

An Introduction to the Concept of Landscape in Geography

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Abstract - The diversity of landscape concepts and definitions often perplexes researchers who are new to landscape studies, this is the most common challenge faced by most of such researchers. In terms of meaning and application the term “landscape” is highly diverse. Different disciplines, such as art, architecture, archaeology, ecology, and geography have developed and defined the concept of landscape in different ways. Even within geography, the concept is confusing due to differences in its application by different paradigms in different manner. Different schools of thought or paradigms of geography had differently perceived the concept of landscape. At a general level landscape is divided as natural and cultural, at the same time this distinction appears to be fading in more specialised academic engagements. Humanistic geographers consider landscape as a social product, whereas historical geographers focus on the origins of landscapes. Cultural geographers take a more qualitative approach to landscape, seeing it as a symbolic representation of values and meanings. This paper is an endeavor to address the cardinal genres of landscape engagements in geography.

Keywords: Production of Landscapes, Landscape as Text, Marxist Geography

I. INTRODUCTION

The etymology of landscape is a complex one, the idea of landscape is differently defined and perceived in different disciplines. The term “landscape” derived from the Germanic languages Dutch and German. The term landscape is believed to have originated from the Dutch term ‘lantscap’, and the German word ‘Landschaft’ which means land region or environment (Antrop, 2013). Landscape as an idea and ideology has its origin in renaissance Italy, it emerged as a way of representing certain relationship between landowners and their landed property during the transition from feudalism to capitalism in Europe (Mitchell, 2000). The term landscape has become popular among the general public as a synonym for scenery. Its meaning as ‘scenery’ is younger and dates back to seventeenth-century Dutch painting (Antrop 2013). Though the earliest realistic representations of landscape can be found in renaissance paintings from the fifteenth century (Vos 2000). It is believed that the emergence of landscape paintings in the renaissance period give birth to the landscape consciousness among English speaking world (Troll 1950).

In most of the English dictionaries, landscape is defined as a piece of land that can be seen at a glance or eye. As per the definition given by Oxford Dictionary Landscape means “Everything you can see when you look across a large area

of land, especially in country” (Hornby and Wehmeier, 2000). Landscape is an important area of study in subjects like Art, Aesthetics, Architecture and Geography. Each of these subjects has perceived the concept of landscape in different manner. Landscapes are generally divided into two as Natural and Cultural Landscapes. As per the general notion, natural landscapes are collection of landforms such as hills, mountains, forests and are naturally formed. Cultural landscape represents the combined work of man and nature and they are the places of people’s identities, beliefs, and livelihood (UNESCO, 2003). The term used by UNESCO in 2005, reflected an astounding confusion, and the conflation of landscape with other terms, often deployed as synonyms fashion: terms such as area, region or even humanized or natural scape (UNESCO, 2005). Even today the concept of landscape is confusing in geography, it is being differently perceived and conceived by different people according to the difference in their material and intellectual interaction with the landscapes.

II. LANDSCAPE IN ART

As an interdisciplinary idea, the development of the concept of landscape in painting is important in understanding the geography of landscapes. Visual arts in the form of paintings contributed considerably to the development of the concept of landscape. By distinguishing itself from Kantian notions of landscape as garden or agricultural area, the concept of landscape in visual arts has achieved multiple layers of meaning over time (Balik 2019). The landscape in visual arts became an expression of ideas, thoughts, beliefs, and feelings in the 15th century, coinciding with the appearance of a new type of garden design and urban lifestyle (Antrop 2013). Until the 17th century, the landscape was mostly used as a backdrop paintings and epic scenes (Balik and Balik 2019). In the 17th century, it began to be depicted independently as a subject and an artistic narrative through numerous metaphors (McTighe, 1996).

