Abstract

In Slovenia, the concept of spatial development of the landscape system will be included in the national spatial plan as an independent layer within which the target state of Slovenian landscapes will be defined. The values protection areas, which will be the most restrictive parts of the plan, comprise the most valuable landscapes, that is the most valuable natural areas and cultural landscapes (outstanding landscapes). In these areas all development will be subject to the conservation of biotic values and of structure and morphology of the cultural landscape and cultural heritage in the landscape.

Slovenian landscapes mostly derive from traditional forms of land use with highly harmonious relationship between technology of farming and natural landscape structures and processes. The basic characteristics of the landscape patterns should be preserved, but only a modest number of small natural reserves and outstanding cultural landscapes should be designated as conservation areas.

To determine the most valuable landscapes and cultural heritage in the landscape, the Ministry of Culture of the Republic of Slovenia had prepared the list and the map of the areas of complex conservation of cultural heritage in landscape (open space); this map was taken into the national spatial plan as the basic input of goals in the field of conservation of cultural values.

In the last ten years the Ministry of Environment and Physical Planning, with similar aims, also prepared the brochure Regional Distribution of Landscape Types in Slovenia in which the Slovenian landscapes are categorised regarding their characteristics and qualities.

In this paper the methodology of landscape classification is presented, including the criteria for the definition and evaluation of landscape units. In addition, the criteria for the definition of outstanding landscapes are presented as the starting point for the list of the Slovenian landscapes of greatest value.
1 Introduction

In Slovenia, a new national spatial plan is now being prepared as a strategic spatial document. Further policies for spatial development will be designed on the basis of the target state of the Slovenian landscape defined in the spatial plan. The plan will provide possible locations for different interventions defined at the strategic level and given in written and graphic form on schematic small-scale publication maps.

The new national spatial plan will be composed of three layers: system of settlements, infrastructure systems and landscape system. The concept of the spatial development of the landscape system will be included in the national spatial plan as an independent layer within which the target state of the Slovenian landscapes will be defined. Within the framework of this concept, the plan will particularly focus on the questions of spatial development of the activities which are carried out in the landscape, and also deal with the questions concerning the spatial development of settlements and the planning of further development of infrastructure systems.

The concept anticipates the breakdown of the entire Slovenian territory into areas of three categories: areas with development priorities, areas of sustained development and areas in which the protection of values is the first priority. The last mentioned values protection areas comprise the most valuable landscapes, that is the most valuable natural areas and cultural landscapes (outstanding landscapes) where all the development will be subject to the conservation of the biotic values and of structure and morphology of the cultural landscape and cultural heritage in the landscape.

Proceeding from the present situation and to date trends in the field of conservation of natural and cultural heritage, and also taking into account the experience acquired by other European countries and the international commitments, the suggested spatial development of the areas of great natural and cultural values foresees the conservation of a small number of small areas (narrower conservation areas) and underlines the need to include the aims of the conservation of nature and cultural values outside designated areas (broad protection areas) into the spatial development procedures.

Following this scheme, only a modest number of small natural reserves and outstanding cultural landscapes should be designated as conservation areas. The Slovenian outstanding landscapes mostly derive from the traditional forms of land use with highly harmonious relationship between technology of farming and natural landscape structures and processes. Nowadays, new technologies of land uses have developed, especially in agriculture, which have an essential impact on the formation of landscape structures.

Within the conservation of most valuable cultural landscapes formed by agricultural land use, the basic characteristics oh landscape patterns should be preserved. These are normally rare, unique or typical and endangered patterns of landscape structure. Their greatest values are in the harmonious spatial relations between agricultural land and settlements and in the consistent application of traditional forms of land use.

The concept of the spatial development of landscape system provides the essential part of the professional ground for the new spatial plan. The development policies of different landscape activities aim at sustainable use of landscape elements and potentials and shall provide for a
sustainable spatial development. It should take into account the typological characteristics of the landscape morphology and its special values resulting from natural conditions and land use to date.

