needs of the inhabitants.

The forces behind this major change in our societies are manifold. A predominant part of the picture is a population increase that has coincided with the growth of industries, which require a concentration of workers and are therefore located in the cities. Agriculture, on the contrary, as dispersed as the land itself, has decreased its demand for workers.

The changes have often weakened or even destroyed old cultural and social patterns and formed new ones. Urbanization coincided with the development of the welfare state in the West and the socialist state in the East. Social care is no longer the obvious responsibility of the family, and the various generations do not as often as they used live in proximity to each other. Changed habitation patterns are, in the West, part of the growth of the affluent society. It has resulted in a much increased living space per capita, as well as an increasing number of households comprising only one or few persons. Many families have two places to live in: a summer house in addition to a permanent home. In the East, many country houses have been turned into datchas for the city inhabitants.

1.2 A twofold challenge – rural and urban development

The demand for sustainable development is a particular challenge for the planners of cities and municipalities. Cities are far from sustainable. But the problem is actually twofold: that of urban development and that of rural development.

Rural development focuses on the question of economy even if environmental issues start to be recognized. Reforming agriculture and forestry means making farms economically profitable and environmentally acceptable. Today we see major changes in property structures in the countryside, particularly in the East. Farms are becoming typically family owned both in the East and the West. But in addition we see a much more varied economic life. To agriculture and forestry is added a whole series of activities, professions and lifestyles that strengthen the economy.

Urban development, on the contrary, seems to focus on the environment. This is understandable. Traffic and transport threaten to choke cities both by air pollution and physically by

A history of habitation

THE FIRST SETTLERS

The first habitations in Baltic Europe, in the North soon after the melting of the inland ice some 8000 years ago, were small settlements at places where food and other provisions were easily accessible, in particular along coasts and rivers. These small groups of settlers were essentially self sufficient. In many cases habitation had a seasonal, or even nomadic, pattern.

VILLAGES AND FARMS

The agricultural revolution led to a more residential life pattern. Agriculture allowed an area to support up to a 50 times larger population. Now many villages developed. Our first preserved houses stem from the iron age, about 600 AD, and farms are known from the Viking age, 700 - 1050 AD. The fields were cultivated and the cattle were found in the immediated vicinity of the farms. Villages and farms continued to be the dominating form of habitation up to our century.

TRADE AND POWER CENTRES

The first towns, places for trade and commerce, with a few thousand inhabitants, emerged in the 9th century together with the viking trade. Hedeby at the German-Danish border, Polotsk in Belarus, Novgorod in Russia and Birka west of present Stockholm were such early centres of trade.

The first major city expansion in Europe occurred during the 12th and the 13th centuries. The medevial cities, surrounded by a rampart, a city wall, developed as strongholds in the process of nation building. These cities were centres of power for the surrounding land and they controlled trade in the region. Lübeck, Kalmar, Visby, Tallinn, Vilnius, Gdansk, and Krakow are some of these medevial cities.



Figure 1.2 Novgorod during Hanseatic times, in the 14th century (Ennon, 1972) $\,$

97 % LIVED ON COUNTRY SIDE

In the early 19th century still only some 3 % of the population in Europe lived in cities. It was now that industrialisation, which required centralisation of resources, became the driving force for a new wave of urbanization. The fast increasing population was absorbed by the growing cities and the need for workers in factories. At the same time the fruits of industrialization, such as transport technologies - the railway and thereafter the car - and energy, in particular electricity, distribution, allowed cities to grow in size. Agriculture, forestry and fishery on the contrary, required a shrinking part of the population and many young people left farms, forests and the sea to find their future in the growing cities.

LAST WAVE OF URBANIZATION



Figure 1.3. A street in Visby during the 19th century. (Drawing by A.T.G.)

The last wave of urbanization occurred from the 1950ies to the 1970ies. Cities grew through suburbanization, in parallell with depopulation of the country side. Large areas for housing in multi-storied apartment buildings were built in the outskirts of cities at the same time as city centres were adapted or rebuilt in a rather drastic way to allow for car traffic. From the late 1970ies urbanization has steadily abated.

