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THE SEARCH FOR THE NEW WAY OF THE LANDSCAPE STUDY

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Pour que le paysage puisse devenir l'objet de la recherche scientifique, il faut l'interpréter comme un concept. On peut rédiger le paysage comme un ensemble différencié. Le processus de la différenciation se déroule dans la dimension de la matière, de l'espace et du temps du paysage. Le processus contredisant de l'unification apparaît par l'expression du système synergique, par l'expression du système chorologique et chronologique. Finalement ce processus se manifeste dans l'unification de ces trois systèmes en système d'un rang — paysage plus élevé.

1 INTRODUCTION

1.1 In the preceding study [12] we pointed on the one hand to the lack of traditional conception of the landscape and on the other hand to the needs and possibilities of a new approach to the landscape. In connection with this study we will try to develop more closely the new approach to the landscape.

2 TWO WAYS OF THE LANDSCAPE STUDY

2.1 The landscape exists as an object, as an objective reality. The landscape-object can be interpreted in two ways, by the word „landscape“, and by the concept „landscape“.

By the word „landscape“ is to be clarified the nature of the landscape-object to such a measure as to make oneself understand by the help of this word in a current, spoken language.

By the concept „landscape“ the nature of the landscape-object is to be clarified to such an extent as to make possible the examination of this object systematically, scientifically, in order to become an object of the science.

2.2 How does the word „landscape“ acquire its significance? It acquires it so that it refers quite directly to the landscape-object. The word connects to the object by means of a gesture. In pronouncing the word „landscape“ we point explicitly or implicitly to the landscape-object. This operation is the landscape *ostensive definition*. However, the meaning mediated by the ostensive definition is precise only to some measure. The word „landscape“ is used in various contexts and it is why its meaning varies in a relatively large scale

[1, 13, 16, 17, 18]. However, from the spoken language view point this relative inaccuracy and vagueness is not an obstacle in understanding. But the vagueness of this word appears quite differently from the landscape scientific research point of view.

From the scientific research point of view the landscape ostensive definition is an unsuitable starting point. Almost every statement on thus vaguely conceived landscape is equally correct. Almost every research method is equally suitable. Everyone who examines the landscape thus inaccurately conceived has a completely free scope. He can adjust the object of his research according to his conceptions, needs and abilities. He can decide freely on which features of the landscape he will concentrate his attention and which of its features he will neglect.

Such a vague concept of the landscape is not therefore an instrument which would bring into the landscape research the fundamental attributes of a scientific research order and system. In the final result it may become directly an obstacle to the scientific knowledge of the landscape.

The landscape research starting from the landscape ostensive definition may come only to a quantity of partial landscape pictures, but little coherent. One time it is a landscape conceived as a sum of a bigger or smaller number of elements. In other picture the landscape can be outlined as a whole. One time, however, it is a whole formed only by topical connections, in another time it is a whole formed only by choric or only chronologic connections, etc. In further pictures the landscape is conceived again as a whole composed only of natural elements. In another time it is whole completely formed by connections oriented anthropocentrically, etc. The result of accumulating similar little corresponding and always only partial pictures is the conception that the landscape has the character of a *syncretic whole*. The traditional research, starting from an ostensive landscape definition, came to such a conception. In the syncretic landscape concept even the geography — apart from certain exceptions — has not seen for long the more serious shortcomings.

2.3 The only way out, leading from the blind alley of syncretism, is the landscape interpreted as a concept. On the basis of the present facts it is necessary to formulate a certain concept of what the landscape is, what properties and nature it has. This concept will have markedly hypothetical features. Even so it will bring into the landscape research a certain system and order. By the landscape concept it is possible to systemize and evaluate the results of the present research. It is possible to distinguish true and untrue statements on the landscape, it is possible to distinguish suitable and unsuitable methods of its research.

Even an imperfect, only provisory order in the facts and methods is substantially better than chaos and syncretism. Therefore the landscape-concept is the „raison d'être“ of the geography.

3 THE CONCEPT OF THE LANDSCAPE

3.1 Our aim is to remove from the landscape picture as much syncretic features as possible, to create an antithesis to the syncretic concept of the landscape. An antithesis to the syncretic concept is the concept of the landscape

as of a *differentiated unity* — concept that the landscape is a whole which is composed of markedly differentiated elements and of clearly defined connections uniting these elements into a whole, unity.

