

Bridging the Theory and Practice of Regional Sustainability: A Politico-Conceptual Analysis

Alois Hynek, Masaryk University in Brno, Czech Republic and Technical University in Liberec, Czech Republic; e-mail: hynek@sci.muni.cz

Nikola Hynek, University of Bradford, United Kingdom and Masaryk University in Brno, Czech Republic; e-mail: N.Hynek@bradford.ac.uk / hynek@fss.muni.cz

Abstract

The paper offers a perspective aiming to bridge the theory and practice of regional sustainability. It does so by conceptual and political analyses which broadly divide the article into two parts. In the initial half, an analysis deals with the concepts of environment and compares and contrasts the notions of regions and landscapes. It nevertheless goes further in an attempt to transcend this alleged dichotomy. As a part of this mapping, the delimitation of differences between human and physical geography is being made. Subsequently, notions of space and spatiality in human geography scholarship are being examined. The first half of the article concludes with tackling the question of what is landscape spatiality – or, can one speak about spatialities of landscapes? The second half of the article reflects on the practice of regional sustainability. At the beginning, the question of sustainability pillars is being addressed. What follows is an initial profile of the Highland region within which the authors gained empirical data from their participation in the process of environmental policy-making. It is in this context that the regional strategy for the Highland, specifically its environmental part is being analysed. Subsequently, an analysis of expert and political framings in the Highland is investigated and compared. Epistemic-community theoretical insights are compared with authors' hands-on experience. In conclusion, the summary of authors' practical involvement in the Highland environmental policy-making in light of a wider theoretic-conceptual context is provided.

Key words: politics, regions, landscapes, spatiality, sustainability

Introduction

The paper offers a perspective aiming to bridge the theory and practice of regional sustainability. It does so by conceptual and political analyses which broadly divide the article into two parts. In the initial half, an analysis deals with the concepts of environment and compares and contrasts the notions of regions and landscapes. It nevertheless goes further in an attempt to transcend this alleged dichotomy. As a part of this mapping, the delimitation of differences between human and physical geography is being made. Subsequently, notions of space and spatiality in human geography scholarship are being examined. The first half of the article concludes with tackling the question of what is landscape spatiality – or, can one speak about spatialities of landscapes? The second half of the article reflects on the practice of regional sustainability. At the beginning, the question of sustainability pillars is being addressed. What follows is an initial profile of the Highland region within which the authors gained empirical data from their participation in the process of environmental policy-making. It is in this context that the regional strategy for the Highland, specifically its environmental part is being analysed. Subsequently, an analysis of expert and political framings in the Highland is investigated and compared. Epistemic-community theoretical insights are

compared with authors' hands-on experience. In conclusion, the summary of authors' practical involvement in the Highland environmental policy-making in light of a wider theoretic-conceptual context is provided.

As far as the environment is concerned in our theoretical terminus, it is essentially confined to its meaning of anthropocentric concepts of human-nature interactivity. In such understanding, landscapes can be conceived as mosaics of spatial ecosystems. Regions are subsequently comprehended as either uniform or nodal spatial organizations. While the former concerns the combination of physical and/or cultural features, the latter includes an interdependent operational connectivity of core, here described as a semiperiphery/periphery. Apart from the above two distinct types of regions, we can also distinguish the third, to some extent a less tangible type: vernacular regions. Vernacular regions have been defined as perceptual regions that reflect people's mental feelings and images of their lived territories (Fellmann et al. 2005). Additionally, the distinction between soft and hard sustainability will be made: Whereas the soft sustainability is related to the environment, the hard sustainability makes its reference to the landscape ecology.

For the purposes of this article, we employed our own heuristic framework labelled RESPECTS comprising regional economic, social, political, environmental/ecological, cultural and technological factors. The RESPECTS is a regionally tailored version of a general ESPECT framework that can be used for any spatial dimension spanning from local to global scale. The term 'sustainability' is used in the original sense of Brundtland's definition, before it has assumed a denoted meaning in a merger with neo-liberal international prescriptions (cf. Bernstein 2000).

Comparing and contrasting now more discrete destinies of the former Czechoslovak landscape ecology, it is quite safe to argue that Slovak experience in landscape ecology and generally in the topic of sustainability is more advanced than in the Czech Republic. However with regard to the inclusion of social and economic issues, more pragmatic Czech policy-formulation tend to reflect these trend more. In any case, there are a number of authors from Slovakia who have been an inspiration for this text (cf. Lehotský 2006, Huba and Ira 2006, O'ahel' and Feranec 2006, Bezák 2006; Izakovičová, Miklós and Drdoš 1997; cf. Urbánek for a landscape synthesis concept).

Part A. Theoretical and Conceptual Analysis

I. Comparing and Contrasting Regions and Landscapes: Towards the Transcendence of a Dichotomy

Contemporary regional geography is quite dominated by human geographers studying so-called regional disparities (cf. Blažek 2000, Matlovič 2004, Poštolka, Šmída and Dítětová 2006, Poštolka 2007, Martin 2006, Krugman 2004, Buček 1999, Sloboda 2006). The reference point for this paper will, nevertheless, be rather a distinction between regions and landscapes than a relative state of the former.