As a result of industrialization, exploration of new territories, and advances in technology, botany, and geography, the scope of the concept of landscape began to expand in the nineteenth century (Balik and Balik 2019). In the early twentieth century, movements to protect nature, landscapes, and sites arose in a number of Western countries as a result of environmental degradation and the loss of traditional rural landscapes (Antrop, 2013). During this time, the concept has grown to include immaterial constituents as well as technological, cultural, and social

developments, paving the way for the integration of experience and representation into the landscape concept (Cosgrove, 2008). Rather than referring solely to gardens and agricultural areas, the contemporary understanding of the landscape is recognised as an interdisciplinary and collaborative production with myriad layers of meaning, it has evolved into a social construct, as a means of expressing ideas, memories, imagination, and feelings (Balik and Balik 2019). Landscape became an expression of human ideas, thoughts, beliefs, and feelings through painting.

III. LANDSCAPE IN GEOGRAPHY

The meaning and definition of landscape in geography has evolved significantly over time. As per the definition given by the Dictionary of Human Geography (2000), landscape is a cardinal term of human geography, it is considered as the central object of investigation (Gregory *et al.*, 2017). Landscape as an important area of geographical inquiry has at least a hundred years history. The use of the exact meaning and the scientific definition of the word landscape was a feature of early stages of geographical research. The scientific study of landscapes was started with the naturalistic explorers (Antrop, 2013). In the early stages of geographical engagements, landscape was considered as a complex phenomenon that could be studied using objective scientific methods (Antrop 2013). Landscape was traditionally viewed as a physical and objective external world that could be empirically engaged and analysed (Bellentani, 2016). Alexander von Humboldt and Vidal de la Balche were the two pioneering geographers who contributed to the developed the concept of landscape in geographical studies (Mathewson 1986; Antrop, 2000).

Humboldt widely regarded as the “founding father” of modern geography, attempted to bring together various branches of scientific knowledge into a unified perspective on landscapes in his book *Kosmos* (Walls 2009). Through his naturalistic explorations, he pioneered the holistic perception of the landscape by emphasising the human and cultural aspects of the landscape (Malcolm, 1995). Vidal de la Blache also mentioned the importance of landscape in explaining the lifestyle of people living in particular region (Preston and Geoffrey, 1981) He had a literary and historical approach, although he perceived landscape as a holistic unity like Humboldt. He emphasised the significance of local society and its way of life in the landscape's organisation (Paulo 2004). During the turn of Humboldt and other romantic naturalists, the term landscape was applied to relatively large areas of space visually distinguished by physical and cultural features that were sufficiently homogeneous to assume individuality (Holzer, 1999). As per the traditional notion, landscape indicates a distinctive portion of physical earth (Mitchel, 2000), and it seems more closely associated with Physical Geography. Richard Hartshorne considered landscape as a geographic or territorial concept as an alternative of region or space (Muir 1999), which caused confusions among geographers in the first half of the twentieth century.

The concept of landscape became a prominent area of study in geography since the beginning of 20th century (Freitas, 2003). The term Landscape came into the Anglophonic geographical discussions through Carl Sauer's explanations (Anderson, *et al.*, 2003). He popularised the German concept of landscape in the United States, making it a cornerstone of cultural geography (Antrop 2013). As per the opinion of Sauer, the role of Geography is to scientifically examine “*the phenomenology of Landscapes*” (Sauer 1925). Thus he states that geography is the systematic study concerning the production and modification of landscapes. He believed that, landscape is the product of the interaction between human culture and bio physical environment (Anderson, *et al.*, 2003). In his morphological analysis of landscape he focused on the material imprint of nature culture interaction. Thus landscape became a core area of study in geography and was seen as a unique synthesis between the natural and cultural elements of a region. Both qualitative and quantitative methods were adopted to study landscape in geographical perspective. Methods were developed to analyse and interpret the qualitative and quantitative characteristics of landscapes by twentieth century.

IV. QUANTITATIVE REVOLUTION AND LANDSCAPE STUDIES

Following second World War, significant changes occurred in all areas of human life, including technology, transportation, economy, humanities, and science (Nir, 1990). These changes can be seen in the field of geography as well. By the 1950s, some geographers were dissatisfied with the regional paradigm of geography, which was more descriptive rather than formulating general laws, as is popular in other areas of scientific inquiry. A significant number of geographers eagerly followed the quantification trend in the social sciences, they quickly established as the dominant group and the quantitative approach was accepted as the mainstream geographical engagement (Nir, 1990).