To the concept of the landscape as a differentiated unity it is possible to come by two contradictory operations — differentiating and uniting. The strong influence of the tradition causes that our thinking moves more easily in the direction of the differentiation. For what was the cause that the landscape research had dispersed into numerous closely specialized, not interconnected researches [see in detail [11]].

In drawing up the concept of the landscape the differentiation is an inevitable operation. However, it is not an adequate operation, the differentiation itself does not lead to the concept of the landscape. Rather the contrary. The differentiation penetrating to always greater details, blurs the landscape picture. In always clearer outlines come out the individual elements of the landscape which, however, overlap always more and more the picture itself of the landscape. Figuratively said, for trees it is impossible to see the forest.

The landscape picture will begin to acquire visible outlines only when the unification connects directly to the differentiation. In the unification the landscape will begin to appear as a distinctive form of the existence of the matter, however, little known as yet. Figuratively said of the process of unification holds „Créer c'est unir“ [8]. From the point of view of the creation of the concept „landscape“ the unification is an important operation [see [11]].

3.2 Landscape differentiation

3.2.1 The landscape differentiation is an operation whose aim is to distinguish clearly the greatest possible number of its elements, parts 3.2.2. The fundamental landscape differentiation is an operation emphasizing the difference between the *matter*,¹ *space* and *time*. After this distinction the landscape will acquire three particular dimensions-material, spatial and time. It represents a material, corpuscular formation, which is found „in the space“ and „in the time“. Each of the three dimensions is strongly internally differentiated.

3.2.3 The landscape differentiation within the frame of its material dimension consists of a distinction of various types of matter, various types of corpuscles, which build the landscape as some construction stones.

The landscape material differentiation is of a large extent and takes place on hierarchically arranged levels. In the landscape it is possible to distinguish material elements of a physical, biotic and human nature. But they are only three fundamental differences. There exists a whole series of finer differences. In the group of physical elements it is possible to distinguish, rocks, relief, soil, water, air, etc. In the group of biotic elements it is possible to distinguish the fauna and flora. In the group of human elements of the landscape it is possible to distinguish the human population and works created by human work. Under this distinguishing level there exist further levels. It is possible to distinguish the individual types of rocks, surficial forms, soils, plants, animals, social, ethnic groups, etc.

The process of differentiation within the frame of the landscape material dimension has shown the landscape as a formation materially markedly *heterogeneous*. It has shown it in the form of a formation composed of corpuscles

¹ The „matter“ has the same connotation as „der Stoff“ or „вещество“.

of varied matter. However, it has not uncovered the existence of relationships between these elements of the landscape.

3.2.4 The landscape differentiation within the frame of its spatial dimension is an operation which emphasizes the differences in the position of the landscape material elements. The material of the landscape have a character of corpuscles, impenetrable elements. Therefore it is not possible that a place taken by one material element be taken also by another material element. The spatial relationships of material elements have the character of a *disjunction*. In the light of this differentiation the landscape space appears as a *discontinuous formation*.

The landscape spatial differentiation has numerous hierarchical levels. From the differentiation on the highest, global level it is possible to descend down to the differentiation on the level of sites. The process of differentiation within the frame of the landscape spatial dimension has shown the landscape in the form of a vast discontinuous space composed of a quantity of discrete positions, places. However, it has not uncovered the relationships between these discrete positions.

3.2.5 The landscape differentiation within its time dimension is an operation which emphasizes the differences between the preceding and resulting states of the landscape material elements, as well as the differences between the preceding and resulting positions of these elements. The difference between the state (position) which „is“ and the state (position) which „was“ or „will be“ is close to the difference between being and not being. This is how we understand the relationships between the resulting and preceding states (positions) of material elements which have a character of *disjunction*. As a result of the differentiation thus understood the time of the landscape has not the character of a continuous flow, but it is composed of *discrete* states and positions. The movement takes place by jumps.

Even the differentiation of the landscape time dimension has several levels. Events in the landscape can be differentiated on the highest level on the basis of a geological stage. From this level it is possible to descend always more down, to the level of years, days, etc.

In the light of the time differentiation the landscape appears as a formation composed of a quantity of discrete events of varied hierarchical levels. However, this differentiation is not an operation which would uncover the relationships between the discrete events.

3.2.6 The landscape differentiation is an operation which leads to a certain knowledge of the landscape, to a certain notion of the landscape. It shows the landscape in the form of a formation with a complicated composition, i. e. the landscape is composed of a very varied and wide intervenes in the sphere of physical, biotic and human phenomena, that in the spatial dimension the landscape extends from the global level to the level of „point“ and that in the time dimension the landscape extends from the level of geological epochs to the level of „instants“.

