

## THE CONCEPT OF THE LANDSCAPE AND ITS ACCEPTANCE IN THE PRACTICE

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### Abstract

The landscape is historically perceived basically in two ways: as a tangible material reality and also as an intangible, mental and artistic experience. The basic practical policies related to the landscape ecology under the umbrella conception of the integrated land resources management are based on materialistic geocomplex/geosystem conception. In last decades a massive wave of the “friends of landscape” appeared, who shifted their attendance to the cultural-historical-value and perception based approach to the landscape. This wave is supported by the compromiss soft definition of the landscape and the wording of the European Landscape Convention. Nevertheless, the penetration of the landscape to the practical policies requires the materialistic approach and definition of the landscape.

*Keywords:* landscape, hard concepts, soft concepts, Convention

### 1. Introduction

In the year 2012 we celebrate the 30<sup>th</sup> anniversary of the establishment of the International Association for Landscape Ecology IALE, which happened in Piešťany (Slovakia) in 1982 during the 6th International Symposium on Problems of Landscape Ecological Research. By 1982 and by that event the community of landscape scientists – that time composed mainly by geographers and landscape ecologists – more-less finished one important period of discussions and disputes on the term of “**landscape**” – which had run during previous two decades, and, they accepted - with more or less detailed differences - the materialistic, geosystem/geocomplex based approaches to the landscape, as well as to the concepts of the most important directions of the landscape research and its implementation to the practical life.

After that period, especially in the first decade of the 21st century a massive new generation of landscapers presented theirs results oriented on non-materialistic - as the cultural, historical, aesthetical, perceptual - aspects of the landscape. That new wave has been strongly supported by an important political success of the landscape sciences – by adoption of the European Landscape Convention (Council of Europe, Florence, 20th October, 2000). So, nowadays at least two main streams of landscape researches might be identified: the traditional, sometimes called as “hard” geosystem based researches, and, on the other part, the “soft”, cultural-

heritage oriented and perception based concepts of the 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, architects and artists.

Of course, the broad scale of concept is not the problem, the problem might occur when implementing and accepting the landscape science in the practice. All that might entitle us to open again the discussions on the definition and other conceptual theoretical problems of the landscape.

## 2. The traditional approaches and new development

One of the core question of the landscape was and still is the concept of complexity. The complex approach has been pronounced mainly in scientific circles in the German geographical/landscape ecological school – including scientific centres in Central Europe (Neef, 1967, Neef – Richter – Barsch - Haase, 1973, Snacken - Antrop, 1983, Richling - Solon, 1993, and many others), as well as in the Soviet landscape sciences school (the “landshaftovedenyje”, Sochava, 1977, Preobrazhensky - Minc, 1973, Preobrazhensky, 1983). Many scientific conferences and symposia have been devoted to clarifying those basic concepts (e.g. Proceedings, 1973, 1976, 1979, Drdoš (ed.), 1983). The scientists discussed, sometimes even disputed the relations and differences between „classic”, complex physical geography and later born landscape ecology, between landscape as natural system and landscape as natural-man-influenced system, the role and the competence of geographers, ecologists, landscape ecologists, etc. In general, these schools understood the landscape as a **geographical complex**, either as natural-social (the “German” school), or just a natural, physic-geographical complex (the “Soviet” school). The more modern modification of those understanding was the development of the **geosystem** approach.

Another group of scientists - let’s call them the West European-American landscape ecological school – focused on the structure of **land cover and the landscape pattern** (e.g. Forman - Godron, 1981, Csorba, 1988, Turner, 1990, Diviaková, 2010, and many others).

It is to accent that those schools never demonstrated sharp divides and never expressed any animosity. Proof of that has just been the common effort to establish the IALE in Piešťany in 1982. All above mentioned approaches succeeded to penetrate to the practice, they still present a decisive and important stream of the practical application of the achievements of landscape ecology. They maintained its influence among researcher up to these days.