As for the Czech tradition, Czech geography distinguishes between regions (i) that are predominantly conceptualised as human geographical objects and landscapes (2) which are seen to much lesser degree as influenced by human practices; the former is usually studied by physical geography. In terms of urban and rural studies, Czech human geography examines both urban and rural entities whereas physical geography prefers to analyse rural landscapes and only rarely urban/suburban space. The following diagram portrays the above distinction:

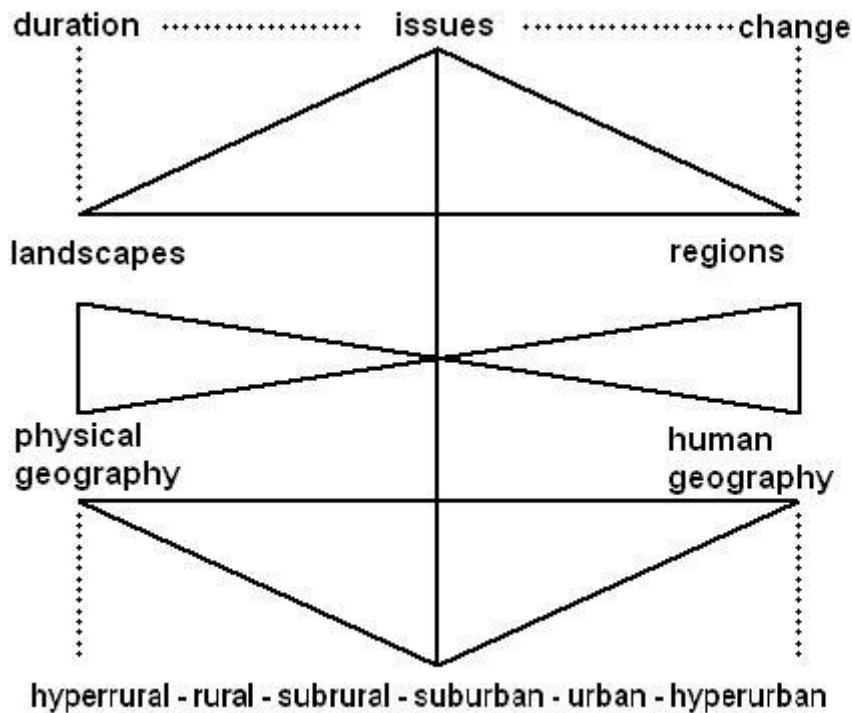


Fig.1: Domains of Czech physical and human geography

The regional Vs. landscape dilemma can be solved by more productive geographical approach which will emphasize *space* as a fundamental research entity.

We stress the phenomenon of a continuous transition which both human and physical geographies have in common (i.e. the range from hyperurban to hyperrural spaces). Such an approach arguably breaks ranks with the mainstream Czech geography practice in that it does not reduce regional geography to an essentially regional *physical* geography. Our concept of regional geography is thus wider (cf. Hynek and Hynek 2006).

Consequently, the discrepancy outlined hereinbefore has informed our attempt to overcome the traditional gap between physical and human geography by paying closer attention to the conceptual interconnection of regions and landscapes. One can thus say that landscapes are spaces studied with respect to interaction between humans and nature, while regions are spaces of human and/or physical attributes.

II. Notions of Space and Spatiality in Human Geography Scholarship

As the previous section stressed, in order to avoid a heuristically negative dichotomy between regions and landscapes, the notion of space and spatiality need to be brought to the fore. What follows is a conceptual analysis of spatiality in the scholarship of leading human geographers.

Initially, spatiality is recognized by Derek Gregory (2000) in human geography in four main meanings which, at the same time, imply human and social implications of space:

1. Upon existentialist and phenomenological tradition (cf. Pickles 1985), understanding of places and spaces in our immediate experiences can be conceived as constellations of relations and meaning which we encounter in our everyday activities. It reveals the human significance of contextuality and cannot be understood independently of the beings that organize it through 'situating' themselves to it.
2. Upon structural Marxism spatiality identifies the connections and correspondences between social structures (modes of production or social formations) and spatial

structures. Lipietz (1977) claims that the concept of social structure is dependent on and so must be derived from a concept of spatial structure. Spatiality consists of a correspondence between 'presence – absence' in space and 'participation – exclusion' in a particular system of social practices contained within each level with its own topology.

3. Edward Soja (1985) has developed Lefebvre's vision of spatiality specifically for socially produced space, effectively creating forms and relations of a broadly defined human geography. We learn that while not all space is socially produced, all spatiality is. Spatiality is both the medium and the outcome of situated human agency and systems of social practices broadly consonant with structuration theory. Its protagonist, Anthony Giddens (1984), rejected the idea that there is anything intrinsic about the nature of space and claimed that in human geography spatial forms are always social form as well as spatial configurations of social life – spatialities – are just as much as a matter of basic importance to social theory as are the dimensions of temporality.
4. Upon post-structuralism, especially after Deleuze and Foucault, spatiality is indicated as the ways in which constellations of power-knowledge are inscribed in space and through which particular subject-positions are constituted and particular identities fabricated.

Additionally to the above, E. Relph (1981) distinguishes between four different sorts of space, or more precisely possibilities of knowing about space, with one's different relationships to places as a result: Firstly, pragmatic space which has been organized by our bodily situation; Secondly, perceptual space which is based upon observing through intentions; Thirdly, existential space is composed of cultural structures as much as our perceptions, which are full of social meanings; Fourthly, cognitive space is defined through ways in which one abstractly models spatial relationships. It can thus be maintained that spatiality in this sense explains how space and social relations are made through each other.

Another understanding of space, approaching the concept from a different angle, comes from K. Hübner (1990), who argues that space is not simply composed of a continuum of a multiplicity of points but is rather made up of discrete elements, the so called *témene*: it is the alignment of the *témene* that constitutes the spatial dimension. The same author further distinguishes between sacred and profane spaces and also asserts that there is no single place.

The last point nicely fits with a postmodernist geography, here represented by M. Dear (2001) who identifies three topical areas concerning our contribution. With regard to the first one, the author stresses an increasing emphasis of the discipline on the urban, particularly notions of cultural landscapes and the process of place-making leading to them. Dear is interested in examining economic landscapes of post-Fordist exchange, full of flexible specialization, with a particular interest in global-local connections and the spatial division of labour. Dear also studies the nature of ongoing philosophical and theoretical disputes, especially those that are related to space and the problems of language.