However, the second aspect of the landscape composition is not uncovered by the differentiation. It is a way how the individual landscape elements, distinguished by the differentiation, relate to the unity. The process of unification leads to the clarification of this aspect of the landscape composition.

3.3 The landscape unification

3.3.1 The landscape unification is an operation whose aim is to unite in a whole the elements distinguished by the differentiation, to draw up the landscape concept in the form of a differentiated unity.

The unification as an operation antithetic to the operation of the differentiation will link up with all the levels of the differentiation.

3.3.2 The unification in the landscape material dimension is an operation through which link up with the whole those of the landscape material elements which are in the interaction. By this operation is formed the whole within which the change from one material element is transferred to other material elements not respecting either the smaller or greater differences in the matter of the elements. The unification in the landscape material dimension is an operation which does not efface the differences emphasized by the material differentiation, but it is an operation which overcomes these differences. In the light of this operation the landscape appears as a *unity materially differentiated*.

The operation of the unification does not lie on the principle „each with each“. It is not an absolute unification. But it must respect the fact that in the landscape are not realized all the possible relations between the material elements. A certain material element interacts always only with certain other elements and interacts with them only in a certain way. It is why the unification is always a *relative* unification. The relativity of the unification is the result of contradiction between the differentiation and the unification.

The absolute unification does not admit variations in the ways, form of the unification. On the opposite, the relative unification is a precondition for the *variations* in the unification of the landscape material elements. The variations in the forms of the material unification, however, do not spell disorder and chaos. On the contrary, behind the numerous variations we can recognize certain *composition principles*.

Even the most emphatic differences in the matter, the differences between the physical, biotic and human material elements are overcome by the unification which in the background of a great quantity of variations shows regular composition features. In the light of this unification the landscape appears as an arranged three-layered formation. The basal layer of this formation is formed by the physical elements, the medium layer is formed by the biotic elements and the upper layer is formed by the human elements. These different layers are united into the whole by asymmetrical dependences. The number and variability of relations between the layers is always controlled by a higher layer. In this sense the dominant position belongs to the highest human layer. On the other hand, however, the existential dependences take place in the opposite sense. The existence of a higher layer is controlled, it is dependent on the state of the lower layer. The lower layer does not depend existentially on the higher layer. From the view point of the existential dependences the lowest layer has dominant position. On the state of the basal physical layer depends the existence of the higher layers.

The formation which occurs by the unification of various material elements of the landscape has the character of the *synergetic system* [17]. It is the bearer of the *entire qualities*, which are not related to individual elements of this system, but to the way, form, as the elements of the system unify, as

they interact. In the concept of the synergetic system are overlapped the fundamental differences between the physical, biotic and human elements of landscape. In the light of this concept the landscape begins to appear a specific form of the existence of the matter.

3.3.3 The unification in the landscape spatial dimension is an operation by which are united into the whole those of the differently localized material elements which are connected by relations, which interact. In the similarly unified whole the change passes from one place to another overcoming thus the greater or smaller distances between the positions of the material elements. In the light of this form of unification the landscape appears as a *unity spatially differentiated — continuum*.

The unification in the spatial dimension is not an absolute unification. Even the spatial unification is *relative*. Only some places unite with some places. In the light of the relative spatial unification the landscape appears as a *relative continuum*. Thus is formed the condition for the *variability* of the spatial unification. Even here it is possible to distinguish certain *composition principles*.

There exist groups of places which are interconnected by a dense network of dependences. The spaces formed thus have a high degree of continuity and a character of autonomous spatial individuals. With the surrounding spaces the individuals are connected by a lesser number of dependences. Against the surroundings they appear as relative discontinuities. Since the discontinuity is only relative they can be united into wholes of higher ranks. In the light of the spatial unification the landscape appears as a relatively continuous, heterogeneous, hierarchical structural space. Its hierarchical structure can be expressed relatively well, for ex., by the decomposition of sets, when the principle of decomposition is the changing degree of the continuity of the landscape space.

The formation which takes place by the described form of unification has the character of a *chorological system*. It is the bearer of entire qualities which are related as the individual places interact between themselves.

The landscape space in the light of the concept chorological system appears as a certain *field of force* which influences the character and properties of the objects localized in it. The landscape space is not a qualitatively empty formation, but it is the only one from the principal bearers of the landscape properties.

