LANDSCAPE ARCHAEOLOGY

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Summary

The gradually increasing awareness of the deep mutual relationships between the natural and social environments determines the ever more pronounced contemporary orientation of archaeology towards the protection and study of cultural landscapes and their historical development. The landscape is a phenomenon claimed by the advocates of both positivist (scientific) and postmodern approaches to archaeology. Each has found within it inspiration for the expansion of its paradigms. A summary is presented of the understanding to date of the landscape phenomenon and the expression of man's relation to it in the arts, philosophy, natural sciences, and particularly in archaeology and anthropology. The roots of the burgeoning interest in the discovery and documentation of monuments in the landscape, and of the tracing of their relationships both to natural landscape components and to each other, are examined. Interest centers on the development of archaeological topography in Early Modern England (J. Leland, J. Aubrey, W. Stukeley) and of "field archaeology" (W. