

The Environment and the City

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An introductory contribution to the Warsaw Congress.

The need for change in planning theory and praxis

Awareness of environmental issues is growing all over the world. Sweden's environmental protection policy is ahead of that of many other countries and Swedish public opinion has woken up to the situation. Despite this, large-scale production is accelerating; the planning and construction of new motorways and airports are in full swing; more cars, buses, oil and coal furnaces are operating than ever before; industries, factories and waste-burning installations still discharge poisonous gases. Consequently, well-known sources of pollution are causing new environmental problems and are damaging the remaining environmental assets, both in Stockholm and in most of our other cities. People's practical participation in environmental issues is relatively low and mostly concerns preservation of objects and places.

I do not question the honest ambition of politicians nor of individuals. Yet the adoption of tangible measures to facilitate a more sustainable environmental development are unsatisfactorily few, apparently because such measures tend to be at the expense of our living standards. The environmental approach to life unluckily comes into collision with our lifestyle and practical and business interests. There is a strong positive correlation between the economic growth we strive for and our utilization of natural resources. Therefore, we need more credible arguments to convince those who have not wholly understood the grave threat to our "common future" posed by pollution.

Moving from the polemics of politicians and people's behavior to our own responsibility, I suggest that a great deal of the impoverishment of the

environment is due to the planner lacking basic environmental knowledge and having an unsettled theoretical background. We need to define which additional areas of knowledge and application are required by planners, on the one hand, and, on the other, the definition, scope and implementation of programmes at all planning levels. To deal with this I suggest an intensification of research and the development of planning theories based on principles of nature. Hence, I plead for the need for a change of paradigm for physical planning. By following the rules of ecology, I believe we may return to the classical beauty and pluralism of nature. At the start of our workshop I am relying on the contributions of participants to this congress to provide a range of answers on how to improve the planning methodology and enrich our professional competence.

Definition of the concept of environment

Since we are an international assembly I would like to discuss the term 'environment'. Our human ability to describe and define our surroundings can never be complete, yet we need definitions to provide a medium for the exchange of information. In his Pereslavl-Zalesky paper our colleague from Moscow, A Vysokovsky, made an important analysis of the semantic differences between the words *environment* (Eng), *milieu* (Fr) and *sreda* (Russ). He emphasized the significance of a mediator between man and his surroundings in the Russian word *sreda*.

I agree with his viewpoint and believe this approach will be fruitful for further discussions on this subject. I should like to start by defining the concept of environment as "the external conditions and circumstances of the natural and artificial elements of the surroundings in which humans are living, which exert an influence on their development and behavior."

This definition is, I hope, wide enough to cover the scope of human relationships and adjustments to their environment.

The relationship between political aims and available resources

To contribute towards creating a better environment, as well as for many other things, we need to have the will, and the means and skills to use them.

I take it for granted that all of us dealing with physical planning have a strong desire to contribute towards a healthy and beautiful environment, where a city and its surrounding region are in harmony with nature. That is why I shall continue by addressing questions of the means (money and equipment) and then plead mainly for developing our own know-how.

The scope for action depends on finances

The western economy seems to have survived the crisis of the 1970s by reorganizing production, introducing new technology, etc. Even the economy of East European countries is undergoing recovery. I hope we are now better prepared to meet the on-going Middle East crisis, too. I do not intend to delve into economic development; I would only like to remark that the economy of the industrialized world is not bad.

Action ought to be able to draw on substantial financial resources. The findings of the Brundtland Commission made it obvious there is no leeway to discuss a limitation of expenses. The protection of our environment must cost money, now a fully accepted principle in Sweden.

Our intention is to introduce a "green" Gross Domestic Product (GDP). This means making the diminishing natural resources and environmental damages visible in the statistics of our economic development as negative entries. In the USA budget for 1991, one billion \$ has been asked for "US Global Change Research Program". The 7G countries recently agreed in Houston to allocate substantial means to deal with environmental issues. All this is very encouraging. The question is whether it is enough.

The scope of action depends on industrial and technical equipment

Industrial production has demonstrated its ability to adapt itself to new demands. Extensive structural changes have taken place in our industry over the last decade. The steel industry has, for instance, been substantially slimmed down and restructured. Industrial growth, has on the other hand, occurred in the engineering, chemical and forestry industries. Observing the flexibility of industrial production and its prompt adaptation to new demands, I believe that industrial activities should also be redirected to promote environmental protection and nature conservation.