The Ministry of Culture of the Republic of Slovenia had prepared the list and the map of the *areas of complex conservation of cultural heritage in landscape (open space)*, which was taken into the national spatial plan as the basic input of goals in the field of conservation of cultural values. The main purpose was to contribute to a better spatial development and to allow for the supervision of spatial treatment of the most precious cultural resources in the rural and urban environment. These areas have already been included into the last amendment to our national spatial plan.

The spatial development of these areas should be adapted to their characteristics and values, which does not mean that we have to remake the old landscape patterns but rather that we have to find new appropriate patterns (redesign). Defining of these areas depends on the heritage, its spatial context and meaning in a cultural landscape, and is always linked with the particular problems of these areas. The list and the map of these areas derive from the Regional Distribution of Landscape Types in Slovenia whish has been prepared in last few years as the professional contribution to the new spatial plan. Primarily, the spatial dimensions and limitations of landscape units were taken into consideration, as well as the information of the degree of conservation of particular landscape units. In addition, the outstanding landscapes were included in the *areas of complex conservation of cultural heritage in landscape*. The list of outstanding landscapes has also been prepared in the last few years; it includes the most valuable parts of Slovenian landscapes and represents all landscape types that are characteristic of Slovenia.

In defining the *areas of complex conservation of cultural heritage in landscape*, the following fields of interest were also taken into account:

- Architectural typology and classification
- Geocultural typology (ethnological viewpoint)
- Functional, historical and spatial link-up
- Presence of the more significant cultural heritage
- Spatial archaeology
- Presence of public infrastructure in the field of culture and the state of developed cultural activities
- Demanding spatial planning and management for preservation of valuable spatial elements, guidelines for the future social and economical development, linkage of the local communities, cross-border linkage
- The natural environment is treated in the context of culturological contents and importance.

May I continue with a detailed presentation of the study Regional Distribution of Landscape Types in Slovenia, wich was ordered by the Ministry of the Environment and Physical Planning in 1991 and completed in 1998. The authors of the study were Professor Dušan Ogrin and Professor Dr. Janez Marušič, University of Ljubljana, Biotechnical Faculty, Department of Landscape Architecture and Margita Janetič from the Ministry. The collaborators of the study were landscape architects: Doc.Dr. Nika Kravanja, Stanka Dešnik, Jelka Habjan, mag. Jelka Hudoklin, mag. Alenka Kolšek, Saša Piano, Mitja Simič, Etbin Tavčar, Marjeta Jug, Marsela Podboj, mag. Marko Prem, Jelena Hladnik and Igor Zakotnik.
My presentation will include the criteria for the definition and evaluation of landscape units. In addition, the criteria for the definition of outstanding landscapes are presented as the starting point for the list of the Slovenian landscapes of greatest value.

2 Regional Distribution of Landscape Types in Slovenia

The study Regional Distribution of Landscape Types in Slovenia was made upon the order of the National Office for Physical Planning of the Ministry for the Environment and Physical Planning. This work originated from the awareness that Slovenia is rich in diverse landscapes. The landscapes of Slovenia have recently experienced significant changes which are expected to increase considerably along with the anticipated changes following Slovenia’s opening to the world-wide market. The concern for the conservation of the national landscape wealth is therefore understandable. In addition, we have so far lacked a reasonably complete picture of the landscapes of Slovenia in spite of several monographs and specific studies associated with the Slovenian landscapes or individual regional landscapes in Slovenia.

The inventoring and getting to know the Slovenian wealth of landscapes was not the sole objective of the project. Based on the knowledge about the variety and character of Slovenian landscapes, the National Office for Physical planning wishes to implement appropriate forms of landscape conservation and, where required by past degradation, an improvement of the landscape image. The project should provide guidelines for physical development activities to be carried out without affecting and deteriorating this landscape wealth. The basic objective of this project should therefore be the conservation of landscape wealth in Slovenia, by making the use of all forms of its implementation available to the contemporary physical planning.

The study had several direct objectives as well:

(1) to prepare the material for the National Physical Plan - this material should form one of the professional bases for landscape planning,
(2) to enforce landscape conservation by directly defining the outstanding landscape regions,
(3) to implement indirect landscape conservation by making on the knowledge about landscape qualities based assessments at various land developing activities,
(4) to give practical instructions to everybody involved with the land development activities or charged with issuing approvals to such physical development activities,
(5) to define at least general guidelines on how to behave in the landscape environment.

