



Delft University of Technology

Landschappelijke authenticiteit

Het landschap als levend systeem, geschiedenis en ruimtelijke beleving

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LANDSCAPE AUTHENTICITY

THE LANDSCAPE AS A LIVING SYSTEM,
HISTORY AND SPATIAL EXPERIENCE

STEFFEN NIJHUIS

Genuineness, originality and authenticity are terms that are very close in meaning and they are often associated with the use, preservation and evaluation of cultural heritage such as paintings, sculptures and buildings. But how does that work with the landscape? Is there such a thing as landscape authenticity? And how can that be understood? ►

1. Reclaimed lakes are often clearly recognizable landscape types. The Beemster is a famous example, with its characteristic irregular perimeter dike, orthogonal planting and subdivision patterns, and typical 'stolp' farmhouses, all well below sea level (photo Hans Lemmens, Algemeen Nederlands Persbureau)



In this article authenticity means that each landscape has its own distinguishing features and is differentiated by its own specific character. In other words, landscape authenticity is about spatial quality and identity. Orientation in time and space play a role, as do aesthetics, (multi)functionality, ecological variation and coherence. Owing to the diversity of connections and interactions between these aspects, landscape authenticity is a complex matter. This article argues that we can understand landscape authenticity by looking at the landscape as an integrated whole: as a living system, history and spatial experience.

LANDSCAPE AS A LIVING SYSTEM

A common definition of landscape is the one adopted by the Council of Europe: 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'.¹ This definition emphasizes the dynamic nature of landscape: landscape changes with and without human intervention. Sometimes the changes are far-reaching, sometimes less so. Some changes, such as the consequences of climate change, take a long time to become visible. But change can also occur swiftly, as when a new housing development is built in a former agricultural area. This is why landscape can be conceived as a living system, which is to say a complex and dynamic network of subsystems that are constantly changing in response to natural processes, social demands and technical possibilities. As such the landscape is an interface between nature and society, which manifests itself in a material space made up of both structures and processes.

In order to understand the coherence and heterogeneity of landscape in space and time, it is important to study the chronological (horizontal) and topological (vertical) relationships.² A practical and widely used method entails analysing the landscape in layers and organizing them according to the level of influence and dynamics of change.³

LANDSCAPE IN LAYERS

Unpacking the landscape in layers is a way of grasping the different systems and subsystems and their relationships. This dissection into layers should not be seen as a static or hierarchical arrangement. Rather, it is about discrete layers that influence one another to a greater or lesser degree, and that influence may also change over the course of time. There are many types of layer-based analysis, such as the triplex model in which a distinction is drawn between the abiotic (relief, water, soil), biotic (flora and fauna) and anthropogenic (human activity) layers.⁴ Another well-known layer model divides the landscape into substratum, networks and urbanization.⁵ Although useful in their

application, neither model explicitly addresses the social and cultural aspects. Alternative layer-based approaches stress that the concept of the relation between the physical environment (hardware), human activity (software), and cultural, institutional and conceptual ideas (orgware) is essential to understanding the landscape and its genesis.⁶ In light of this, the following layer-based analysis seeks to understand the landscape a dynamic interaction between human beings and nature.

THE NATURAL CONTEXT (LAYER 1)

The natural context is made up of relief, water, soil, geological substructure and climate, together with the corresponding ecosystems. This layer should be seen as an exogenic, physical factor, with specific features that are also subject to change, such as geological and geomorphological processes like plate tectonics, erosion and sedimentation by wind and water (fig. 1). Natural succession, as when open grassland turns into a forest or into a semi-open park landscape as a result of natural grazing, is a concrete example of this process. The natural context should not be regarded as a discrete factor, but as a central and inextricable component of the system that in large part determines how the landscape can be used. The dynamics of this basic condition are characterized by a slow, often almost imperceptible, process of change, repetition and natural cycles.

HUMAN MODIFICATIONS AND INTERVENTIONS (LAYER 2)

Human activity is part and parcel of the use of the natural context for living, working and recreation. Human beings appropriate the natural environment through activities such as road building, land reclamation, diking and canalization of watercourses, the construction of towns and villages, drainage and irrigation, which manifest as, among other things, different subdivision patterns and water infrastructure. Throughout history, that appropriation process has led to a succession of sometimes drastic changes in the landscape. The dynamics of this layer are related to the long term of social, economic and cultural history.