By the 1960s, a new orientation in geography based on theory building and modelling had laid the groundwork for new techniques of spatial analysis through geostatistics, which temporarily undermined regional and landscape studies in geography (Antrop, 2013). The rise in popularity of quantitative techniques, combined with the consequent loss of significance of theoretical engagements, has resulted in a crisis in landscape studies in geography. Landscape studies again gained traction in the field of geography by 1970s. The formation of the Landscape Research Group (LRG) in 1967 was an pivotal event in landscape research's resurgence after the quantitative revolution (Antrop, 2013).

In Netherlands, the Working Community Landscape Ecological Research (WLO) was founded in 1972 and launched the Landscape journal as part of a resurgence of landscape study (Zonneveld 2000). Experts and scientists from a wide range of fields, including geography, planning, landscape architecture, archaeology, and ecology, make up

the LRG. The Landscape Research Group worked to advance interdisciplinary landscape research. At the same time, the Berkeley school of thought in the United States and many British geographers developed a philosophical approach to landscape. They emphasised the significance of landscape perception as a social construct with narratives and symbolic meanings (Tuan, 1974). The International Association of Landscape Ecology (IALE), founded in 1988 with the goal of promoting interdisciplinary research in landscape studies, added new dimensions to landscape research (Navh and Libermann, 1994). In 1988, the IALE launched two international journals, *Landscape and Urban Planning* and *Landscape Ecology*. The founding of IALE and its journals had a significant impact on the development of landscape discourse in geography and other related disciplines.

The development of geo spatial technology can be read in connection with the positivistic turn in geography. The use of aerial photographs satellite imageries and GIS has considerably influenced the landscape research in geography. The application of spatial technology detached the human experiences from the landscapes up to some level. The bird's eye view of aerial photographs and satellites considered landscapes more or less as a synonym of land use. Such engagements obscured the possibilities of theoretical engagements on landscapes in geography up to certain levels. Even though in recent years human geographers also began to use geo spatial technology in landscape research in more promising ways.

Marxian theory and Marxist geography made significant contributions to the advancement of landscape studies in geography. Geographers addressed landscape in Marxian landscape discourse as a social/cultural entity, the distinct product of human engagement with nature in the form of Labour, or as the product of the exploitation of the poor for the production of surplus value. The works of John Berger and Marxist critic Raymond Williams (1972) focused on the critical examination of the ideological function of landscape images. They argue in their works that landscape is a political entity that reflects socio-political realities. Landscapes, in their opinion, are not value neutral; they are capable of producing and reproducing the values and norms of the powerful actors in society who produce the landscape. (Williams, 1972). As per the opinion of Contemporary Marxist Geographer David Harvey, landscapes are an outcome and medium of capitalistic relations of production, explicitly it is a commodity produced under capitalism (Harvey, 1982).

Cultural geographer Don Mitchell emphasises the material process of labour in making landscapes under capitalistic power relations. He illustrates the materialistic understanding of landscape production in capitalistic production system. In an article entitled "*Landscape and surplus value*" Mitchell shows an example from Californian labour history to reveal the process through which landscape is produced in the process of surplus production.

"The production of landscape morphology is an essential moment in the production of surplus value (profit) in capitalism" (Mitchell 1994). According to Mitchell the nature, form, inherent meanings and represented values of a landscape is the reflection of the interest of its makers. *"Landscape has some meanings, representation and form all this is result of cultural imperatives of those who makes & represent the landscapes"*. In his materialist analysis of landscape, he identified that *"landscape is a matter of ongoing struggle and conflict between different social and economic groups within the capitalist network of violence, inequality, and profit"* Mitchell (1994). He brought the political-economic aspects which work in the production and modification of landscapes. In the article *Writing Western: New Western histories encounter with landscape* he states that, *"Social political and economic conditions are the key processual element that both produces and propels landscape forms"* (Mitchell, 1998).