Dear is by no means the only person employing the social constructivist approach to human geography. As far as the mutual constitutiveness of space and time is concerned, the most important thinker has with no doubts been David Harvey. This author (cf. Harvey 1996) introduces the idea that spaces and times, or rather *space-times*, are not external coordinates, but are rather contained within – or implicated in – different processes that effectively produce their own forms of space and time.

III. What Is *Landscape Spatiality*, or *Spatialities of Landscapes*?

Landscape is a common word but also a geographical term. In the use of the latter it has been used very broadly in various contexts: to give but one example, landscape can be understood as an intersection of individual, formal or generic meanings, which are – in our point of view

juxtaposed, not contradicted. Landscape is said to represent scenery, or sometimes is denoted to an observed or observable territory in a single view.

Cosgrove (1998) has maintained that landscape is more about the way one sees things, than as a ready image or object. Writings of both Barrows (1923) and Hagget (1983) lay emphasis on the process of forging a relationship between people and land, with human environment as a resulting object of study and human ecology as a discipline studying the former.

A different perspective is offered by C. Troll (1939, 1970) who investigated in his works the complex of causal and reciprocal connections between biological communities and their environment in a particular section of landscape. Troll's usual analytical level was the pattern of landscape ecosystems at choric/regional level. The paramount objective of such a point was to create a unifying approach which would eventually merge natural science with social geography. It is in this context that the notion of complex metabolism between nature and society underpinned by processes of reproduction and consumption is introduced.

Landscape spatiality can also be understood through an idea of territorial infrastructure. Such infrastructure is constructed as a vital organizational landscape to facilitate social production and reproduction. Relationship between economic production, social reproduction and political governance are constantly reconstructed, or in flux: Be it deindustrialization, urban sprawl, role of the cities – e.g. the shift from welfare to workforce. Cities are replacing states in the construction of social identities, they are landscapes of social production rather than reproduction (cf. Taylor 1996).

The perspective of landscapes as distinct associations of forms, specifically between a physical and cultural dimension, is taken by C. Sauer. The author uses structurationist theory of Giddens, introduced earlier on, to demonstrate that landscapes are products of cultures and also reproducing them through time. In other words, every cultural region includes its matching landscape. This perspective is further elaborated in the strand of human geography drawing on cultural studies with its use of iconography and text metaphors for perceiving and imagining landscapes (cf. Cosgrove and Daniels 1988, Duncan 1988). M. Crang (2001) explicitly talks about double encoding of landscapes: Landscapes are understood as wrapped in another representation, characterized by a simultaneous existence of multiply environments, as a bank of cultural memories. There is also a moral subtext to all the above since landscapes are seen as properties and an ethical argument that they should be owned by those beholding it is being articulated. The process of capturing and controlling the land thus occurs in a non-material way, through their representations in maps and in paintings as well as through fashioning landscapes on the ground using design and architecture. The landscape then, far from being neutral and inert, has social and cultural meanings, a symbolism, hence the word iconography.

In contrast to this approach of understanding landscape spatiality stands out the perspective of land management framed by state and shaped by economy (cf. Blaikie 1985). This perspective has been paying a lot of attention to the discourse on management; problems of landscape can be solved through problem-solving managerial practices of experts. An important question of how politics as policy of resource management and how control over the environment is discursively constructed immediately crops up (Moore 1995, Leach and Mearns 1996).

Moreover, there has been a motley bundle of geographers who have been paying attention to both economic/material processes and discursive constructions, with their interplay as the central issue. M. Crang (2001) evokes the notion of palimpsest with the landscape as the record of change: Cultural values change so new forms are required. This process is said to include past practices and knowledges and features series of layers - abiotic, biotized, biotic, anthropized, anthropic, and noospheric. Cultural landscapes are concurrently

conceptualized as other spaces/places: They are constructed both materially and discursively, with each construction affecting the other (Allen, Massey, Cochrane 1998).

Finally, we cannot omit Foucault's contention asserting that the operation of power or the constitution of subjectivity is always connected to an examination of how power, space and subjectivity entail production of space. This idea has been consistently pursued by B. Latour (1993) who coined the term spatialization. According to this author, spatializations are not just physical arrangements of things, but spatial patterns of social action, kind of embodied routine, as well as historical conceptions of space and world. Landscapes are subsequently described as concrete instances of spatialization.

Part B. The Practice of Regional Sustainability

The new public administrative division of the Czech Republic (2002) into 14 regions/NUTS III has been followed by intensive efforts pertaining to new regional policy formulations regarding the European Union practice and national tradition. The authors took part in strategies and programmes of the regional development of Czech NUTS III, specifically the regions of South Moravia and the Highland. As for the focus, the attention has been paid to the section of environmental quality and sustainability. The European Convention on Landscape and The Aarhus Convention have been applied in the process of negotiation, which included politicians and public servants, experts, civil groups and citizens. The issues of cultural landscape improvement, environmental awareness, waste management, hydro-cycle renaturalization as well as renewable and alternative sources of energy have been included into an everyday environmental agenda.

I. How many pillars to have for sustainability?

The current concept of sustainability is a favorite bone of contention between its defenders and opponents. In defiance of the latter, it is still a living theme. Our contribution appertains to the deepening of the conduct of sustainability by several ideas and practical illustrations.