Almost parallel with the geosystem approach to the landscape also the holistic theories developed. We might underline in this stream the understandings of the landscape as a total human ecosystem (Naveh - Lieberman, 1984). Some of the holists left the materialistic understanding of the landscape and explained it just as an aspect, a reflexion of the real material world (see e.g. Zonneveld, 1981, Golley - Bellot, 1991, Hynek, 2010). It is to appreciate also the efforts to explain multiply aspects of the landscapes as a bridge from ecosystem to human ecology (Haber, 2004), as the triple view of landscape as „scenery – pattern – system“ (Zonneveld, 1995), or even the five dimensional „spatial-mental-temporal-joint natural-cultural up to complex system“ look on the landscape (Tress - Tress, 2001).

A relatively new massive group of „friends of landscapes“ came from different professional backgrounds, loving the beauty and other values of landscapes. Their work is based on the visible “**scape**” of the land, basically leaned on the evaluation of landscape pattern. A part of this stream shifted its consideration towards the appraisal of the historical landscape structures, the cultural-**heritage** features of the landscape pattern. Unfortunately, a deal of the works – especially of the younger generation of landscape ecologists – lapsed to a sheer spatial statistic of the land-use changes when playing with the GIS techniques. Other group likes to consider the landscape to be a phenomenon; they investigate the value, quality, perception. Sometimes this approach is presented as the approximation to the holistic approach, appreciating also elder concepts, as e.g. the landscape as “*genre de vie*” (Vidal de la Blache, 1922). The specialists from this group do not insist on deep knowledge of landscape as geosystem, neither on the knowledge of the elements of landscape, of their physical structure. Often they even keep aloof from work along the technical procedures, legal tools, rules, they prefer free inventive approach (see e.g. Hreško – Mederly - Petrovič, 2003, Štefunková - Cebecauer, 2006. Breuste – Kozová - Finka (Eds.), 2009, Mizgajski - Markuszewska (Eds.) 2010, Machar - Kovář (Eds.), 2010, Boltžiar, 2011 and many others).

### 3. What is the right way?

Of course, the different approaches to the landscape are not a new issue. Generally said the landscape is historically perceived in two ways: as a tangible material reality and also as an intangible, mental and artistic experience (Zonneveld, 1981, 1995, Naveh - Lieberman, 1994, Haber 2004 and many others ). The question is which way can help to fulfil the strategic goals of the geographers, ecologists and landscape ecologists - to rank the landscape ecology among those sciences which considerably influence the word environmental policy.

The most promising way for that goal is to convince the society that the landscape ecology is the basic science for the umbrella conception of the **integrated management of the land resources** (of the landscape), as it was defined already in the Chapter 10 of the AGENDA 21, and, what is still an open and highly actual conception of the sustainable development. The umbrella of integrated management should “integrate” a whole range of important landscape-ecological concepts formulated to policies such as the natural resources management, watershed management, forest management, nature and biodiversity conservation, the ecological network concepts, the landscape planning and land-use management and others (since McHarg, 1969 and Fabos, 1979, through Ružička - Miklós, 1982, Haber, 1990, Bastian - Schreiber, 1994, Kerényi, 1995, Jongman, 1996, O’ahel’ - Lehotský, Ira, 1997, up to new developments as e.g. Kozová – Hrnčiarová - Drdoš et al. 2007, Izakovičová, 2009, Moyzeová, 2010, Špinerová, 2011 and many others).

All those concepts should be based on a proper definition of the basement entity of the landscape ecology – the landscape. How can we approximate the right approach to this question? One of the possible ways is to investigate the **requirements** of the above mentioned policies towards the landscape sciences, i.e. mainly to look for an answer on the question, how those policies can apply the concept of landscape to their processes.

#### **4. The “hard” materialistic concepts of the landscape**

We can state, that all of above mentioned integrated management policies are realised in the landscape through a quite simple issue – this is the land-use and its changes. Whatever name is given to the resulting material entity – landscape, cultural landscape, environment - the present state, as well as each change of this entity is the expression of the past or present **use of each single spot** of the land – as the result of the land-use and land-use changes (see e.g. Fabos, 1979, Ružička - Miklós, 1982, Haber, 2008).