3.3.4 The unification in the time dimension of the landscape is an operation by which are united in a whole those of the consecutive states of material objects which are connected by dependences, which interact. Within the whole formed by similar uniting the given state appears as a consequence resulting from the preceding states and simultaneously anticipating the consequent states. This form of unification overcomes the differences between the past, presence and future. In the light of the unification in the landscape time dimension the landscape time appears as a *continuum*. Even the unification within the landscape time dimension is *relative*. The given state of the material element does not correspond with all the states which preceded it, but it corresponds only with some, and even this in a certain way. Thus is formed the condition for the variability of the time unifica-

tion. Behind it we can distinguish again certain *composition principles*. There exist states united in sequences — linear or cyclic by expressive, strong dependences. Such sequences of states appear as relatively autonomous, individualized processes. Against the other processes each of similar individualized process appears as a relative discontinuity. Thanks to it the relatively individualized processes interfere, they assemble into more complicated processes of higher ranks. They create thus a complex hierarchically arranged system. The processes of a long history are found on its highest levels. On the lowest levels there are the processes almost without a history, the processes referring to short „instances“.

In the light of this unification the landscape time appears as a *non uniform, structured* flow of events. The formation that takes place by the described form of the unification has the character of a *chronological system*. It is the bearer of certain *entire qualities* which are related in the way as the events are united into wholes. The history is thus the further one from the important bearers of properties in the landscape.

3.3.5 The landscape fundamental differentiation emphasized the differences between the matter, space and time. The unification within each dimension, however, indicated that the differences emphasized by the differentiation, the differences between the matter, space and time of the landscape are not insurmountable. The synergetic, chorologic and chronologic systems in the light of the unification do not appear as independent systems, but they refer mutually. The fundamental unification is an operation which unites in a whole the synergetic, chorologic and chronologic systems. Thus occurs the system of a higher rank—the *landscape*.

The unification of the synergetic and chorologic systems is manifest by the modification of both systems. The chorologic system impresses its hierarchic composition to the synergetic system. It causes that the synergetic system changes from one place to another. There does not exist a synergetic system snatched away from the spatial context, a system which would not integrate with the neighbouring synergetic systems. In this way the entire qualities of the synergetic system depend on the chorologic system. However, there exists also an opposite dependence. The form of neighbourhood relationship, the nature of the spatial relations themselves depends, however, on the character of the neighbouring synergetic systems, on their entire qualities. In this way the composition of the chorologic system is dependent on the properties of the synergetic system.

Even the unification of the synergetic and chronologic systems appears in their mutual modification. The chronologic system impresses to the synergetic system the historic features. Similarly as in the preceding relationship there exists even here a reverse influence. The character of the history, the nature of the chronologic system depend on the properties of the synergetic system. The synergetic system has the character of a three-layer formation (3.3.2) which forms by the process of stratification — the younger layer is put on the older one, connecting with it by the mentioned asymmetric bonds. The irreversible process of stratification, lying on the asymmetrical bonds, causes that the history of the synergetic system is *irreversible*. In the process of stratification of the synergetic system the younger layer is always more mobile than the older layer. However, the younger layer interacts with

the older layers. It is why the whole synergetic system is dynamized by its occurrence. The course of events in it is always quicker, the time *accelerates*.

Even the unification of the chorologic and the chronologic systems is manifest in a mutual modification. The chorologic system becomes dynamical. The landscape space changes „in the time“, it has its history. Referring to it are consequences analogous to the above mentioned changes of the synergetic system. And the contrary, the properties of the chronologic system change „in the space“, from place to place. The time is a *non simultaneous* time, in various places it passes differently.

The unification of the synergetic, chorologic and chronologic systems is a *relative* unification. The bonds between these systems may vary, in one time they are equivalent, once dominates the one system once the other, etc.

The unification is an operation by which is gradually formed the concept „landscape“. At the end of this operation is the land conceived as a differentiated unity, as a whole or system of a higher rank which takes place by the unification (interaction) or systems of the lower rank, by the unification, synthesis of the synergetic, chronologic and chorologic systems.

4 SOME STUDY TOOLS

4.1 The outlined landscape concept is based on a whole series of various concepts. These concepts are tools by which the landscape can be studied further on, the notions and facts on it can be corrected and deepened.

Behind the contradiction between the differentiation and the unification we can distinguish the contradiction between the concept of the *sum* and the concept of the *system*. Each of these processes starts from a different notion on the landscape and only in this notion it finds its justification.