Having been inspired by the above authors, we advance a model of sustainability in spatial sense – ESPECT/ TODS. The matrix of the model consists of six main poles through which 'reality' is often depicted, though usually in isolation from one another: **E**(conomy)-**S**(ociety)-**P**(olitics)-**E**(cology)-**C**(ulture)-**T**(echnology). The strategy to arrange them in a hexagon represents an effort to overcome this usual isolation and lack of interconnectedness (i) as well as to emphasize the equality of each and every node (ii). In other words, these poles, or nodes, are artificial subsystems which try to paint 'reality' through their own intellectual categories and tools. One needs to bear in mind, however, that while science is rough, life is delicate and it is the practice of writing that rectifies this distance (Barthes 1978).

This is what the outer circle signifies – the wholeness, unity, or synthesis through a two-way rotation which implies the need to overcome the dogma of six artificial points of view. The strength of this framework in regard to the outer circle and its underlying hexagon is grounded in the need to hybridize and thus synthesize findings of otherwise six isolated subsystems into a single account; we constantly need to be reminded and aware of the fact that phenomena out there are not created through isolated intellectual subsystems, but are, in fact, coproduced.

As far as the inner rhombus with nodes **T**(emporality)–**O**(ppression)–**D**(ominance)–**S**(patiality) is concerned, it is based on two sets of dyads (T x S; O x D) and its function is to explore simultaneously spatial and temporal effects of power/knowledge nexus. The oppression-dominance dichotomy can be spatially understood as the relationship between centre and periphery, and temporally as real and imagined lived space in between them. It is

also the case with respect to the rhombus that the unity and synthesis is being sought – this effort is again inscribed through a two-way rotary mechanism of the inner circle.

Finally, the inclusion of both the hexagon and rhombus into a single framework reflects the necessity for the researcher of investigating ESPECT and TODS as parallel, complementary and interconnected systems since it is not only through the synthesis of nodes, but also through an examination of processes which coproduce these geometric arrangements, that we can get a better grip on physical, social, and imagined 'reality'.

ESPECT & TODS

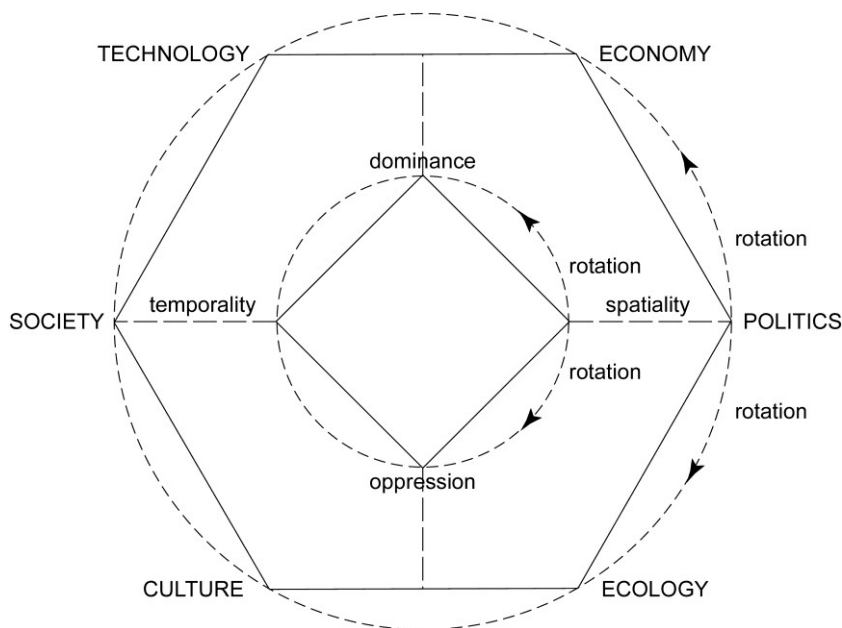


Fig.2: ESPECT & TODS

II. The Highland Region: An Initial Profile

The following section provides the reader with a set of main characteristics of the Highland Region. In order to keep clarity at a high level, a condensed form of bullet point will be used:

- ✓ Recognized as NUTS III region, one of 14 Czech NUTS III – administrative units
- ✓ More uniform region than nodal, almost spatially identical with landscape mesochore known as the Bohemia-Moravian Highlands – a mosaic of forests, fields and villages
- ✓ Step-like roof/horst between the Czechlands border mountain rim and lowland cores of Bohemia and Moravia with four altitude levels from 'dry doormat' to 'wet sponge'
- ✓ Diffusions of innovation from medieval colonization, Theresian cadastre to industrial revolution
- ✓ Communist era (extensive industrialization, new neighbourhoods + second homes, agricultural collectivization – large blocks of fields)

- ✓ Postcommunist era (new industrial/entrepreneurial zones, hypermarkets, Beverly Hills – new baroque settlements), new regional and environmental policy in strategies, programmes, and projects of regional development in documents covering:
 - evolution of region
 - general characteristic
 - infrastructure
 - economy
 - labour market
 - social and cultural infrastructure
 - environment
 - recreation and tourism
- ✓ searching for the epistemology for applied research

The map below represented our cartographic knowledge base regarding environmental issues in The Highland, NUTS III:

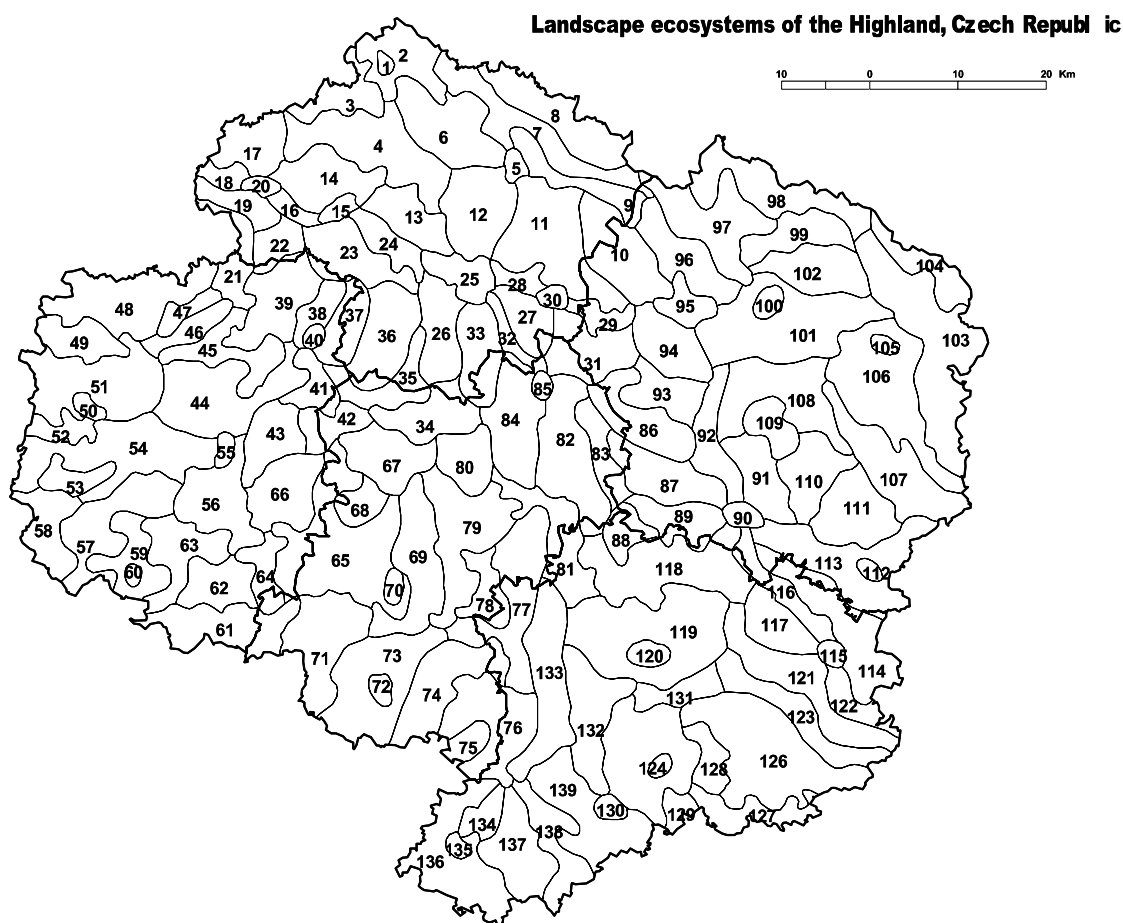


Fig.3: Landscape spatial units – cultural landscape ecosystems of The Highland

Legend:

Cities/towns

1,5,15,20,25,30,40,50,55,60,70,72,80,85,90,95,100,105,112,120,130,135

Forests

3,8,10,13,14,22,34,37,41,49,52,53,57,63,64,66,68,69,71,74,75,78,83,86,88,97,102,128,129,133,134,138

Fields

2,26,35,38,46,59,87,104,121,124,136,137,139

Forests and fields

6,12,17,,19,27,33,39,43,44,51,67,71,99,101,113,118,131,132

Forests,fields, ponds

93,94,96,108,110,111,117

Fields,villages,forests

4,7,11,23,31,36,48,54,56,58,61,65,73,76,82,119,126

Fields,meadows,forests,villages

31,42,62,77,79,84,89,91,106,114

Water reservoirs

21,92,123,(103)

Deep valleys

9,16,18,24,28,29,32,45,47,81,98,103,107,116,122,127

The practical procedures included practices of regional coordinating group, consultants, knowledge base, frames and their SWOT analysis, strategies, critical points, objectives, priorities, strategy of development, actors, regional conference and implementation, policies, principles, financing, EU programmes, framing, SME, etc. The importance of local/regional environmental experience, evaluation, problems and perspective was taken into account during the agenda/setting and the process of policy-making. These activities resulted in the creation of the final product, the Strategy for The Highland (see below).

Regional strategy for The Highland (2001) – part 4: Environment:

Target 4.1:

- Landscape sustainability
 - Measure 4.1.1:
Landscaping renovation and protection
 - Measure 4.1.2.
Water courses network revitalization (hydro cycle renaturalization)

Target 4.2.

System of environmental awareness and education, Agenda 21, NATURA 2000 , Aarhus Convention, European Landscape Convention

Target 4.3 :

Waste management, including radioactive wastes disposal

Target 4.4

Renewable and alternative energy sources assistance

A 2004 update:

- ✓ New natural park ‘Javořice’
- ✓ Intensive water purification and wastewater treatment plants
- ✓ New generation of air and water pollution monitoring
- ✓ Non-food agricultural production, e.g. energetic
- ✓ New master plan for Landscape Protected Area ‘ The Zdar Heights’ emphasizing landscape sustainability, e.g. introducing new agroenvironmental measures
- ✓ Insisting on diverse tree species composition in forestry
- ✓ Cohesiveness and balance in landscape sustainability planning preventing deterioration and fragmentation
- ✓ Limitation of megaprojects, amusement parks
- ✓ More attention to limit denaturalization of landscape, pay attention to sensitive combination of nature and technologies
- ✓ To stop destruction of wetlands hidden with a veil of water courses revitalization

- ✓ Strengthen judgment of anthropogenic landforms in procedures of EIA and SEA
- ✓ Effective control of soil erosion, transportation and accumulation
- ✓ Use land resources adjustment to improve landscape sustainability
- ✓ Present Action plan of environmental education and awareness
- ✓ Support best available technologies and tools for environmental control
- ✓ Rules for The Highland Landscaping with respect to its character
- ✓ Achieving low waste society – reduce, sort, separate, recycle, reuse, treat
- ✓ Maintenance of overburden waste-dump
- ✓ Saving energy use and reducing fossil fuels use
- ✓ New grant programme for supporting renewable and alternative sources of energy