URBANIZATION TODAY

Today the degree of urbanization varies between some 60-70 % in the states in transition to more than 85 % in the West, e.g. Germany, Denmark and Sweden. A majority, more than 50 % of the population, still lives close to the coasts, less than 30 km from the sea line. The old centers for trade and commerce are still important. Outstanding examples are St Petersburg, Gdansk, Stockholm, Hamburg and Copenhagen on the coast. The medevial power centres are however small. Visby, Kalmar, and Lübeck are examples. The Baltic region today has 29 cities of more than 250.000 inhabitants. LR

making mobility in cities increasingly difficult. The turnover of resources and the resulting waste piling up are today far from sustainable and constitute increasing problems for cities.

It is in this context that the connection between the two becomes clear. To solve physical sustainability in human habitats we shall have to create more efficient links between urban and neighbouring rural areas. Such links between, for instance, waste streams of towns and food production areas and forests in the country are thermodynamically most efficient in smaller systems. However, as long as we value the city for its cultural richness we shall have to accept a larger-scale and a different strategy. But these larger-scale streams of energy, nutrients and waste must still be environmentally clean and use renewable resources. A larger part of the built environment - like small towns, distant suburbs and, in general, townscapes closley connected to green areas - might use systems on an intermediate scale. Developing such links is part of the sustainability programme.

1.3 The global perspective – increasing urbanization

Fast and 'uncontrolled' urbanization is the greatest problem of habitation in developed as well as in developing countries in the world today. Between 1950 and 1990 the population of the world's cities went up from 200 million to over two billion, with three billion expected by 2025. Today there are 20 'megacities' of over ten million people. World-wide, 60 cities have now grown to over four million people (one of these, St Petersburg, is found in the Baltic region).

Urbanization based on industrial development, is a trend that started in Europe and North America and is now gripping the world. Paul Knox (1994) provides a useful outline of urbanization as a process (Figure 1.4). The outcomes of the urbanization process are closely related to the



Figure 1.4 Urbanization: processes and outcomes (modified after Knox 1994:8)

dynamics of the city, its internal structure, urban form, and transportation patterns, or, more generally, to urban change.

Today almost 50 per cent of the world population is urban. The growth of urban population will continue, but growth rates in core countries and also in periphery countries (except in East Asia) are slowing (Table 1.1). The world is also less dominated by 'megacities' than predicted some ten years ago. Only 3 per cent of the global population resides in cities of ten million or more inhabitants. The real problem of worldwide urbanization is the rising poverty level. There are over 100 million homeless in cities, mainly in developing countries, and the number is growing. Housing and infrastructure problems are underestimated in many countries.

Generally there are four groups of problems of world-wide urbanization:

• *Housing*, 'how to house the growing population?'. In many cities too high rents and the lack of available flats has forced migrants to build their own houses. The proportion of slums and uncontrolled settlements in the cities of Africa, for example Addis Ababa and Mogadishu, and Latin America, for example Casablanca and Bogotá, can be well over 50 per cent. In Asia, the accommodation problem of poor cities is well illustrated in India. In Calcutta, Bombay, Delhi and Madras, half of the urban population are shanty or slum dwellers. Poverty in the slums, crumbling tenement buildings, means overcrowding, poor sanitation, drugs and crime, and the risk of diseases, like urban malaria, tuberculosis, and AIDS.

Urbanization in the Baltic region

Table 1.1 Urban populations. World and Baltic basin.				
Region / Country	% of total	Av. annual growth		
	population	80-9	90-94	
Sub-Saharan Africa	31	4.9	4.8	
Arab countries	56	4.4	3.7	
East Asia /Pacific	32	4.6	3.9	
South Asia	26	3.5	3.3	
Latin America/Carr.	74	3.0	2.6	
"East" Countries				
Russia	73	1.2	-0.2	
Belarus	70	2.2	1.5	
Poland	64	1.4	1.0	
Estonia	73	1.0	-0.9	
Latvia	73	1.0	-0.8	
Lithuania	71	2.1	0.9	
"West" countries	77	0.8	0.3	
United States	76	1.2	1.3	
United Kingdom	89	0.3	0.4	
Belgium	97	0.2	0.5	
Germany	86	0.4	1.0	
Sweden	83	0.3	0.6	
Finland	63	0.7	1.1	
		0.1		

Figure 1.5.