Actually, each policy on the management of the landscape starts by a simply question: do we like the present structure of the landscape or not? If yes, we shall apply all possible measures to protect each single element creating the favourite landscape structure – their quality, extent, position – against changes, to keep them as they are now. If not, we try to promote changes. But in this moment we have to accent again that each change of whatever „holistically“ perceived landscape and possible improvement of the landscape quality is based on the changes of the single points, lines and polygons of present landscape elements. If so, the policies and the legislation must define the landscape as a **material entity**, consisting from

**tangible material elements** framed by space, position and relief, and by their mutual relations, of course.

The landscape changes are in developed countries regulated by legal procedures. Thus the policies, the planning, protection, conservation of landscape and its valuables must relate to concrete elements, too. Such approach is actually much closed to existing spatial planning processes. Nothing new, they already run on national levels as spatial/territorial/physical planning, the land-use planning, the ecological network design, having more or less complex and integrated character, but they run on very **different level** of complexity and integration, not yet regulated on international level.

If we agree with the above described deduction, we have to agree also with the statement, that the most suitable definition for the mentioned policies is the geosystem based definition of the landscape what in basic congregated form might read as: landscape is a geosystem, as an integrated complex of elements of geographical sphere and their interactions each with all other. This definition includes the main features from system and geosystem definitions of many authors as Bertalanffy, 1968, Chorley - Kennedy, 1971, Krcho, 1978, Demek, 1974, Sochava, 1977, Snacken - Antrop, 1983, Miklós - Izakovičova, 1997 and others).

Of course, this definition might be modified by various „improvements“. E.g. the geosystem definition of the landscape and the explicit expression of the elements of geosystem decisively helped to implement very successfully the conceptions of LANDEP (the Landscape Ecological Planning, 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 definition of landscape as a geosystem has been presented in the Act 50/1976 Coll. On Territorial Planning and Building Code (Building Act), amendments 237/2000 Coll. which reads as follows:

*“Landscape is a **complex system** of space, position, georelief and of all other mutually functionally inter-connected natural, man-modified and man-made material elements, in particular geological basement and soil-creating substratum, water bodies, soil, flora and fauna, man-made objects and elements of land-use, as well as by their interaction determined socio-economic phenomena. Landscape is the environment of man and other living organisms.”*

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

*“Regulative for spatial arrangement ... and functional utilisation of the 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 the elements** of the 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...”* So, the certain properties of the elements act as **bans, limitations and supporting factors** of spatial arrangement.

## 5. The “soft” concepts of the landscape and the European Landscape Convention

The European Landscape Convention should be appreciated basically as a huge international success and asset towards the acknowledgment of the landscape in politics. However – like each international convention – also this one shows in its scripted form 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 that *“Landscape is an area, as **perceived** by people, whose **character** is the result of the **action and interaction** of natural and/or human **factors**;“*

We may say that the definition does not contain any false world. Nevertheless, it is a non-materialistic definition, landscape is not defined as a material system structured by elements, but as an imaginary entity based on **perception, character, action and interaction of factors**. The Article 5 and 6 define the landscape as an assembly of „**heritage**“, „**values**“, „**quality**“, as foundation of the “**identity**”, the articles force the parties to undertake measures to increase the “**awareness of the values**” of the landscapes, to define the “**quality objectives**”.

The problem is not the wording of the definition, of course, but the possibility of the acceptance and application of such definition to practical procedures. Namely, the Convention stated that the („softly” defined) landscape should be treated by “hard” measures, as – according to the Article 3 – *“to promote landscape **protection, management and planning**”,* and, according to the Article 5 – *“establish and implement landscape **policies aimed at landscape protection, management and planning**”.* The question is, how can those hard and mostly by law supported policies accept, apply and suit to the softly defined landscape, as to the “area perceived by people ...” ?! The answer is obvious: if we shall not apply the strict materialistic definition of the landscape, if its elements will be not

tangible, if they are not related to regulative, then the policy makers, planners will apply those provisions in a **voluntary way**, as they wish, not as an **obligatory regulative**.

It is to mention again what we deduced in previous chapter, probably by modified words: the promotion of the protection of all the landscape heritage, values, quality, and scape is still a result of the use of single material elements of landscape, result of concrete land-use. Those single elements create the „scape“ of the land, i.e. also the values, there is no way to protect or improve the scape „holistically“, it is to proceed by legal procedures – by **spatial planning** or other similar processes. Furthermore, it is to mention, that each part of the landscape has its owner, who can be obliged to keep or change the “scape” of his ownership only by legal tools.