III. Frameworks and the Process of Expert and Political Framing in the Highland

Our practical activity was a part of a policymaking process and we were looking for active politicians, professional, activists, citizens holding their perspectives to join in our research focus on The Highland. The basis of our approach consisted in the use of the ESPECTS framework. This framework has been developed as a set of lenses which represent and show some prevailing categories and tendencies in the classification of things, events, phenomena etc. The framework is a priori designed and aims to be as much non-biased and neutral as it can be. It means that it attempts to avoid the pitfalls of perspectivism (some a priori-chosen particular combination of lenses proportions) that would precede an analysis itself. All possible perspectives are taken as legitimate, though, not all of them would be in the later phases of the same normative value.

The ESPECTS framework has been specifically developed for the scientific practice purposes and as such it gives the observer a wide choice of points of view. As far as the field of science is concerned, the objective is to keep all lenses clustered in the ESPECTS in equilibrium. Therefore, the same attention ought to be paid to all parts of this framework. The domain of practical policy-making and politics, however, work differently. Science and politics can be conceived as two different fields of human activity, featuring different criteria, structures, mechanisms of socialization and actors too. As our practical experience shows, these social fields overlap to lesser or greater extent and we can often witness the process in which politicians turn to experts to ask for advice or expertise (esp. in non-precedent situations).

In case this process becomes more solid and engenders somewhat regular interactions over a particular issue, the scientific mechanisms change. For instance, if the scientist is to be asked to supply the regional stakeholder forum with his/her expertise and recommendation, the issue requires active political framing(s) for a subsequent political debate. In other words the scientist needs to create different frames of the issue for different occasions. He/she needs to take into account things like the composition of stakeholders present in the negotiation and/or bargaining process, the prevailing patterns of the institutions where these negotiations take place, the “history” of similar negotiations etc. According to M. Hajer (2003: 58), the *public domain* is ‘spaces in which people of various origins deliberate on their future as well as their mutual interrelationships and their relationships to the government’ (here a regional one).

It was the nature of our scientific domain (its wide and in some sense an overarching scope) which played an important role in the expectations of stakeholders as far as our contribution was to be concerned. Thus, in order to meet their demands, we could not be in an “only-expert” role. We had to introduce and present some political solutions as well. Practically, we refused Peter M. Haas’s notion of politically neutral experts who would withdraw from the political debate when the first political contest occurs. Since our role was

to provide the forum of policy-makers (gatekeepers) and various stakeholders with scientific expertise, we did exactly that. However, our role was not exhausted by this: we were also representatives of a private regional research agency that had been granted this contract. Therefore our final position/stance reflected both of these attributes. Consequently, we opted for James K. Sebenius's strategy in which scientist are an active link in a political chain and the task was to transform the scientific facts into a politically feasible winning strategy.

This process of transformation needs to be understood as an attempt to persuade or convince the other involved actors about the strengths of our proposal. And again, for such a process, one cannot rely on a rather naïve notion of neutral science. There is nothing as a neutral science, it is always the level of scientist involvement and the nature of the issue that influence (though not determine) the style and strategy of the issue presentation. As the above case shows, once the scientist gets into the political field and is expected to be not just an active participant in the political debate but also a "solution provider," the creation of various political (not just scientific) strategies and frames is being a crucial part of his/her contribution.

Conclusion: Summarizing Our Experience of Practical Involvement in the Highland Environmental Policy-Making

For the purposes of providing the basis for a subsequent discourse on environmental issues in the area of The Highland, we have constructed a thematic map which represented our knowledge base. The starting point of this map was a presentation of spatial pattern of land cover of The Highland from various sources of data including remote sensing data, air photos etc. Landscape ecology generally portrays landscape ecosystems. In the particular case of cultural landscape it examines how humans use natural resources, whereby creating cultural landscape ecosystems (CLE). A CLE spatial identification depends on the map scale; in this case it was mainly 1:100 000 where they are presents as clusters.

Their recognition enabled us to gather, process, store and use data on CLEs. We can utilize the information concerning their physical components (landforms on rocks, regolith and slope sediments, soils, climate and hydrocycle, potential and real biocenoses), human activities (agriculture, forestry, mining, fishing, manufacture, transportation, housing, recreation, tourism, nature/landscape protection, etc.), and their spatially pronounced interactions which influence both inputs and outputs in a two-way fashion. Any CLE belongs to the chain of production, reproduction and consumption with its general, specific, and unique position and focus. CLEs are from an anthropocentric position a part of human environment.

Discourse on environmental issues of The Highland included various individuals and social groups, politicians, experts, professionals, enterprisers, industrialists, businessmen, workers, public servants/officials, juniors and seniors, males and females, citizens of different social origins and experience. Their environmental experience with The Highland was, first of all, local, linked with their residence, service places, job place, recreation/tourist places. We hardly met somebody with full spatial knowledge of the entire Highland's CLE. However we did not forget to take into account the role of specialists in agriculture, forestry, transport, health services etc., who knew their field of expertise around The Highland. On the other hand, our position was previously based on our own regional survey. All the above stakeholders contributed by their own perspectives to the enrichment of a still ongoing discourse and process of policy-making and gave us a good sample of the local interests.