In the frame of the study, the following themes were estimated:
1. Landscape as a Subject of Study and Interest
2. Basic Determinants of the Cultural Character of Landscape
3. Landscape as a Subject of Planning
4. Landscapes of Slovenia
5. Changing of Slovenian Landscapes
6. Literature about Slovenian Landscapes
7. Starting Points of the project Regional Distribution of Landscape Types in Slovenia
8. Foreign Experiences
9. Landscape Regionalisation of Slovenia
10. Landscape Patterns of Basic Landscape Areas in Slovenia
11. Evaluation of Landscape Units
The results of the project are presented in six volumes. Although still very voluminous, the material is a concise version of the material prepared through field work. As the basic landscape inventory the project is a kind of milestone. It is, therefore, also an important record of the state of Slovenian landscapes at the time when many traditional patterns of living and functioning are alive in the landscape, yet at the same time the first indications of spontaneous changes or planned reformations and renovations of the landscape can be seen. Those land developing activities which are brought about by the construction of infrastructure, traffic links, power production and distribution facilities, and industrial plants are the most apparent. The landscape image is none the less affected by the agricultural land reformations, resulting in the rearranging of farmland patterns and at the same time reducing cultivation to the most suitable plots of land. All these changes suggest that the future landscape image of Slovenia might be fundamentally different. This is why the project is focused primarily in the landscape protection.

Many parts of the work could be considered as first attempts or drafts. This applies both to methodological solutions and the results of the work themselves. As the first attempt, the work is incomplete and requires further improvement. At the same time its incompleteness is an incentive and challenge for our future endeavours.

2.1. Basic Determinants of the Cultural Character of Landscape

At the very beginning it is necessary to define the subject of study within this project. This has to be done primarily due to considerable differences among various definitions of landscape, and within the framework of this project, the differences among cultural landscape definitions by different authors. Landscape is the basic subject of geographical research, at the same time the subject of arrangement and development for a landscape planner, the “means of production” in recreation and tourism, and with its separate components, the “means of production” for all related activities: forestry, agriculture, water resources management, power production and distribution, mining industry, traffic, and perhaps others. Last but not least, the landscape is everyone’s habitat and living environment.

The first thing to be pointed out is the basis of all protective actions, i.e. the need to preserve the known and the familiar, the need to conserve the environment man has become accustomed to. The “Fear of unknown” is one of the mechanisms inherent in the human biologic essence, the archetype, according to psychoanalysts, a way of overcoming uncertainty that is always brought along in the new and unverified. The “Fear of unknown”, however, is not something that could be understood as an expression of the conservative in man. It is the foundation of even such activity as a cultural attitude to human past accomplishments, the foundation of heritage protection which, as it seems, will become one of the most important human preoccupation in the future.

No less important as a value than cultural landscape is landscape uniqueness. The “physical continuum”, the transition of one spatial area into another in the interchange and blending of various landscape phenomena enables the creation of the uniqueness of every particular moment. Man, living in working in this space, is thus provided with a basis for its recognition as well as identification. This is the source of landscape identity as its significant feature. Today, the losing of landscape identity is considered as one of predominant factors causing concern at the changes in landscape. If these changes are a result of the ever growing
unification of the forms of living and being as well as the unification of the technologies involved in landscape affecting activities, for example the unification of land cultivation methods, they in fact lead to the annihilation of this particular landscape quality. The ability of individual landscape patterns to be typologically classified, although a contrasting feature to uniqueness, is of importance for the landscape readability. As a result, our findings about the observed landscape can be put in order in our mind, so that this knowledge becomes active. Although the typological classification is based on comparability, on similarity of landscapes, this very ability to be recognised and compared makes it the basis of landscape identity as well as of a number of other characteristics, even landscape diversity which can actually be recognised only if we can articulate the whole into particularities.