The critical landscape geographies developed by Mitchell and others focused on the social and economic realities at work in the production of landscapes, through this he states that landscape is a social product which fetishes all the realities behind its production. *"If we think of landscape and its products simply 'natural' then they can easily appear to our eyes as innocent, untouched and unproblematic entities, objects without broader context, they seems to simply exist as a part of 'nature', once we began to think about the forces that produces the landscape things such as systems of agriculture labour, production, transnational commodity chains, buyers sellers transportation and storage providers, advertisers, supermarkets, then it quickly become a apparent that these are social and economic as much as natural products.* (Mitchell, 2003). *"Landscapes are reflections of social, political and economic circumstances so we can have a critical understanding of landscape, therefore we study landscapes for what may reveal about the nature of human social and economic relations"* (Mitchell,2003).

He also mentioned about the pass over of the role of human labour in landscape studies by the power under which the landscape is produced. In his book *The lie of the Land* (1996) He examines the production of beautiful Californian landscapes. His work proceeds through the labour history of California, he investigates the human engagements as labour behind the construction of the famous and beautiful Californian landscapes. He states that landscapes are not naturally formed but socially produced. *"The construction of Californian landscape has been the work of steelworkers, paver's, chip assemblers, dam builders, drywall nailer, textile workers and quite importantly army upon army of migratory workers planting crops, repairing railroads and highways, chopping trees, mixing cement and harvesting cantaloupes"* (Mitchell, 1996). Thorough his analysis of Californian landscapes, Mitchell give an answer for the important question like *"how does the geographically configured space of landscapes contribute to the survival of capitalism?"*. His work on Californian landscapes reveals

the linkage between landscapes with the long histories of struggles, oppression and alienation of human labour. Mitchell raises several political questions against the production of specific landscapes through this study. Landscapes are predominantly the product of human labour, and the nature of the landscape is determined by the mode of production under which the labour is employed. Landscape is the product of material or mental interaction of man with the physical environment.

Denis Cosgrove was another major figure who adopted explicit Marxist critical approach to landscape studies. Denis Cosgrove (1992) observed that the landscapes are the result of capitalist engagements in the society. He argued that landscapes are not produced according to the interests of an individual policy or of a state, rather it is the function of corporate decisions. As per His observation, landscape will help to uncover the hidden meanings represented in it. Landscapes are not value neutral but are loaded with the dreams and desires of the power under which they are produced. Denis Cosgrove (1998) In his monumental work, *Social formation of Symbolic Landscape* provided a more subjective understanding of the concept of landscape. He examined the history of the idea of landscape from Renaissance Italy to the modern world. He provided a definition of the idea of landscape as a way of seeing and representing the world. "*Landscape is a way of seeing that has its own history, but a history that can be understood only as part of a wider history of economy and society*" (Cosgrove, 1998). Marxist approach to geography aided to reinforce the interdisciplinary characteristics of landscape research.

V. LANDSCAPE AS TEXT

A new perspective in landscape approach has developed in Geography under the influence of the structuralism in cultural geography. By 1980s human geographers extensively began to use the metaphor of 'text' to interpret landscapes (Bellentani, 2016). The landscape began to be addressed as 'text' which carries multiple meanings. The consideration of landscape as text in landscape interpretation helps to expose the hidden meanings represented in landscapes to interpret the unrepresented meanings (Bellentani, 2016). In this approach landscape was viewed as a cultural construction, a unique way of organising and representing the world. (Watts, 1957) in his work "*Reading the landscape of America*" pinioned that, "*we can read any landscape as we might read a book*". Jewish geographer Marwyn Samuels observed landscape as an intentionally shaped entity. According to him, every landscape will reflect the builder's dreams and desires, landscapes can be considered as their own individual biographies (Samuels, 1979).