CULTURE, ORGANIZATION AND POLITICS (LAYER 3)

This layer comprises the cultural, spiritual and religious conceptions of the natural context and our engagement with it, including the state of science and technology, organizational forms, political movements, design concepts and aesthetic ideals. Water, for example, has different meanings in different cultures, which can find expression in landscape architectural treatments in parks and gardens. The reclamation of the peatlands in the western Netherlands,



2. The dynamic character of the landscape is clearly visible along the Dutch coast where processes of erosion and sedimentation continually modify the land (photo Joop van Houdt, Rijkswaterstaat)

for example, was in part motivated by geopolitical and economic considerations. Another example is land reclamation for food production, housing, recreation and nature development in the IJsselmeer area. The dynamics of this layer relate to the relative short term, linked to people and politics.

An understanding of landscape authenticity is inherent to the concept of the layers and their relationships that constitute the landscape system. The landscape is a relational structure that connects and influences scales and spatial, ecological, functional and social entities. As such, the landscape is not just a holistic system, but also a scale continuum that we can only understand by looking at different spatial scales and their relationships.

LANDSCAPE AS HISTORY

Time is an important factor in landscape authenticity. Over time the landscape undergoes transformations resulting from selections based on possibilities and evaluation. Some structures, patterns and forms are preserved, others continue to develop or are replaced by new ones. That transformation or series of transformations usually results in a balance between more permanent landscape structures and others more prone to rapid change.⁷ The more permanent ones tend to be resistant to change and over time become more robust (and even inert). Those asynchronous transformations turn the landscape into a layered whole in which physical traces of time can reinforce or contradict one another.⁸ It provides a window on a range of chronologies, events and meanings that con-



3. A layer added to the history of the place. This divided bunker, once known as Bunker 599, offers visitors to the Diefdijk Line a different perspective of the surroundings. A joint project of RAAAF and Atelier de Lyon, 2013 (author's photograph)

nect the traditional and the contemporary, the tangible and the intangible. In that respect an authentic landscape is so rich in meaning that it can be 'read' as a biography, as a palimpsest that illustrates the key activities that have contributed to the formation of that landscape.⁹ Key to the landscape as history is the notion of the *longue durée*, the landscape as a long-term structure that changes over time in a process of 'sequent occupance'.¹⁰ A knowledge of these historical traces is one of the starting points for new transformations of the landscape: the addition of new 'layers' (fig. 2). As such, the evolution of the landscape is inherent in the 'erasure' and the 'writing' of history. The landscape is the result of a gradual process of selection in which some elements remain and others change or are replaced.

LANDSCAPE AS SPATIAL EXPERIENCE

Spatial experience is crucial to understanding landscape authenticity. Legibility of the landscape is a key concept, as aptly expressed by the poet Willem van Toorn: 'Some landscapes are so "full", so rich in meaning, that you can almost read them like a book, or look at them like a picture book. ...You don't even have to know a lot about the history of the area to see, or rather experience, how it has acquired its wealth of forms through an age-long interaction between human beings and nature.'¹¹ This involves the perception of beauty and the orientation in time and space resulting

from the aforementioned processes. Perception alludes to the sensory relationship between the observer and the landscape. In principle it entails a holistic experience involving all the senses, although visual aspects dominate because most sensory information about the spatial environment comes via visual perception.¹² The scope of our senses also plays a role. While the landscape in our immediate surroundings can be experienced with all our senses, the vast majority of landscape is experienced mainly through sight.¹³ Spatio-visual characteristics, such as unity, spatiality and outward appearance, are crucial to the legibility of the landscape and the concomitant human behaviour and valuation of the landscape (fig. 3).¹⁴

CONCLUSION

Landscape authenticity can be understood by regarding the landscape as a living system, as history and as the spatial expression of that history. The landscape is constantly changing, even without human intervention. Legibility of the landscape is the basis for its perception and valuation. The physical aspects are just as dynamic as the perceptual: a changing view of the landscape often leads to a change in how we treat the landscape. This is characterized by a selective and incremental process in which the role of time is obvious; some structures remain and are modified; others make way for new structures. Understanding the evolution of the landscape is therefore just as important as the visible result. For this reason, the landscape is also an important source of knowledge about the valuation of material (physical) and intangible (social and political) features of the past, about how to deal with particular natural conditions and their effects, about how the landscape functions, which interventions are successful and which not, and so on.¹⁵

How then are we to deal with landscape authenticity? Landscape authenticity has nothing to do with fossilizing the landscape in its current condition; a landscape cannot be preserved unchanged given that it is itself the result of continuous transformation. Dealing with the landscape does call for a careful approach because rapid urban development and functional change can compromise the layering and legibility of the landscape and there is a danger that the cultural identity will disappear. To avoid this requires a 'management of change' approach aimed at creating a future landscape in which the past, in one form or another, continues to play an appropriate role.¹⁶ This demands a dynamic and political process that is not confined to the domain of the landscape experts, but in which local stakeholders are also actively involved.¹⁷ In this way the public debate about the significance of (historical) landscape features and their use can give rise to careful appraisals of landscape authenticity.