Elements of the cultural character of landscape

Typological recognisability
Uniqueness - identity
Exceptionality - arousing of special emotions (mysteriousness, greatness, etc.)
Harmony of the usage and the natural - ecosystem
Biotic diversity
Variety of experience
Attraction of appearance (shape)
Ability to provide information - cultural heritage
Symbolic meaning - wealth and harmony of meanings

Landscape variety as one of the foundations of the wealth of experience in the landscape can be significantly reduced as a result of human involvement which strives for unification. This danger is particularly serious in view of all the greater capacity of human technologies to avoid the specific features of natural conditions, to nullify the diversity of natural factors with technical solutions and increased investments into spatial development which at the same time strongly increases the physical scope of changing. A varied relief, that the man knowing only manual cultivating tools had to adapt to, is no hindrance at all for modern heavy-duty cultivating machinery. The contrasting relief is a foundation not only of diverse land use but also of biologic diversity. Biologic diversity is such an important feature of the natural physical substance of landscape that its disappearance has become a subject of general human concern. International agreements now bind us to preserve the biotic and, indirectly, landscape diversity.

One should not neglect the very aspect of experiencing landscape that is in many ways considered as the basic and most important feature of landscape, its visual attraction, i.e. an aesthetic experience provoked by the view of many landscape scenes. The aesthetic experiencing of landscape is by all means a complex phenomenon, depending not only on the cultural landscape features, although physical and visual characteristics of a scene are an external basis on which each visitor builds his own specific aesthetic experience. The latter, of course, means that it is not possible to achieve a full agreement on which physical features of landscape are the basis of aesthetic experience, which means that there are no objective criteria for this particular landscape feature. By means of a detailed classification of physical landscape characteristics it is, however, still possible to discover more basic generators of aesthetic experience of a more genera validity and significance for the majority of observers.
Among these recognisable, sometimes also unconsciously impressive landscape characteristics are the landscape structure, formal order and harmony, regularity of patterns, rhythm, orientation, focus, frame, outlines, dominants, correctness and recognisability of shape, characteristics of texture, etc. The basic structural pattern is determined by either relief or rivers, or created spatial corridors, roads, settlement features, dominants and focuses, agricultural land features - open - light, and forest features - closed - dark in the landscape.

The aesthetic experience of landscape is the quality which should be of utmost significance for landscape visitors. It is therefore frequently associated with the considerations about the possibilities for tourist and recreational activities in the landscape. In this case the landscape is treated as an important spatial resource associated with economic activities as well. These are: facilities for foreign tourists, tourism in connection with rural life - the so called tourism on farms, winter sports, trekking - discovering landscape regions by walking on marked paths, cycling, etc.

Historical aspects and the evidence-providing features of the landscape belong to the scope of symbolic landscape qualities and may be the most important element of the heritage character of a landscape. Landscape as a vessel of meanings, the language of landscape is what allows our understanding of the observed space, recognition of order and harmony; the harmony among the activities within landscape and harmony between the use and natural foundations. The meanings intertwine - the messages of the present life in landscape and the messages of the past which can go back thousands of years.

Cultural landscape, as shown in this short argumentation, can be a very complex blend of physical and symbolic variance, physical appearance as well as man’s understanding of this physical appearance, diversity of interests which either see landscape potentials or dictate specific views upon the landscape development possibilities or protective requirements. These interests are, in the first place, generally human, but there are also special interests, i.e. the interests of separate social groups or particular local communities living in that particular area, and last but not least, also the interests of individuals who act, cultivate or just live in the landscape.

In landscape, however, one should also recognise the “interests” of nature and its primeval character as claimed by contemporary philosophers from the field of ethics, the interests defined by the teleological character of natural ecosystems and all the constituents of nature. Their conservation and protection is the responsibility of men as intelligent beings. Landscape protection is therefore also a moral and ethic issue.