Major cities in the Baltic region and degree of urbanization. (cf.table to the right). Industrialized areas are shaded. Data on development of urbanization shows that growing cities are found typically in the East, (for example StPb, Tallinn, Riga, and Gdansk-Gdynia), constant urban populations in southern Finland and eastern Sweden (Helsinki, Turku/Åbo, Stockholm) and decreasing urban populations typically in the west (Göteborg, Copenhagen). (Data for city populations are from VASAB 1994 or Folke et al 1996 and refer to years 1990-94).

Cities 5 000 000 to 8 000 000 1 000 000 to 5 000 000 200 000 to 500 000 Urbanisation (%) 8 0 to 90 7 0 to 80 6 0 to 70 Archangelsk Future Statemen Statemen

• *The overall quality of daily life* is indeed the second important group of problems of fast global urbanization.

• Insufficient administrative control constitutes the third group of urban development problems. Urban governance and planning might even be the weakest link in the solution of problems concerning basic housing, provision of water, sanitation and electricity services, provision for schooling and medical services, and control of traffic. The famous example of turning the city of Curitiba in Brazil towards sustainable urban development shows that community programmes concerning environmental education in schools, and building day-care and healthcare centres had a key role. The

Major Cities Population				
(>200 000) of cities				
St Petersburg	$5\ 035\ 000$			
Novgorod	$234\ 000$			
Kaliningrad	$413\ 000$			
Pskov	$288\ 000$			
Murmansk	$455\ 000$			
Petrozavodsk	$279\ 000$			
Minsk	$1\ 608\ 000$			
Gomel	503 000			
Vitebsk	365 000			
Mogilev	364 000			
Grodno	$295\ 000$			
Brest	287 000			
Bobruisk	226 000			
Katowice (m)	$2\ 180\ 000$			
Warszawa	2644000			
Lodz	838 000			
Krakow	$744\ 000$			
Wroclaw	641 000			
Poznan	583 000			
Gdansk-Gdynia (m				
Szczecin	414 000			
Bydgoszcz	384 000			
Lublin	350 000			
Bialystok	$274\ 000$			
Czestochowa	260 000			
Radom	230 000			
Kielce	$230\ 000$ $214\ 000$			
Torun	$214\ 000$ $202\ 000$			
Tallinn	$492\ 000$			
Riga	897 000			
Vilnius	$\frac{596\ 000}{429\ 000}$			
Kaunas				
Kleipeda	206 000			
L'viv	807 000			
Ostrava	327 000			
Karvina	285 000			
Berlin	3 438 000			
Hamburg	1 661 000			
Kiel	315 000			
Rostock	244 000			
Lübeck	260 000			
Stockholm(m)	$1\ 435\ 000$			
Göteborg(m)	704 000			
Malmö(m)	$458\ 000$			
Helsinki(m)	848 000			
Tampere(m)	$268\ 000$			
Turku(m)	$240\ 000$			
Copenhagen(m)	$1\ 359\ 000$			
Aarhus	$261\ 000$			
Oslo	$458\ 000$			
Bergen	$212\ 000$			

reorganization of transportation, and simple solutions for garbage problem were also important in Curitiba's programme.

• *Environmental considerations* constitute the fourth group of problems which global urbanization is dealing with. Many megacities are in fact heavily polluted.

1.4 The processes of urbanization

Urbanization is driven by a series of interrelated processes of change. These processes determine the character and dynamics of the urban systems that develop. They are:

- economic
- demographic
- political
- cultural
- technological and
- social.