References

- ALLEN, J., MASSEY, D. AND COCHRANE, A. et al.(1998). *Rethinking the region*. London (Routledge).
- BARROWS, H.H. (1923). Geography as human ecology. *Annals of the Association of American Geographers*, vol.13, pp.1-14
- BAUDRILLARD, J.(1988). *America*. London (Verso).
- BECK, U.(1992). From industrial society to the risk society: questions of survival, social structure and ecological enlightenment. *Theory,Culture and Society*, 9, pp.97-123.
- BERNSTEIN, S. (2000): Ideas, Social Structure and the Compromise of Liberal Environmentalism. *European Journal of International Relations*, 6:4, pp. 464-512.
- BEZÁK, P. (2006). Integrovaný prístup hodnotenia krajiny na príklade výskumu v NP Poloniny. In Izakovičová, Z. ed. *Smolenická výzva III: Integrovaný manažment krajiny- základný nástroj implementácie trvalo udržateľného rozvoja.Zborník príspevkov, Smolenice 18.-19. apríl 2006*, pp.125-130
- BLAIKIE, P. (1985). *The political economy of soil erosion*. London (Longman).
- BLAŽEK, J.(2000). (In)consistency and (in)efficiency of the Czech Regional Policy in the 1990s. In: *Informationen zur Raumentwicklung*, Nr. 7/8, Berlin, pp. 373-380.
- BUČEK, M. (1999).Regional Disparities in Transition in the Slovak Republic .*European Urban and Regional Studies* 6: pp.360-364.
- BUZAN, B., WAEVER, O., DE WILDE, J.(1998). *Security: A New Framework for Analysis*. London (Lynne Rienner).
- CLARKE, D. and DOEL, M. (1994). The perfection of geography as an aesthetic of disappearance. *Ecumene* 1, pp.317-23.
- CLOKE, P., CRANG, P.,GOODWIN, M., eds. (1999). *Introducing human geographies*. London (Arnold).
- COSGROVE, D. (1998). *Social formation and symbolic landscape*. Madison (University of Wisconsin Press).
- COSGROVE, D. and DANIELS, S., eds. (1988). *The iconography of landscape*. Cambridge (Cambridge University Press).
- CRANG, M., (2001). *Cultural geography*. London (Routledge).
- CZEKAJ, J., HELLMICH, M., HUCKA M., KUTSCHERAUER, A., VOZAB J. (1998). *Systems and methodological aspects of regional development strategies in the Czech Republic*. DHV, ARR, RRA, 29 pp. (in Czech)
- DALBY, S., (2002). *Environmental Security*. Minneapolis (Minnesota University Press).
- DANIELS, S. and COSGROVE D. (1993). Spectacle and text: landscape metaphors in cultural geography. In: J.DUNCAN and D.LEY, eds, *Place/culture/representation*. London (Routledge), pp.57-77.
- DEAR M. 2001: The postmodern turn. In: C.Minca, ed. *Postmodern geography.Theory and Praxis*. Oxford, (Blackwell), 1-34
- DUVALL, R., WELDES, J., LAFFEY, M. et al. (1999). *Cultures of Insecurity: States, Communities, and the Production of Danger*. Minneapolis (University of Minnesota Press).
- FELLMANN, J.D., GETIS, A., GETIS, J., MALINOWSKI, J. (2005). *Human Geography – Landscapes of Human Activities*. New York (McGraw-Hill), 5th ed.
- FORSYTH T., (2003). *Critical Political Ecology – The politics of environmental science*. London (Routledge).
- FOUCAULT, M. (1984). Of other spaces .*Diacritics* 16, pp.22-27.
- FOUCAULT, M. (1986). Space, knowledge, and power. In: *The Foucault Reader*, ed.P.Rabinow. New York (Pantheon), pp.239-56.
- GALVASOVÁ, I. et al. (1999, 2001). *Strategy of Development for The Highland*.GaREP, Brno (GaREP) + *Minutes of the negotiations of Regional Coordinating Group* (in Czech)
- GIDDENS, A. (1984). *The constitution of society*. Cambridge (Polity Press).
- GREGORY, D. (1994). *Geographical imaginations*. Oxford and Cambridge, MA;(Blackwell)
- GREGORY, D., 2000: *Spatiality*. In: JOHNSON R.J. et al., 780-781.
- HAAS, P. M. (1992). Introduction: Epistemic Communities and International Policy Coordination. *International Organization*, 46, No.1, pp.1-36.
- HAGGETT, P. (1983). *Geography: A Modern Synthesis*. 3rd ed. New York (Harper and Row)
- HAJER, M. (2003). *A frame in the fields: policymaking and the reinvention of politics*.In: Hajer M. and Wagenaar H., eds., *Deliberative Policy Analysis. Understanding Governance in the Network Society. Theories of Institutional Design*. Cambridge (Cambridge University Press), pp.88-110
- HARAWAY, D.J. (1991).*Simians,cyborgs, and women: the reinvention of nature*.New York (Routledge).
- HARVEY, D. (1996). *Justice, nature and the geography of difference*. Oxford (Blackwell).
- HOLT-JENSEN,A. (2001). *Geography – history and concepts. A student's guide*. 3rd ed., London (SAGE Publications).
- House of Commons ODPM: Housing, Planning, Local Government and the Regions Committee Reducing Regional Disparities in Prosperity Ninth Report of Session 2002–03 *Volume I: Report*.