2.2 Characteristics and changing of the Slovenian landscapes

The Slovenian national territory is relatively small, but extremely diverse as a result of its varying climate and geomorphology. Slovenia has “a piece of Alpine landscape, a piece of Pannonia, and a piece of the Mediterranean”. The wealth of Slovenian landscape heritage is enhanced by Karst, the westernmost part of the Dinaric system which adds many things to the already indicated diversity, especially some significant symbolic values which have become part of the general national cultural heritage.
Man has adjusted to the natural diversity of the Slovenian territory and over the centuries created various forms of landscapes. The basic structure of cultural landscape, the ratio between the forested, more natural land and agricultural land as well as the settlement pattern is, according to the historians, presumed to have been established as early as the Bronze and Iron Ages. The Roman period caused relatively high population of lowlands and plains. It also introduced new forms of agricultural land arrangement. The Slovenian landscapes definitely underwent big changes in later periods. It should not be overlooked that the major part of Slovenian territory is comparatively humid and new forests appear at such a speed that they easily change the landscape image in a very short period of some interruption in the development or historical turnaround. Such interruptions and turns happened in Slovenia at the collapse of the Roman Empire as well as later. If not throughout the Slovenian territory, then such events happened locally. As a result, Slovenian landscapes reflect extremely different influences, impacts of historical periods as well as of different cultures: pre-Antique, Roman, Germanic and Slavic.

The Slovenian landscapes may be considered as some of the rare ones in Europe to preserve a quite primeval image of the cultivated land arrangement. Due to the interaction of various historical circumstances, the major restructuring processes of cultivated land bypassed Slovenia, and as a result an articulate subdivision can still be found. This is the most obvious sign of fragmented land property which can be found hardly anywhere else in Europe, and which is perhaps the most important reason for low farming productivity. This dispersed agricultural property indicates that rearranging of agricultural land might become one of the most demanding issues of landscape conservation or protection in Slovenia in the future.

Those activities and happenings in the landscape which directly or indirectly affect the its physical structure are a cause of concern for the cultural landscape heritage. These are in fact all activities in the landscape. Landscape changes continuously. Even when man withdraws his activities from landscape, it still experiences changes. These changes are spontaneous. In ecology they are designated as successions, spontaneous restitution of natural conditions towards their peak, to the climax.

Cultural landscape heritage is “threatened “ by two factors:
• man and his landscape changing activities;
• nature and its capabilities of recovering the land “lost” in the past.

The contemporary concern of the developed European countries for the conservation of cultural landscape is largely a result of other events, of the fact that nature is returning to the land it was banished from. This process is namely the most difficult to control, because it happens spontaneously and is caused by human “inactivity”. Only human activity can preserve the cultural character of landscapes. Only man’s physical development activities provide the basis for the cultural character of landscape. The nature and form of these activities determine whether they will contribute to the cultural character of landscape or, on the contrary, destroy it. Nowadays, it is quite likely that land development will affect the cultural character of landscape.

A common finding is that man’s physical development of land is increasingly noticeable, not only because of the growing - real and imaginary - human needs, but due to the ever greater possibilities of satisfying these needs. A growing number of transport routes keeps opening
ever wider stretches of land, there are more and more buildings for people to live in ever more comfortably, the areas occupied by offices and production plants, open pits and landfills are increasingly extensive, and people wish to use more and more land for their free-time and recreation facilities. There is also a growing need to control numerous natural processes, such as floods, landslides, as well as to control the condition of land, such as ground water regime. These processes are unquestionably a significant cause of the landscape changing.

The sealing of land by building has been a marked physical planning problem of Slovenia in the recent decades. The areas of built of land in urban fringes as well as in open landscape have grown so widely extensive as to become a problem of general concern. Also the adoption of strict legislation related to the agricultural land protection reflects the dissatisfaction with the spatial development. This legislation, however, has not eliminated the problem.

The present moment in Slovenia is marked by extensive developing activities in the landscape as a result of the construction of Slovenian motorways. Other infrastructure routes are forecast as well - gas pipelines and power transmission lines. All these physical development activities can affect even the most remote landscape areas because they tend to use the shortest possible lines between the end points, and due to their scope the changes these activities produce are quite extensive. The scope of these infrastructure facilities is such that there is relatively little possibility to inoffensively incorporate them into the cultural landscape, particularly at places where the cultural landscape is marked by small scale, articulated landscape elements and similar character of the past physical development activities. This small scale feature predominantly marks Slovenian landscapes in general.