Within a *region or nation* the growing towns and cities can either develop as a hierarchical system or as a networking system. Within the *cities themselves* the processes determine the structure of the built environment. We may have different patterns of urban land use or different patterns of transportation and communication.

There are many possible outcomes, or types of city, of these processes. This spans from the too well-known suburbs to fantastic edge cities, 'dreamscapes' and theme parks as new urban realities. At the same time, however, the value of old urban areas and traditions diminish. The processes also determine the social life and social ecology of the cities, and influence the social and demographic composition of neighbourhoods.

At the heart of the dynamics that drive and shape the development of individual cities are economic changes. The sequence and rhythm of economic change will be a recurring theme as we trace and retrace the imprint of urbanization and urban change. The formation of a global economy is one of the major structural trends of our epoch (Castells 1992). It is an economy where capital flows, raw materials, labour markets, commodity markets, information, management, and organization are internationalized and fully interdependent throughout the planet.

One of the most important subsets of interdependence is that between *demographic change* and urbanization. Cities are, in a fundamental way, the product of their people (Knox, 1994). Put another way, the character of urbanization is shaped to a significant degree by the size, composition, and rate of population change. Yet the condition of cities themselves, as in the case of rapid urban growth in less developed countries, can in turn influence those characteristics. Crowded and degraded slum environments can lead to higher death rates, and cause urban stress. On the other hand cities with good amenities tend to attract particularly large numbers of migrants. Border towns and big cities with international ports and airports tend to attract a disproportionate share of immigrants.

It is also possible to find parallel examples of the interdependence of urbanization and cultural change. The broad cultural shift from modern and industrial society towards post-modern and post-industrial society that began in the 1970s and 1980s brought among other things a renewed interest in the past that has found expression in urban form. Historic preservation and the recycling of past architectural styles has increased in importance. In the cultural change 'place promotion policy' has become an important instrument of urban renewal processes.

There are many different examples of the interdependence

For cities to become sustainable, they need to develop a strong awareness of the ways they affect the world. They must create their own control systems, acting like thermostats, continually monitoring their global and local environmental impacts. Responding to this feedback, real 'ecocities' would take all the necessary measures for global and local ecological rebuilding into their grasp. They would reorganize their transport, energy, food, and sewage systems for maximum efficiency and minimal environmental impact. Ecocities would acknowledge the limits of the Earth's carrying capacity by nourishing the wellbeing of their local hinterland. Global dependence would be replaced by more sustainable local living.

Girardet (1992)

of urbanization and *technologi cal change*. Many technological changes, while not strictly causing or being caused by changes of urbanization, have been important preconditions for change. This is particularly true for the different phases of suburbanization.

1.5 Suburbanization

Suburbanization is one of the main consequences of urban growth. There are many explanations and interpretations concerning the suburbanization process (Bourne 1996), but two perspectives dominate.

The first perspective sees suburban development as a natural and evolutionary process of accommodating growth by extending the urban margin. New growth takes place from the inside outward to the urbanized fringe, through a myriad of individual decisions, but still largely tied to jobs in the urban core. This process has meant continuous, and sometimes 'uncontrolled', growth in the urban fringe, and tends to result in so-called *dispersal cities*.

The second perspective sees suburbs as a means of escape from the health and environmental problems of the city. The growth of such suburbs might either be a consequence of individual decisions to move out or through centralized planning initiatives. Examples of planned 'green and healthy' suburbs are the earlier 'Garden City' movement and later the construction of 'New Towns'. The construction principles of some new residential neighbourhood units in Nordic countries included the ideas of 'better living environments for families with children' and were clearly a part of the welfare state project.