I suggest that at this congress our endeavours should focus on *the scope of action that is dependent on the skills and competence of the planner.*

In one way or another each of us has faced the question of what should be done to improve the environment. I am aware that there are differences in the system of education and in planning praxis in different countries. Differences should also be found in attitudes, in the way of living and in the cultural values of the society where the planner is working. But far greater

differences are found at different periods of time. Only some decades ago the architect-planner was expected to be as skilled at designing a soup-spoon as a regional plan, simply by analysing the functional use of the item or the subject. If our planning philosophy were still to base its knowledge solely on (scientifically) observable facts and data of sensory experience, then we have probably reached the telos of the planning profession. When we now face our "common future" with both partial and structural urban problems we have to work out answers to the question of how to restore and avoid further destruction of the urban environment, based on the principles of the nature. – I believe we agree that we have to incorporate environmental aspects in the planning process. The questions are: How? What do we have to learn?

1. The planner has firstly to learn enough to be able to understand:
 - current environmental problems, thus becoming able to collaborate with scientifically trained persons from other disciplines, such as ecologists, resources analysts, atmospheric, soil and water specialists, etc.;
 - economic planning and the use of resources;
 - research work with householding of resources and the ecological running of the built environment;
 - the consequences of the destruction of the atmosphere's ozone layer and the acidification of soil and water.
2. The planner has to learn to be able to analyse:
 - how vegetation and soil conditions influence the microclimate in a particular area;
 - current trends within the area, e.g. atmospheric inversion and smog.
3. The planner has to learn to ask, determine and discuss:
 - what kind of appropriate information and so called soft basic data is needed in each case on each planning level;
 - which adjacent professions and disciplines are of interest for the case.

This process of learning and understanding will, I believe, lead to the insight that human welfare is dependent on the welfare of nature. The next step ought to be the application of this new insight.

1. I suggest that a negotiable method for ecological planning, adaptable at all levels of physical planning, is to incorporate the ecological aspects in a resource saving perspective, i.e. to bring together energy questions with the cybernetic aspects of the planning and decision-making that determine the use of land and city structures. It is neces-

sary to understand in which social and professional context the planner is operating. The acquisition of skills in environmental questions will be of little use if the holder of those skills cannot utilize them in relation to the forces operating in that society.

2. The dissemination of information on the underlying conditions and assumptions is, therefore, imperative. I would like to underline the importance of the state of mind of people in our surroundings, who might be open to change. Here is a task for the "enlightened" planner: To influence public opinion and inform the politicians.

When confronting new problems the profession needs:

- complementary education to facilitate the formulation of measures and actions, such as the implementation of measures intended to achieve the desirable environmental effects;
- insight concerning an ecological approach;
- the ability to tangibly describe the consequences of different measures and actions that follow from the new approach;
- experience from the "field" to complete the theory.

I am aware that the above list ought to be made more complete, but even before that I venture to say that it is most important to formulate a new paradigm for sustainable urban and regional planning with a humanistic approach.

The complexity of the problem can be gleaned from a vast number of case studies and experimental projects all over the world. To formulate a problem is the first step towards solving it, but many difficult steps remain. We are still working experimentally. Obviously far more experience of implementation is needed. For combatting environmental pollution and securing ongoing ecological protection we require coordinated action on a national, regional and local scale, which entails the adoption of a holistic interdisciplinary approach.

Concluding remarks

Mankind has increasingly come to rely on its own knowledge and ability, because nature can no longer tolerate the load of waste and pollution we discharge into our environment. It is now vital to learn how to deal with all the external conditions, circumstances and influences of the natural and artificial elements on our surroundings, since they affect the development of the individual and our society. Meanwhile there is a risk that people's fear of environmental destruction can be misused by opportunists, judgement-day prophets and sensation-seeking journalists. Some consider the

need to meet the environmental crisis so urgent that they talk of abandoning the democratic mode of decision-making processes. Exaggerations must be avoided and be replaced by sustainable arguments. Our intellectual responsibility is to search for the truth and describe the situation as realistically and correctly as possible. To identify and quantify the interdependence of human society and natural systems ought to be our main objective.

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