Many authors, writing about landscape conservation in the developed European countries, put a special stress on the activities in agriculture. The size of cultivated land is being reduced, but cultivation is growing more intensive. This results in are increasingly extensive change of rural land, destroying the naturalness features land. As a consequence the natural growth, e.g., solitary trees, hedgerow trees and bushes, is disappearing and the number of merged parcels of cultivated land is growing.

The modernisation of agriculture inevitably leads to “pushing” the nature and its elements out of the landscape. On the other hand, the narrowing of cultivation to only the most suitable plots of land only also results in the withdrawal of agriculture from that area and the return of nature.

This “duality” in the development of agriculture demands serious considerations related primarily to the cultural landscape protection possibilities.

The abandoning of farmland is not a new phenomenon in Slovenia. The process has been going on since the beginning of the last century, and at an accelerated rate after the World War II. The forests are “returning” and becoming the predominant element in the landscape image of Slovenia. At present, forests already cover over a half of the national territory. Landscape reforestation does not necessarily mean that its cultural features will be destroyed but, nevertheless it requires a certain form of control, which can only be enforced by means of indirect measures.
A serious threat to the cultural landscape are numerous and increasingly intensive land developing activities affecting waters and riversides.

### 2.3 Starting Points of the Project of Regional Distribution of Landscape Types in Slovenia

The project was designed as an applicative task, as the preparation of professional bases for the National Physical Plan and for the planning operations of the National Office for Physical Planning. For this reason it had to cover the entire national territory, but at the same time it did not permit many researching and theoretical digressions. To provide a clearer picture of the problem it has to be mentioned that the project had to provide, in line with the shown objectives, an appropriate information on each and every hectare of the Slovenian territory. This is a very large-scale task, and we have already mentioned that we were able to acquire data from previous works only in a very limited scope.

A specific and theoretically interesting issue was the relation between two possible approaches to the arranging of spatial information. Should such information be related to the spatial units or typological units? In physical planning, both forms of the spatial information system are, in fact, intertwined. But one or the other can be stressed with respect to the planning issues.

The fist possibility, i.e. to associate spatial information with spatial units, is inevitable due to the physical planning objective of the project. The physical plan has to “cover” every particle of land within a certain planning area.

The second possibility is important due to the sorting out of planning issues into respective groups - “problem standardisation”, in order to make the guidelines unified within separate groups of spatial issues. An important aspect is that the typological classification has to be based on those landscape features which we wish to protect, or the features which present a planning problem because of their changing. In the case of this project this requirement meant that the typological landscape classification had to be based on those landscape features which can be visually perceived, and have the character of formative elements, i.e. the character of morphologic landscape characteristics.

Instead of statistical processing and regionalisation into homogeneous landscape units on the basis of such statistical processing, the geographical regionalisation of Slovenia was adopted. This regionalisation was only a basis, because the units were assessed as too coarse for the purposes of this project. The already mentioned criteria were used for more detailed articulation: homogeneous features of the unit with respect to the landscape image appearance, i.e. morphological landscape features. The stress was laid on the macro- and micro-relief. The latter also included the presence and appearance of water. The criteria for morphological landscape image description were also the elements of surface cover. The procedure was carried out according to the visual assessment, i.e. subjectively, because of the mentioned limitations. Despite the more detailed articulation it was obvious that even the so finely articulated units are still so large that various morphological forms of landscape structure can be recognised within a single unit.
Individual morphological landscape units are called landscape pattern. In the following chapters we shall therefore speak about landscape patterns. In this case a landscape pattern denotes a certain structure, a system of - morphological or visually recognisable - landscape elements. The pattern has a clear physical appearance, it exists in a defined space, but its physical boundaries can be defined only in exceptional cases. A landscape unit may contain several different patterns and transitional forms among them. They are recorded as patterns within a landscape unit without being physically defined. Landscape patterns are not presented cartographically, and can be traced only by the landscape units in which they have been found.