Also the large-scale building of suburbs with apartment blocks in the large cities in the region were welfare projects. After all, many families moving in came from very poor conditions. It is a paradox that these hegemonic projects of the welfare state have now after 20-30 years turned against the welfare state itself. In many cases, apartment blocks are problem areas in cities, for example in

SUSTAINABLE CITY PROGRAMMES

Healthy city

Healthy city programmes have been certain kinds of predecessor of sustainable city programmes. According to the World Health Organization, *a healthy city* has a clean, safe physical environment, and its development rests on a sustainable ecosystem. It provides safe and durable supplies of food, water and energy, and efficient waste disposal. It also provides entertainment and leisure activities that facilitate interaction and communication among its citizens, and has a strong, mutually supportive, integrated, non-exploitative community. A healthy city values its past and respects the diverse cultural heritage and specialities of its citizens, regardless of race or religion.

City fruitful

These principles can also be seen in the Dutch *City fruitful* programme in which the ambition at the heart of urban design is to integrate **E**nergy, **E**cology, **E**conomy and **E**motion into a new concept of the city. In a new kind of urban culture energy is an important factor in flow management and in planning for proximity; ecology has its meaning in areal guiding models and in creating green belts in urban areas; economy calls for the imagination and mental strength of the residents and entrepreneurs to create sustainable cycles of pro-

the countries of the Baltic region. The problems consist of:

- polarization: good areas, bad areas and ugly areas lead to segregation in society.
- social problems: selective population, 'community weakness' of inhabitants,
- leisure-time activity problems of young people, problems of human relations at home,
- environmental problems: dense mass of buildings, monotone grid plans, few green areas, high car ownership rates, and
- problems of physical structure; the short age of panel houses.

1.6 The principles of sustainable habitation

Cities are today clearly not in line with the goals of sustainable development. For cities to become sustainable, they need to develop a strong awareness of the ways they affect the world (Girardet 1992). They must create their own control systems, acting like thermostats, continually monitoring their global and local environmental impacts. Responding to this feedback, real 'ecocities' would take all the necessary measures for global and local ecological rebuilding into their grasp. They would reorganize their transport, energy, food, and sewage systems for maximum efficiency and minimal environmental impact. Ecocities would acknowledge the limits of the Earth's carrying capacity by nourishing the well-being of their local hinterland. Global dependence would be replaced by more sustainable local living.

The strategies for ecologically sound urban development are different in the developed and in the developing world. After several decades of grappling with urbanization in the developing world, there is now a broad measure of agreement on what it takes to manage cities successfully. Six crucial elements can be identified (Buckley 1996):

- *decentralization*. Local municipal authorities should be given the power to govern cities, with full support from central government.
- *community participation*. Local democracy and collective participation are essential to good city management.

duction and the principles of recycling in urban areas; and emotion means the creative and participating city of all citizens.

Ecopolis

The real *ecopolis* strategies have just started to aim for sustainable habitation. One of the most systematic presentations is Sybrand Tjallingii's book *Ecopolis* (1995). In this book, Tjallingii gives strategies for ecologically sound urban development. The ecopolis strategy framework offers a threefold strategy concerning *flows*, sustainable 'chain-management', *areas*, the use of ecological potential in the area for 'functional value', 'perception value' and 'future value', and *participants*, increase in involvement.

Responsible city

The guiding models for chains, *the responsible city*, concern prevention of pollution, re-use of resources and use of renewable resources, i.e a responsibility for the quantity and quality of flows. *The living city*, focuses on the use of local natural and cultural potential; the spatial structure for flow management; health and differentiated human habitats; and green corridors for plants and animals. *The participating city*, as an ecopolis strategy create conditions for economic cooperation and visible ecological relationships.

- *economic opportunity*. Strong effort should be made to stimulate the local economy so as to create jobs in both formal and informal sectors, and thus reduce poverty.
- *infrastructure*. Public-private partnership should be used to put in place efficient systems for roads, water, energy supply, public transport and waste management.
- *land rights.* These should encourage private investments, while protecting the environment, security and public health.
- *municipal finances*. These should be transparent, with local property and land taxes and coherent.

In an urban context sustainability means a wide range of things. Some of these are:

- resource budgeting
- energy conservation and efficiency, renewable energy technology
- long-lasting built structures and reuse of old ones
- proximity between home and work and efficient public transport systems
- waste reduction and recycling, organic waste composting, and a circular metabolism.