# APPROACHES AND COMPROMISSES IN THE CONCEPT OF LANDSCAPE

# (EDITORIAL)

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#### ABSTRACT

An integrated approach to the landscape requires an exact formulation of the main object of our interest – the landscape. Nowadays, the concept of landscape occurs on broad scale in other sciences. Basically, at least two main streams should be identified: the so called "hard" geosystem based concepts, and, the "soft", cultural-heritage, value and perception based concepts of landscape. The first approach is represented by geographers and landscape ecologists, the second one by very different groups of "friends of landscape", including specialist from the first group, as well as very broad group of social scientists to architects and artists. The problem is not in the broad scale of concepts, but in the acceptance of landscape science in the practice. The paper explains two points of view on landscape definitions.

#### **INTRODUCTION**

A long term desire of specialists in geography, ecology and landscape ecology was a general approval of complex, large-scale approaches to the landscape - nowadays recognised as the "integrated" approach - in land-use and spatial planning procedures (Fabos, 1979, Ružička, Miklós, 1982, Barsch, H., Saupe, G. et al., 1993, Langevelde, 1994, Izakovičova, Miklós, Drdoš, 1997 and many others). This aspiration has been supported by substantial scientific research since the sixties of the last century (e.g. Neef, E., 1967, Schmithüsen, J., 1976, Zonnenveld, I.S., Forman R.T.T., (Eds.), 1990, Haase, et al. 1991, Naveh, Z., Liebermann, A., 1994). The complex approach has been pronounced in scientific circles in the German geographical/landscape ecological school - including scientific centres in Central Europe (Neef, E., Richter, H., Barsch, H., Haase, G., 1973, Proceedings 1976, Drdoš (ed.), 1983) - and in the Soviet landscape sciences school (the Landshaftovedenyje, Sochava, V. B., 1977, Preobrazhensky, V.S., Minc, A.A., 1973). Many scientific conferences and symposia have been devoted to clarifying the basic concepts, e.g. the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> international symposia on the problems of landscape ecological research organised in by the Institute of Landscape Ecology of Slovak Academy of Sciences (Proceedings 1973, 1976, 1979), or the congresses of the Czechoslovak geographers (e.g. the XVIth congress, Zborník, 1978). They discussed, sometimes even disputed the relations and differences between "classic"complex physical geography and later born landscape ecology. In general, this school understands the landscape as a geographical complex, a geosystem. Another group of scientists - let's call them the West European-American landscape ecological school - focused on the structure of land cover and its pattern (e.g. Forman, R.T.T., Godron, M., 1981, 1986, Turner, M., 1990). Of course, those schools are never distinguishly pronounced and never expressed any opposition. This was confirmed through the common effort to establish the International Association for Landscape Ecology, which happened in Piešťany (Slovakia) in 1982 during the VIth International Symposium on Problems of Landscape Ecological Research.

Nowadays we can also recognize a third distinguished group of "friends of landscapes" coming from different professional backgrounds, loving the beauty and other values of landscapes, whose activities are based more on the cultural-heritage approach to the landscape. They consider the landscape to be a phenomenon, as the "scape" of the land, as cultural-heritage value. The specialists from this group do not always insist on the deep knowledge of landscape as geosystem, on the knowledge of the elements of landscape, of their physical structure (see e.g. Breuste, J., Kozová, M., Finka, M. (Eds.), 2009).

Of course, this is not a new issue. According to Naveh and Leiberman (1994) the landscape is historically perceived in two ways: as a tangible material reality and also as an intangible, mental and artistic experience. In the following lines we present a comparison of two examples of the understanding of landscape and their consequences for the practical acceptance of landscape-ecological concepts.

## Landscape as a geosystem - a "hard" definition of landscape

The concept of landscape as a geosystem is broadly accepted among geographers and landscape ecologists. It is based on the theory of general system (Bertalanffy, L. von, 1968). The general geosystem theory was modified by many scientists according to the goals of geographical sciences (e.g. as Krcho, 1968, 1978, Chorley, Kennedy, 1971, Demek, 1974, Sochava, 1977, Preobrazhensky, 1983, Snacken, Antrop, 1983, Miklós, Izakovičova, 1997 and others). A congregated system definition of landscape according to the understanding of the above mentioned authors may be presented as: Landscape is a geosystem, an integrated complex of elements of geographical sphere and their interactions with each other. Of course, this definition might be modified by various "improvements", mentioning the time, the space, the structure, the dynamics and other aspects of the system, but those, who really follows the geosystem theory know, that all those aspects are implicitly included within the basic definition of the system, as fundamental attributes of the "elements and their interactions".