3. Working procedure and the criteria for the evaluation of the landscape patterns

The basic working method was field work. It comprised observation, recording, taking photographs of landscape patterns and verification of previous definitions, e.g. definitions of regions and boundaries, classification hierarchy, etc. The description structure was agreed in advance, and subsequently further co-ordinated and amended. An attempt was also made to standardise writing methods in order to suppress the differences in style among individual authors.

In order to reduce excessive subjective approach our working procedures involved precisely defined working methods by stages or steps, multiple verifications and workshop confrontations and discussions.

Although simultaneous verification of individual working steps and procedures was time-consuming it proved in the end to be a very useful activity, because simultaneous adjustments to the study objectives were made through the experience gained from field work and processing of the material collected on site.

At the level of landscape patterns the landscape is presented by colour photographs. One of the results of this project was to be a special file of landscapes.

A description is added to each photograph of a pattern, providing the most important landscape pattern characteristics. The terms used to describe these characteristics are generally established in this field.

In the frame of classifying patterns we relied primarily on the surface cover, the settlement usually presenting its minor part. At some places the settlement is the only recognisable pattern, because agricultural land is not recognisable any more due to overgrowing. In such cases the settlement was described as a pattern. Otherwise, as said before, the typological classification of patterns tried to avoid excessive impact of settlement and its specific typology.

Working procedure

The procedure of regionalisation, although based on subjective assessment, followed serious thought about the natural characteristics of Slovenia anyway. The first hierarchic classification was based to the largest extent on the climatic conditions, also geographic as well. The next hierarchic level also included the criteria of macro-relief in addition to climatic
conditions. The most important criterion at the last level was landscape image. We presumed that the units at the lowest level have mostly uniform landscape image or at least less diverse basic typological patterns.

The landscape image of a particular unit is should be defined by landscape patterns. The landscape image, representative of a certain spatial unit by being either very frequent, typical or characteristic, identifying that unit, is described as a pattern with these features. It was clearly not possible to identify just one single pattern within a particular unit. Even a small and transparent landscape unit can be further articulated into smaller sub-units. But at this point the already mentioned difficulty of determining physical boundaries of patterns appears.

Within the frame of subjective approach such an abstraction or generalisation may include a large number of factors and landscape characteristics, which would be otherwise, as physical data, very difficult to collect and include in the formalised processing. Generalisation is expressed by the landscape unit character. A landscape unit is perceived as an area with common character. Such a definition is ”comprehensive” and therefore much more appropriate than the homogeneity of landscape units resulting from systematic and numerical processing. The decision to adopt subjective approach was therefore understandable and to a certain extent even justified.

3.1 Typological Classification Procedure

As presented in the chapter referring to the starting points of the project, the procedure of regionalisation should coincide with the typological definition of landscapes. The defining of ”common landscape characteristics”, although with the aim of searching for homogeneous spatial units, can also lead to a typological definition if the final homogeneity of the unit is expressed by morphologic characteristics. At the same time a particular landscape type inevitably expresses a certain ”landscape character” as well. This reflects the conceptual ”blending” of both activities, but that, as mentioned earlier, was the initial premise of the whole work.

An important constituent of an individual landscape unit description is the presentation of its patterns. The patterns are defined on the basis of criteria which should reveal their morphological landscape characteristics.

The typological system is built by gradual inclusion of the most important elements of landscape structure creation - landscape pattern. These elements are:
- climate - it determines the basic features of landscape which can be “read” both in land use and in vegetative cover,
- relief - together with waters it forms the basic morphologic foundation for landscape structure, and
- land use or surface cover. This is a synthesis of climate and relief, and in the areas of the most intensive spatial development it also reflects the disintegration of traditional landscape pattern.
Criteria for Classification of Landscape Patterns

1. Climate
- Alpine
- Sub-Pannonian
- Mediterranean
- Sub-Alpine landscape
- Transitional
- Dinaric landscape

2. Relief (waters)
- High mountains
- Hills
- Plateaux
- Low hills
- Valleys
- Water surfaces
- Plain
- Riverside areas
- Flood areas
- Waters - sea

3. Surface cover
- bare rocks
- Forest
- Meadows
- Fields
- Orchards
- Settlement
- Man-made bared surface
- Overgrowing pastures
- Mixed meadows and forest
- Mixed meadows and fields
- Vineyards
- Wet grassland
- Saltpans

3.2 Criteria for the evaluation of the landscape patterns

The purpose of evaluation was to rank the vitality (natural and economic), experienced pleasure ("amenity"), and stability ("health" / healthiness) ** of the landscape on the evaluation scale defining the reference landscape conditions from the most desired ones to those denoting degradation and reduction of the area’s potentials.