Pierce Lewis in his article '*Axioms for reading the landscapes*' defined landscape as '*our unwriting biography*'. In the first part of his article, he deals with the very common American notion of landscape as a prettified

piece of land with manicured bushes and trees. In the following section, he states that human made landscapes has several cultural meanings, landscapes are capable of reflecting the taste, values, aspirations and even fears of people who worked on it (Lewis,1979). Meinig denied the martial interpretation of landscape as a piece of land over the surface. He observed that "*any landscape is composed not only of what lies before our eyes but what lies within our heads.*" he analyses various reasons behind the difference in people's perception of the same landscapes. He states that while observing a landscape, people incorporate their socially constructed ideas and understandings to interpret it. As per his observation, the same landscape will be perceived by different viewers differently according to their personal traits. He suggested ten different ways of viewing and perceiving the same landscape (Meinig, 1979).

Duncan and Duncan (1988) defined landscape as a text, which should be critically read via the principles of the structuralist semiotics. Duncan attempted to analyse the dialectic relationship between landscape and power in his work "the city as text. His study on the Kandy highlands of Sri Lanka aided in elucidating the political economy of landscape production in the region. For him "*the landscape is one of the central element in a cultural system, for an ordered assemblage of objects, a text, it act as a signifying system through which social systems communicated, reproduced, experienced and explored*" (Duncan, 1990).

He explained, Landscapes as the result of powerful actors' deliberate interventions based on their goals. In addition, the textual turn in geography associated with landscape studies saw landscape as a "communicative device" (Duncan 1990) created by an "author" to communicate information to a variety of "readers." Duncan and Duncan in an article entitled "*Doing landscape interpretation*" published in *the Sage handbook of qualitative Geography* examined the idea of landscape at different levels. He analysed the contrasting ways through which the concept of landscape is defined and redefined in Aglo-American geography. They revealed different ways of conceptualizing landscape in geography (Duncan & Duncan, 2009).

VI. REDEFINING THE TEXTUALITY OF LANDSCAPE

Post-structural geographic research restructured the notion of landscape as text after the 1980s. The scholars who advocating for this new turn in landscape studies forwarded the idea that "there is something outside the text!" (Peet, 1996). They criticized the objective or material understanding of landscape as text. As a result a group of cultural geographers began to uncover the hidden meaning of landscapes as text (Bellentani, 2016). Famous humanist Geographer Yi Fu Tuan forwarded this idea in his article "*Thought and landscape*" in 1979 that, landscapes are not only material entities, but are also the work of the mind. He states that Landscapes are realities ordered from different

directions, from each direction the landscape reflect different meaning (Tuann, 1979). After the 1990s, the role of the author in interpreting landscape as text was challenged due to the influence of post modern literary theories (Cf Duncan, Duncan, 1998; Duncan, 1990). This method of landscape research reduced the rigidity of landscape interpretive possibilities by considering all possible ways of landscape interpretations. To put it another way, landscape began to be thought of as a polysemic concept. In recent decades this conception of landscape as a simple material object has changed and began to read landscape as text, as the expression of something to interpret, something that lies beyond, to be lived, practiced and experienced. (Minca, 2013).

The humanist geographers of the second half of the 20th century adopted a more people oriented approach to study landscapes. Researchers began to learn about landscape dynamics from the people who live in it and according to their perception. Timingold (2000) point out that, landscape researchers can learn about landscape from the informants, from their views and cameras so that they can understand the elements of their own landscapes that are meaningful to the informants (Timingold, 2000). In this way, the investigator can avoid his own preconceived ideas about landscape and come to see the world through the eyes of informants. A more qualitative and intense people oriented landscape study approach developed in geography during this period.

VII. DISCUSSION

Arriving at an appropriate approach with suitable theoretical position is a gradual and time consuming process. It requires wider understanding of the developmental history of landscape paradigms. Landscape research in geography proliferated in different genres, and it had a transdisciplinary character, there for it is difficult to develop a chronological order in the developmental pathways of landscape research. In the earlier engagements Landscape was considered as a material or terrestrial unit that can be studies with of Euclidian geometry. Later landscape studies began to engage the human environmental interaction and resultant changes in the physical scape.