- HUBA M., IRA, V. (2006). Integrované prístupy ku krajine a koncepcia trvalo udržateľného rozvoja. In Izakovičová, Z. ed. *Smolenická výzva III: Integrovaný manažment krajiny- základný nástroj implementácie trvalo udržateľného rozvoja. Zborník príspevkov, Smolenice 18.-19. apríl 2006*, pp.89-93.
- HÜBNER, K. (1990). La verità del mito. Milan, Feltrinelli. In: Farinelli F.2001: mapping the global, or the mataquantum economics of myth. In: C.Minca, ed. *Postmodern geography. Theory and Praxis* .Oxford (Blackwell), pp.238-54
- HYNEK, A., HYNEK, N. (2006). Interdisciplinárni výzvy pro studium regionů aneb 21 podob regionální geografie. Univerzita Komenského v Bratislave *Acta geographica Universitatis Comenianae*, No.47, pp.67-76.
- IZAKOVIČOVÁ, Z., MIKLÓS, L., DRDOŠ, J. (1997). *Krajina ako geosystém*. Bratislava (Veda).
- JOHNSON, R.J., GREGORY, D., PRATT, G., WATTS, M. (2000). *The Dictionary of Human Geography*. Oxford (Blackwell).
- KATZ, C. (2001). Hiding the target: social reproduction in the privatized urban environment. In: C.Minca, ed. *Postmodern geography.Theory and Praxis*.Oxford, Blackwell,pp. 93-110
- KRAUSE, K. and WILLIAMS M.C.,eds.(1997). *Critical Security Studies*. Minneapolis (Minnesota University Press).
- KRUGMAN, P. (2004). *The "new" economic geography: where are we?* Unpublished manuscript. Department of Economics, Princeton University.
- LATHAM, A. (2004). Edward Soja. In: HUBBARD, P.,KITCHIN, R. and VALENTINE, G., eds. *Key thinkers on space and place*. London (SAGE Publications).
- LATOUR, B. (1991). Technology is society made durable .In J.Law,ed., *A sociology of monsters. Essays on power, technology and domination*. London (Routledge) pp.103-30.
- LATOUR, B.(1993). *We have never been modern*. London (Harvester Wheatsheaf)
- LEACH, M. and MEARNES, M. (1996). *The lie of the land*. London (Heinemann).
- LEFEBVRE, H. (1991). *The production of space*. Oxford (Blackwell).
- LEHOTSKÝ, M. (2006). Riečna krajina a jej udržateľný rozvoj – nová oblasť aplikácie integrovaného prístupu. In Izakovičová, Z. ed. *Smolenická výzva III: Integrovaný manažment krajiny- základný nástroj implementácie trvalo udržateľného rozvoja.Zborník príspevkov, Smolenice 18.-19. apríl 2006*, pp.155-159
- LIPIETZ, A. (1977). *Le capital et son espace*. Paris (Maspero).
- MARTIN, R. (2006). Alternative New Economic Geographies: Competing or Complementary Paradigms? *CMI Interdisciplinary Workshop on Regional Innovation*, Cambridge 9-10 June, 2006
- MATLOVIČ, R. (2004). Prešovský kraj v kontexte vývoja vybraných regionálnych disparít na Slovensku. In: Kuzmišin, P., ed., *Podnikateľské prostredie a regionálne aspekty rozvoja*. II., Prešov (ManaCon), pp.. 88-107
- MINCA, C. ed. (200). *Postmodern geography.Theory and Praxis*.Oxford (Blackwell).
- MOORE,D.(1995). Marxism, culture and political ecology. In: R.Peet and M.Watts, eds, *Liberation ecologies*.London (Routledge), pp.125-47.
- OŤAHEĽ J.,FERANEC J. (2006). Diagnóza a manažment krajiny (regionálny príklad). In Izakovičová, Z. ed. *Smolenická výzva III: Integrovaný manažment krajiny- základný nástroj implementácie trvalo udržateľného rozvoja.Zborník príspevkov, Smolenice 18.-19. apríl 2006*, pp.105-110.
- PICKLES, J. (1985). *Phenomenology, science and geography: spatiality and human sciences*. Cambridge (Cambridge University Press).
- POŠTOLKA, V., ŠMÍDA, J., DÍTĚTOVÁ, V. (2006): Wybrane problemy opracowania strategii zrownowazonego rozwoju województwa libereckiego i Euroregionu Neisse – Nisa – Nysa (Selected issues of developing a strategy for sustainable development of the Liberec County and the Weisse – Nisa – Nysa Euroregion). In: *Furmankiewicz, M., Jadczyk, P. (eds) Problemy współpracy na rzecz ekorozwoju Sudetów (Problems of cooperation for eco-development of the Sudetes)*. Jelenia Góra (Muz.Przyrodnicze w Jeleniej Górze, Kat.Planowania i Urzadzania Terenow Wiejskich Akad.Rolniczej we Wroclawiu),pp..49-70.
- POŠTOLKA, V. (2007). Hodnocení a řešení rozvojových disparit na příkladu Libereckého kraje. *V tlači. (Sborník ze XVI. Sjezdu České geografické společnosti, JČU České Budějovice 2006)*.
- RELPH, E. (1981). *Place and placelessness*. London (Pion).
- SAUER, C. (1925). The morphology of landscape.*University of California Publications in Geography*, 2, pp.19-53.
- SEBENIUS, J. K. (1992). Challenging Conventional Explanations of International Cooperation: Negotiation Analysis and the Case of Epistemic Communities. *International Organization* 46, No. 1, pp.323-366.

- SERRES, M. and LATOUR, B. (1995). *Conversations on science,culture,time*. Ann Arbor, MI (*University of Michigan Press*).
- SLOBODA, D. (2006). *Slovensko a regionálne rozdiely. Teórie, regióny, indikátory, metódy*. Bratislava (*Konzervatívny inštitút M.R..Štefánika*).
- SOJA, E. (1985). *Postmodern geographies: the reassertion of space in critical social theory*. London (*Verso*).
- SOJA, E. (1996). *Thirdspace: Journeys to Los Angeles and other real-and-imagined places*. Oxford (*Blackwell*).
- SOJA, E. (2000). *Postmetropolis: critical studies of cities and regions*. Oxford (*Blackwell*).
- URBÁNEK, J.(1993). Od geomorfológie ku krajinnej syntéze. *Geografický časopis* 45, pp. 327-334.