Four basic criteria were selected:
- natural conservation,
- diversity,
- spatial order,
- harmony.
We added two criteria of symbolic meaning for the elements of landscape parts already attributed with specific associative meanings, either at the local community level, at a wider-regional level, or at the national level:
− symbolic meaning of natural elements,
− symbolic meaning of cultural elements.

The difficulties in the application of these criteria became partly evident because of the specific character of individual criteria. In the case of natural conservation it is namely necessary to have a certain knowledge about the physical properties of landscape and about the activities going on in these areas. It is not always possible to assess the right degree of natural conservation on the basis of the landscape image or direct observation alone.

The utmost difficulty related to the criterion of diversity is the observation point. Namely, the observation from a distance can reveal other forms of diversity than a close view. Apart from that, some areas are more open and accessible and consequently more visible than others.

The spatial order is strongly influenced by land use, although some traces of order can be found in completely natural shapes as well. The land use creates most variable forms of order. The agricultural uses reveal a rule which is usually disturbed by urbanisation (dispersed urbanisation, large scale) or natural succession processes (overgrowing). When applying the criteria of symbolic meanings in the landscape a question arises: what is the weight of a certain symbolic meaning carried by the landscape, and how far-reaching is the knowledge about it? In this case the meaning was ranked on a scale grading its weight with respect to the local, regional or national level. In view of the fact that the regions of Slovenia have no formal legal status, the expression regional is used in the sense exceeding the scope of a particular community. "Regional" therefore means a definition of value, which can be identified simultaneously over a larger area.

If a sub-unit contains a degraded area as a result of human interference, which influences the visual qualities and spatial potentials, the high symbol remains anyway. Degradation does not reduce the symbolic meaning. The final score is not a simple sum and calculation of the mean value of all individual scores, but a logically integrated assessment. For this very reason the criteria of symbolic meaning are descriptive and not numerical, and separated from others. The description of a sub-unit contains the features found in the unit which are significant for a particular score. Degradation is described as well. The description thus indicates what the symbolic meaning of a landscape applies to.

**Landscape units evaluation scale**

- of the basic criteria: score 1 = the most, the largest, or to the highest degree
  score 5 = the least, the smallest, or to the lowest degree
- of the additional criteria: national, regional, local significance
4. Criteria for the definition of outstanding landscapes

When formulating the criteria for defining the outstanding landscapes as most valuable cultural landscapes one shall rely on both rational (cognitive) and irrational (emotional) expressions. We should take into account that in the landscape typology, and in the defining of outstanding landscapes, the landscapes (landscape units) are classified and valuated not only on the basis of objectively defined data on landscape structures, but also on the basis of the personal experience based on the watching and understanding of the space.

Landscapes of great values should be defined in the transparent, objective procedure and in the general level (on the basis of certain criteria), although the special ness and uniqueness are essential characteristics of outstanding landscapes.

In the last few years, there have been several attempts to set up a register of Slovenian outstanding landscapes. The selected criteria were similar in all the attempts, and hence the list of criteria for the defining of outstanding landscapes became more and more solid.

The actual list of outstanding landscapes includes almost 100 small landscape areas which:

a) represent traditional forms of dwelling and land use, adapted to natural landscape structure,
b) have visually distinctive patterns of settlements and visually expressive architectural elements,
c) have symbolic, cultural and associational values,
d) have great impressional values (natural structures, cultural values),
e) are unique in regional, national or even broader scale,
f) have special values of natural landscape structures,
g) have a consistent landscape structure which enables their spatial limitation,
h) are of great importance for national identity.
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