NOTES

- 1 Council of Europe, European Landscape Convention, Florence, 3; see also: I. Zonneveld, *Land Ecology. An Introduction to Landscape Ecology as a Base for Land Evaluation, Land Management and Conservation*, Amsterdam 1995.
- 2 Zonneveld 1995 (note 1). In north-western Europe there are long traditions of landscape characterization and physical-geographical and historical-geographical research that focus on such relations. Each of these research fields has its own research perspective and set of research tools. For an overview see, for example: M. Antrop and V. van Eetvelde, *Landscape Perspectives. The Holistic Nature of Landscape*, Basel 2019.
- 3 F. Braudel, *La Méditerranée. La part du milieu*, Paris 1966; S. Nijhuis and M. Pouderoijen, 'Mapping Urbanized Deltas', in: H. Meyer and S. Nijhuis (eds.), *Urbanized Deltas in Transition*, Amsterdam 2014, 10-22.
- 4 P. Vrijlandt and K. Kerkstra, *Mergelland. Landschap en mergeelwinning*, Wageningen 1976.
- 5 M. de Hoog, D. Sijmons and S. Verschuuren, 'Herontwerp van het laagland', in: D. Frieling (ed.), *Het metropolitane debat*, Bussum 1998.
- 6 Braudel 1966 (note 3); G. Dobrov, 'The Strategy for Organized Technology in the Light of Hard-, soft-, and Org-ware Interaction', *Long Range Planning* 12 (1979) 4, 79-90; T. Tvedt and T. Oestigaard, 'Urban Water Systems. A Conceptual Framework', in: T. Tredt (ed.), *A History of Water. Series III, Volume 1. Water and Urbanization*, London 2014, 1-21.
- 7 M. Bobic, *The Role of Time Function in City, Spatial Structures and Present*, Aldershot 1990.
- 8 N. Roymans et al., 'Landscape Biography as Research Strategy. The Case of the South Netherlands Project', *Landscape Research* 34 (2009) 3, 337-359.
- 9 For landscape as biography, see M. Samuels, 'The Biography of Landscape', in: D. Meinig (ed.), *The Interpretation of Landscape*, New York 1979, 51-88. For landscape as palimpsest, see A. Corboz, 'The Land as Palimpsest', *Diogenes* 31 (1983) 121, 21-34.
- 10 C. Sauer, 'The Morphology of Landscape', *University of California Publications in Geography* 2 (1925) 2, 19-54; D. Whittlesey, 'Sequent Occupance', *Annals of the Association of American Geographers* 19 (1929) 3, 162-165.
- 11 W. van Toorn, *Leesbaar landschap*, Amsterdam 1998, 65.
- 12 J. J. Gibson, *The Ecological Approach to Visual Perception*, Hillsdale 1986.
- 13 J.G. Granö, 'Reine Geographie. Eine methodologische Studie beleuchtet mit Beispielen aus Finnland und Estland', *Acta Geographica* 2 (1929) 2, 202.
- 14 J.F. Coeterier, *Hoe beleven wij onze omgeving?*, Wijchen 2000.
- 15 M. Antrop, 'Why Landscapes of the Past Are Important for the Future', *Landscape and Urban Planning* 70 (2005), 21-34.
- 16 G. Fairclough, 'New Heritage, an Introductory Essay. People, Landscape and Change', in: G. Fairclough (ed.), *The Heritage Reader*, London 2008, 297-312.
- 17 H. Renes, 'Different Methods for the Protection of Cultural Landscapes', in: H. Palang et al. (ed.), *European Rural Landscapes. Persistence and Change in a Globalising Environment*, Dordrecht 2004, 333-344.

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LANDSCAPE AUTHENTICITY THE LANDSCAPE AS A LIVING SYSTEM, HISTORY AND SPATIAL EXPERIENCE

STEFFEN NIJHUIS

Landscape authenticity relates to spatial quality and identity. Orientation in time and space are relevant, as are beauty, (multi)functionality, ecological variation and coherence. Owing to the diversity of connections and interactions between these aspects, landscape authenticity is a complex matter. This article contends that landscape authenticity can be understood by looking at the landscape as an integrated whole: as a living system, as history and as spatial experience. The landscape changes even without human intervention. The legibility of the

landscape is crucial to how it is perceived and valued. The role of time is obvious and is characterized by a selective and incremental process whereby some structures endure and are adapted, while others make way for new structures. Landscape authenticity is not about fossilizing the landscape: a landscape cannot be preserved unchanged given that it is itself the outcome of continuous transformation. Understanding the evolution of the landscape is therefore just as important as the visible result.