4.2 In the background of the landscape differentiation stands a well distinguishable notion that the landscape resembles the *sum*. The sum is a formation which is composed of a quantity of elements. These elements are connected with the sum only by a simple relationship of assignment, a relationship which can well be expressed by the conjunction „and“. This kind of composition permits to decompose and compose the sum in a characteristic way. In the process of decomposition or composition not even the nature of the sum changes and nor the nature of the individual elements. The elements remain identical with themselves, regardless of the fact, whether they form part of the sum or not [2, 3, 4, 10, 14]. Solely by referring to the concept of the sum does the landscape differentiation find its justification. The notion of the sum standing in the background of the landscape differentiation has several forms.

4.2.1 The basic differentiation of the landscape starts from the notion that the landscape is a sum which is composed of three elements — matter, space and time. The landscape-sum then can be decomposed into these elements so that all the three elements will keep their identity after its decomposition. This enables to study them as independent categories. In the background of this differentiation an ontological opinion can be anticipated, resulting from the classical conception of the world. Thanks to it that the matter is considered as the principal bearer of the properties in the land-

scape. The space and time have the character of abstract in substance qualitatively empty formations.

4.2.2 The landscape differentiation in its material dimension is based on the concept of the *matter*. It is based on the notion that the landscape is a material sum which can then be decomposed into various kinds of matter represented by the formations of a corpuscular character.

4.2.3 The differentiation in the spatial dimension is based on the concept of an *absolute space*. It is a concept formed by a coordinative definition, defined by a constant system of coordinates and by a constant unit of length [see in detail [7, 15, 19]]. Between the absolute space and the material elements localized in it there is a relationship of dichotomy. Körner S. [9] writes about this relationship in his „scheme of things“. The place has not an influence on the properties of the material objects. The moving material elements do not change. And the contrary, the changing distribution of the material elements has no influence on the space. The material elements can freely interchange their places, similarly as the pieces of coloured glass in the kaleidoscope. In the light of the concept of an absolute space the landscape space appears as a simple *sum of positions*. The absolute space is a tool suitable only for a simple spatial inventory of material elements of the landscape.

4.2.4 The differentiation in the landscape time dimension is based on the concept of an *absolute time*. Even this concept is formed by a coordinative definition [15]. It is defined as uniform and simultaneous. No sequence events can break the uniformity and the simultaneity of the absolute time guaranteed by the definition. The events taking place in the landscape can group quite freely, kaleidoscopically into arbitrary sequences. In the light of the concept of absolute time the landscape time appears as a simple *sum of events*. The absolute time is an implement which is suitable only for a simple inventory of events in the landscape.

4.3. In the background of the unification of the landscape stands the notion that the landscape by its structure resembles the *system*. The system is a set of elements in interaction [2]. It can be decomposed into elements. The system can even be composed of the elements. In the processes of composing or decomposing neither the elements nor the system keep their identity. By these processes the system differs substantially from the sum [2, 3, 4, 10, 14]. In these processes is uncovered the substantial property of the system, its *composition* — the way how its elements are interrelated, how they interact. The system is an indivisible, closed formation in the sense that no element can be removed, or withdrawn from it without changing the composition of the system. In referring to the concept of the system the landscape unification finds its justification. The notion of the system standing in the background of the landscape unification, however, has several variants.

4.3.1 The unification of the material elements into the synergetic system makes lose to these elements their identity. Under the influence of the interaction they change their nature. A more important category as the kind of the matter is the way how the material elements unite, how they interact. More important than the matter are the relationships between the material objects and the relationships between these relations — structure. The con-

cept of the *structure* [10, 14] is the concept from which the synergetic system results. By the concept of the structure is overpassed the landscape conception as a material formation of the corpuscular nature. The notion of the synergetic system as a threelayer formation has many features close to the conception of Harmann N. [6].

4.3.2 The spatial landscape unification is based on the concept of the *relative space*. The relative space represents not the mathematical, but rather the physical category by the field of force (see in detail [7, 15, 19]). The notion of a similar space is evoked also by Körner S. in his „scheme of situations“ [9]. In the relative landscape space the position of the landscape material element is determined by the relationships of neighbourhood — by the forms of interaction with the neighbouring elements. By these relationships is formed the close dependence between the nature and the position of material elements.

4.3.3 The unification in the landscape time dimension, the drawing of the chronologic system is based in the concept of the *relative time*. This system shows several features which are close to the conception of the history in the works of Chardin T. [8].