The explicit expression of the elements and the structure of geosystem decisively helped to implement very successfully applied conceptions of Landscape Ecological Planning (Landep, Ružička, Miklós, 1982) as well as the concept of the Territorial System of Ecological Stability (TSES) to the legislation and planning practice in the Slovak Republic. The basis was the definition of landscape as a geosystem in the Act 50/1976 Coll. on Territorial Planning and Building Code (Building Act)., amendments 262/1992 Zb. and 237/2000 Coll. which reads as follows:

Article 139a Terms of territorial planning:

"(5) Landscape is a **complex system** of space, location, georelief and other mutually, functionally inter-connected material natural elements and elements modified and created by man, in particular geological basement and soil creating substratum, water bodies, soil, flora and fauna, artificial objects and elements of utilisation of territory, as well as their connection determined by socio-economic phenomena in the society. Landscape is the environment of man and other living organisms."

Second decisive moment of this success was the definition of the properties of the elements of landscape as **obligatory regulative** for planning, namely for the "ecologically optimal spatial arrangement and functional utilisation of territory", as:

Article 139a Terms of territorial planning

"(1) **Regulative** of spatial arrangement and functional utilisation of territory is a **binding** guideline which guides the **localisation and arrangement** of a certain object or realisation of a certain activity in territory. It is expressed through **values of properties of elements of landscape** structure by words, figures and graphically, if possible. Regulative has a character of **bans, limitations or supporting factors** in relation to spatial arrangement and functional utilisation of territory. In this way the regulative determines banned, limited and acceptable activity or function in territory."

So, the certain properties of the elements act as **bans**, **limitations** and **supporting factors** of spatial arrangement.

#### Landscape as a natural-cultural phenomenon – a "soft" approach to landscape

A compromise between different approaches to landscape are represented in the European Landscape Convention (Council of Europe, Florence,  $20^{th}$  October, 2000), celebrating its  $10^{th}$  anniversary Basically, we appreciate the role of the Convention, the huge asset of the Convention towards the development of the acknowledgment of landscape in politics. However – like every international convention – also this one shows the compromises between professionals, diplomats and politicians. The following lines aim to point out a few possible problems with the acceptance of "softly" defined concepts of landscape.

The definition of landscape in Article 1 of the Convention says:

,, a) "Landscape" is an area, as **perceived** by people, whose **character** is the result of the **action** and **interaction** of natural and/or human **factors**; "

One may say that each word in the definition is true. Nevertheless, it is a nonmaterialistic definition, landscape is not defined as a material system structured by elements in interaction, but as an imaginary entity based on *perception*, *character*, *action*, *interaction*, *factors*.

Other articles define the landscape as an assembly of *"heritage", "values", "quality",* as:

"Article 5 – General measures

Each Party undertakes: a) to recognise landscapes in law as an ... expression of ... their shared cultural and natural **heritage**, and a foundation of their **identity**; "

"Article 6 – Specific measures

A Awareness-raising

Each Party undertakes to increase awareness ... of the value of landscapes, ...

D Landscape quality objectives

Each Party undertakes to define landscape quality objectives ... "

The problem is not the wording of the definition, but the acceptance by practice and the possibilities to apply such definition to practical procedures. The Convention states that the ("softly" defined) landscape should be treated by "**hard" measures**, as:

"Article 3 – Aims

The aims of this Convention are to promote landscape **protection**, **management** and **planning**, ...

Article 5 – General measures

Each Party undertakes: ... establish and implement landscape **policies** aimed at landscape **protection**, **management and planning** ...

How is possible to force those hard and mostly by law supported policies to accept softly defined landscapes?!

As an example might serve the promotion of the protection of landscape heritage, values and qualities. Every state of landscape, every what holistically perceived state of its structure, its **quality**, **value**, **"scape"** is a result of the use of single material elements of landscape, result of land-use. Those **single elements** - in the reality displayed as dots, lines and areas of the landscape space – create the **"scape"** of the land, which we can evaluate – probably in a holistic way - as more or less valuable, of lower or higher quality.