Gradually landscape studies developed to thrust upon the way of seeing and perceiving the landscape which is socially produced. Thereafter the quantitative revolution rational and positivistic turn in geography during 1950s and 60s undermined landscape research up to 1980. The 1980 witnessed the re-emergence of the concept of Landscape geography through the domain of Landscape ecology. The postmodern turn in geography was relatively delayed while comparing to the art and literature. Under the influence of postmodern social and literary theories landscape research in geography became more transdisciplinary. After 1990s number of works were came out in geography in this genre, especially on urban landscapes.

VIII. CONCLUSION

The Concept of Landscape has evolved greatly over years through its transdisciplinary engagements. Landscape research in geography opens up various interpretative options ranges from material to more subjective interpretations based on the nature and the theoretical position of the research. Different theoretical positions provide different frameworks to look upon the dynamics of landscape production and modifications. The transdisciplinary character of the concept made it difficult to provide standardised definition to landscape in all times. The postmodern turn, which rejects all grand narratives, contributes to the re-emergence of landscape research in various fields of geography in a very subjective and specialised manner.

REFERENCES

- [1] K. Anderson, M. Domosh, S. Pile, and N. Thrift, *handbook of Cultural Geography*, Sage, London, 2003.
- [2] Antrop, *A Brief History of Landscape Research*, in Peter Howard, Ian Thompson and Emma Waterton.(eds.)The Routledge Companion to Landscape Studies," Routledge, London, New York, Marc,2013.
- [3] G. Balık, and D. Balık Lökçe, "On the Relationship of Landscape," *AM Journal*, Vol. 19, No. 1, pp. 29-44, 2019.
- [4] Bellentani Federico, "Landscape as text. In: Higuera, Claudio Julio Rodriguez and Bennett," Tyler James (eds.) Concepts for Semiotics, University of Tartu Press: pp.76-87, 2016.
- [5] D. Cosgrove, "Landscape: ecology and semiosis," in Palang, H. And Fry, G. (eds.) *Landscape Interfaces: Cultural Heritage in Changing Landscapes*, Dordrecht: Kluwer Academic Publishers: pp. 15-20, 2003.
- [6] D. E. Cosgrove, *Social Formation of and Symbolic Landscapes*, Wisconsin University Press, Madison, 1992.
- [7] Cosgrove Denis, and Stephan Daniels, *The iconography of landscapes: Essays on the Symbolic Representation, Design and Use of Past Environments*, Cambridge University press, Cambridge, 1998,
- [8] W. M. Denevan and K. Mathewson, "Carl Sauer on Culture and Landscape: Readings and Commentaries," Louisiana State University Press, Baton Rouge: pp. 9-28, 2009.
- [9] E. Denis Cosgrove, *Introduction to Social Formation and Symbolic Landscape*, in James Elkins And Rachael Ziady De Lue, *Landscape Theory*(eds.) Routledge, London, New York,2008.
- [10] J. Duncan, and N. Duncan, (*Re*) *reading the Landscape, Environment and planning*, society and space, 1988.
- [11] S. Duncan James, *The City as Text: The Politics of Landscape Interpretation in the Kandy Kingdom*, Cambridge University Press, Cambridge, 1990.
- [12] Simone Freitas "Landscape: Where geography and ecology converge," *Holos Environment*, Vol. 3, No. 2, pp. 11-25, 2003.
- [13] Derek Gregory, *The dictionary of human geography*, Blackwell, Malden, 2017.
- [14] David Harvey, *The Limits to Capital. Verso*, London, 1982.
- [15] A.S. Hornby, and S. Wehmeier, (eds.) *Oxford Advanced Learner's Dictionary*, 6th edition, Oxford, UK: Oxford University Press, 2000.
- [16] Peirce Lewis, "Axioms for Reading the Landscapes," *Journal of Architectural Education Taylor and Francis*, London, Vol. 30, No. 1, pp. 6-9, 1979.
- [17] D. Lowenthal, "Past time present place: landscape and memory," *Geographical Review*, Vol. 65, No. 1, pp. 1-36, 1975.
- [18] Nicholson Malcolm, *Historical Introduction Alexander von Humboldt Personal Narrative of a Journey to the Equinoctial Regions of the New Continent*, Penguin, London, 1995.
- [19] Annals Massachusetts, *Association of American Geographer*, Vol. 86, No. 1, pp. 21-43.
- [20] Kent Mathewson, "Cultural landscapes and ecology, 1995-96: Of oecumenes and nature(s)," *Progress in Human Geography - Prog Hum Geog*, Vol. 22, pp. 115-128, 1998.