4 CONCLUSION

4.1 The concept of the landscape as a differentiated unity, as a *synthesis* of the synergetic, chronologic and chorologic systems is an implement by which the landscape research can be synthetized. By this synthetic conception of the landscape it is possible to solve also several of the important environmental problems. The following study deals with this question.

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HLADANIE NOVEJ CESTY VO VÝSKUME KRAJINY

Krajina jestvuje ako objektívna realita. Aby sa mohla stať predmetom vedeckého výskumu, treba ju interpretovať pomocou pojmu. Treba koncipovať pojem „krajina“ Vo výskume krajiny však funkcia pojmovej úrovne nie je dosiaľ docenená. Geografia vymedzuje predmet svojho výskumu nepresne, viac sa odvoláva na jazykovú úroveň ako na pojmovú úroveň. Dôsledkom toho je, že obraz krajiny, ku ktorému dospela, má výrazne synkretické črty — nie je presne vymedzený súbor častí—prvkov, z ktorých sa krajina skladá, nie sú určené ani väzby spájajúce tieto prvky do celku—krajiny. Za tejto situácie je prvoradým cieľom odstrániť z obrazu krajiny čo najviac synkretických črt, vytvoriť priam protiklad k jej synkretickému poňatiu. Protikladom je predstava, že krajina je diferencovanou jednotou. K poňatiu krajiny ako diferencovanej jednoty možno dôjsť pomocou dvoch protirečivých operácií — diferenciacie a zjednocovania. Cieľom diferenciacie je rozlíšiť čo najviac prvkov krajiny. Základná diferenciacia je rozlíšením medzi látkou, priestorom a časom. Diferenciacia v látkovej dimenzii je rozlíšením rôznych druhov látky. Na najvyššej diferenciačnej úrovni sú to rozdiely medzi fyzikálnymi, biotickými a socioekonomickými látkovými prvkami. Okrem toho jestvuje celý rad nižších diferenciačných úrovní. Diferenciacia v rámci priestorovej dimenzie zvyrazňuje rozdiely medzi polohami látkových prvkov krajiny. Tieto prvky sú nepriestupné, ich priestorové vzťahy majú charakter disjunkcie, takže krajinný priestor sa vo svetle tejto diferenciacie javí ako diskontinuum. Priestorová diferenciacia prebieha od globálnej úrovne až po úroveň „bodov“. Diferenciacia v rámci časovej dimenzie je rozlíšením minulých, prítomných a budúcich udalostí. V jej svetle sa čas krajiny javí ako útvar zložený z diskretných stavov. Táto diferenciacia prebieha od úrovne geologických epôch až po úroveň „okamihov“. Zjednocovanie v rámci látkovej dimenzie je operáciou, ktorá zjednocuje do celku tie látkové prvky krajiny, ktoré interagujú. Krajina sa vo svetle tejto operácie javí ako látkove diferencovaná jednota, ako synergetický systém. Zjednocovanie v rámci priestorovej dimenzie je operáciou, ktorá spája do celku tie rôzne lokalizované látkové prvky, ktoré interagujú. Vo svetle tejto operácie sa krajina javí ako priestorove diferencovaná jednota — chorologický systém. Zjednocovanie v rámci časovej dimenzie je operáciou, ktorá spája do celku tie z minulých, prítomných a budúcich udalostí, ktoré vnútorne súvisia, interagujú. Vo svetle tejto operácie sa krajina javí ako chronologický systém. Základné zjednocovanie je operáciou, ktorá na báze interakcie zjednocuje do celku synergetický, chorologický a chronologický systém, čím vzniká systém vyššieho radu — krajina. Načrtnutý pojem krajiny sa opiera o rad rôznych pojmov. Protirečenie medzi diferenciaciou a zjednocovaním odpovedá protirečeniu medzi pojmom sumy a systému. Proces diferenciacie vychádza z predstavy krajiny ako sumy, proces zjednocovania vychádza z predstavy krajiny ako systému. Diferenciacia v látkovej dimenzii vychádza z predstavy krajiny ako látkovej sumy. V priestorovej dimenzii sa opiera o predstavu, že priestor krajiny je absolútnym priestorom. V časovej dimenzii sa opiera o predstavu, že čas krajiny je absolútnym časom koncipovanie synergetického systému sa opiera o pojem štruktúry, koncipovanie chorologického a chronologického systému sa opiera o pojmy relatívneho priestoru, resp. času.