Also, other antilogism appeared in the Convention, which had more or less theoretical than – hopefully - practical importance. Nevertheless, taking into account the geographical scientific point of views, let us open three basic questions:

a) The preamble of the Convention reads as: “ ... *the landscape is a **key element** of individual and social well-being...*”, thereafter: “... *the landscape is an important **part** of the quality of lifee...*”, and the Article 5: “*Each Party undertakes:... to recognise landscapes in law as an essential **component** of people’s surroundings ...*”

Can we agree with those provisions of the Convention, that the landscape is only an **element, a part, a component** of something else, not a general spatial frame, a **complex system**, which is structured by **all elements** of geographical sphere, a material condition for the social well-being and for the life quality ? Of course, the scientific understanding promotes the complex understanding, the question might sound even irrelevant. However, the paragraphs of the Convention read as referred to above.

b) The Article 15 reads that any State should “... ***specify the territory or territories to which the Convention shall apply***”, by other words, they should delineate, where is the landscape. Thereafter the article reads: “*Any Party may, ... by **declaration** ... **extends the application** ... to any other territory*”, and, the article unfortunately also allows, that any such declaration may be “ ... ***withdrawn by notification*** ... “

This article relates to the regional application of the Convention, not to the definition of the landscape. Nevertheless, the text suggests as that landscape would be a **thing**, which is not everywhere, only somewhere, where the States design it,

where they **wish them to be**. The States can **specify and extend** the landscapes, moreover even **withdraw** them!

From the scientific point of view we can put the question: do the landscapes exist only somewhere, where it has defined “values”, where the parties wish to have them, or the landscapes exist everywhere, covering the whole mainland surface? Obviously again an apparently irrelevant question, but the Convention reads as cited above.

Unfortunately, this seemingly fictive conflict could deeply influence the real care on the landscapes, since the decision where to apply the Convention is in the hand of the Parties.

c) The Article 4 in Chapter II concerns the division of responsibilities and reads: *“Each Party shall implement this Convention ... according to its **own division of powers**,..”*. Then the final clauses in Article 12 contain the obligatory provision as: *“The provisions of this Convention **shall not prejudice** stricter provisions ... contained in other ... national or international instruments.”*

Last cited paragraphs are of conventional character. They do not appear dangerous, and we hope, they will be never misused. It is just to express, that if reading them 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, and all that without strict legal sanctioning! So the introduced problems concern the political acceptance of the Convention.

We would like to believe that each Party signed the Convention with a good will. Anyway, during the particular application of the Convention one cannot exclude political/economic problems in various countries, neither the conflicts of interests among stakeholders. It is the reason way we mentioned also those particular problems.

## **6. Conclusions**

What is then the right way for acceptance of the concept of the landscape to the real policies?

Starting from the provisions of the European Landscape Convention , the landscape ecologists should insist, that the above mentioned problematic provisions of the

Convention should be implemented to the practice according to system approach, what understands the landscape as

- an **universal spatial frame** for life and activity of people and all other living beings;
- a **complex (integrated) system**, which is structured by all **material elements** of the geographical sphere;
- by this way creating the material condition for the social well-being and for the life quality; and that
- the landscape is the **whole-mainland-surface covering** entity, what is not only there, where the Parties identify and specify them.

Evaluating the different scientific approaches to the landscapes and considering the practical goal of the co-temporal landscape ecology - what is the effort of implementation of its results to the real policies – as the reasonable compromise between holistic theories, non-materialistic approaches and traditional materialistic understanding of the landscape appears the **geosystem approach**. **Of course in any moment the** basic feature of the system must be pronouncedly accented, namely that the system is more than a sheer sum of its elements. Accepting this approach we can expect that the results of the landscape ecological researches will bear the requested practical features, as well as the aspect of complexity, moreover creates the frame for enforcing also the sound of values and perception to the real policies.

All the above mentioned problems need further development of both the theory of landscape ecology in all of the above discussed streams, as well as the improvement of the applied procedures producing acceptable and clear messages for the policy and practice.

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