- [21] Sheila McTighe, *Nicolas Poussin's Landscape Allegories*, Cambridge University, Cambridge, New York, 1996.
- [22] D. W. Meinig, J. B. Jackson, and P. F. Lewis, "The interpretation of ordinary landscapes: geographical essays," Oxford University Press, New York, pp. 89-102, 1979.
- [23] C. Minca, "The cultural geographies of landscape," *Hungarian Geographical Bulletin*, Vol. 62, No.1, pp. 47-62, 2013.
- [24] Mitchel Donald, *Cultural Geography; A Critical Introduction*, Blackwell Publishing, Victoria, 2000.
- [25] W.J.T. Mitchel, *Landscape and Power*, Routledge, London, 1994.
- [26] Donald Mitchell, *The lie of the land*, University of Minnesota press, London, 1996.
- [27] Donald Mitchell, *The scale of justice, Localist ideology*, Large scale production and agricultural labour's Geography of Renaissance in California. Organizing the landscape, 1998.
- [28] Donald Mitchell, *California living California Dying*, Dead labour and the Political economy of Landscapes in Andersons, K. *et al.*, (eds.) *Handbook of Cultural Geography*, Sage, London, 2003.
- [29] R. Muir, *Approaches to Landscape*. Macmillan, London, 1999.
- [30] Z. Naveh, A. Lieberman, *Landscape Ecology: theory and application*. Springer, New York, 1994.
- [31] Dov Nir, *Region as a Socio-environmental System: An Introduction to a Systemic Regional Geography*, Springer. Netherlands, 1990.
- [32] Claval Paul, *The Languages of Rural Landscapes*, in European Rural Landscapes: in Hannes Palang, Helen Sooväli, Marc Antrop, and Gunhild Setten (eds.) *Persistence and Change in a Globalising Environment*. Springer, Dordrecht, 2004.
- [33] J. Richard Peet, *A sign taken for history: Daniel Shays Memorial in Petersham*, Press, 1996.
- [34] E. J. Preston, and J. M. Geoffrey, *All Possible Worlds: A History of Geographical Ideas*. Wiley, New York, 1981.
- [35] M.S. Samuels, "The biography of landscape," Cause and culpability, in: D. W. Meinig (Ed.), *The Interpretation of Ordinary Landscapes*, pp. 51-88 (New York and Oxford: Oxford University Press), 1979.
- [36] O. Saur Carl, *The Morphology of Landscapes*. Berkeley, Calif: University of California press, 1925.
- [37] Timingold, "The Perception of the Environment: Essay on Livelihood," *Dwelling and Skill*. Routledge, London, 2000.
- [38] Yi-Fu Tuan, *Topophilia: A Study of Environmental Perception, Attitudes and Values*, Englewood Cliffs, Prentice-Hall, NJ, 1974.
- [39] UNESCO, *Cultural landscapes: The Challenges of Conservation*. World heritage papers, Ferrara: World heritage Centre, 2003.
- [40] UNESCO, 2005. [Online]. Available: <https://whc.unesco.org/en/culturallandscape>
- [41] W. Vos, *The history of European landscape painting. In From Landscape ecology to landscape science*, Kluwer Academic Publishers, Wageningen, 2000.
- [42] L. Walls, *Introducing Humboldt's Cosmos*. Minding Nat, 2009.
- [43] Theigeerd Watts, *Reading landscape: An Adventure in Ecology*. Mcmillan, New York, 1957.
- [44] Raymond Williams, *Ideas of Nature in Ecology the inquiry shaping*. Longman, London, 1972.
- [45] I. S. Zonneveld, *Land Ecology*. SPB Academic Publishing, Amsterdam, 1995.