If we wish to protect or change this "scape", values, quality, there is no way to do it **"holistically"**. In our countries the management of the changes is regulated by legal procedures – by **spatial planning**. Each policy starts with a simply materialistic question: do we like the present structure of the landscape or not? If yes, we shall do everything possible to keep the single elements of the landscape structure – their quality, extent, position – as they are now. If not, we try to promote changes: each change of the landscape structure is based on the change of single points, lines and polygons of present landscape elements. Furthermore, it is to mention, that each part of the landscape has its owner, who has to be obliged to keep or change its ownership in a proper way by legal tools.

Of course, this is nothing new: there are functioning systems of spatial/territorial/physical planning, land-use planning, ecological network design, but they are in various countries on **various level** of complexity and integration.

Therefore it is inevitable, that policies and legislation

- define the landscape as a certain **system of material elements** which can be changed or preserved;
- **regulating** the changes related to these material elements.

If we shall not apply this approach and the landscape is not defined strictly, materialistically, if its elements are not-tangible, if they are not related to regulative,

then policies, planning practices will apply the theoretical provisions in a **voluntary way**, not as an **obligatory regulative**.

#### Other theorethical problems in the Landscape Convention

There are few other antilogism in the Convention, taking into account the geographical scientific point of views. Let us open three basic questions:

a) Is the landscape only an **element** or a **part** of something else, or it is a **complex system**, which is structured by **all elements** of geographical sphere?

Of course, the scientific understanding promotes the second statement, the question might sound even irrelevant. However, the paragraphs of the Convention read as follows: *"Preamble* 

Believing that the landscape is a key element of individual and social well-being ...

Acknowledging that the landscape is an important **part** of the quality of life for people.. Article 5 – General measures

Each Party undertakes:... to recognise landscapes in law as an essential component of people's surroundings ... "

So, the Convention reads, that landscape is not a general frame condition for the social well being and for the life quality, not a spatial frame, not the environment itself, but only an element, a part, a component.

b) Is the landscape **a thing**, that is not everywhere, **only somewhere**, where we designed it, where it has values, or everywhere, covering the **whole mainland surface**? Again an apparently irrelevant question, but the Convention reads as follows:

"Article 15 – Territorial application

1 Any State or the European Community may ... specify the territory or territories to which the Convention shall apply.

2 Any Party may, at any later date, by **declaration** ... **extend** the application ... to any other territory

3 Any declaration ...made ... above may ... be withdrawn by notification ... "

Of course, the above mentioned paragraphs relates to the regional application of the Convention, not to the definition of the landscape. Nevertheless, the paragraphs suggest that landscapes may/will appear only where the parties of the Convention **wish them to be**, they can **specify, extend** or **withdraw them**! This conflict could deeply influence the real care and planning of landscapes.

Landscape ecologists prefer the systematic approach, they understand landscape as

- a complex (integrated) system

- which is composed of all other elements of geographical sphere

- a whole-mainland-surface covering entity,

- a universal frame for life and activity of people.

c) Problems of (political) acceptance of the Convention

We would like to believe that each Party signed the Convention with a good will. Anyway, by particular application of the Convention one can not exclude political/economical problems in various countries, conflict of interests among stakeholders, therefore, we mention other problems, which might appear during a very strict application of the following paragraphs:

"Chapter II – National measures

Article 4 – Division of responsibilities

Each Party shall implement this Convention ... according to its **own division of powers**, ... in conformity with its constitutional principles and administrative arrangements ... Chapter IV – Final clauses

Article 12 – Relationship with other instruments

The provisions of this Convention **shall not prejudice** stricter provisions ... contained in other ... national or international instruments."

Neither of the latter cited paragraphs appears dangerous, and we hope, they are never to be misused. It is also necessary to say, such or similar wording in international documents is quite common. It is just to express, that if reading them very rigidly, jurisdictionally, they could be understood that the Parties are quite free to apply the Convention according to their (good?) will, they may treat landscape actually as they did prior to the Convention, without strict legal sanctioning!

### CONCLUSION

The present development of landscape sciences is on high level, much higher than several decades ago. Also the acceptance of our science in practice has improved, several landscape-ecological concepts has been successfully applied to policies and planning processes. Objectively, the theory and the practice of landscape ecology decisively influenced the basement pillars of sustainable development, of the environmental protection, natural resources management, nature conservation, e.g. see several chapters of AGENDA 21, the pan-European ecological network concept, NATURA 2000, landscape planning procedures, the integrated watershed management, integrated landscape management, and, of course, also the birth of the European Landscape Convention. In spite of that, the acceptance of those issues is still not on the desired level, there is still a gap

between politics and science. Therefore, further development of both theory and application of landscape ecological concepts is still a priority issue of all specialists in landscape sciences.

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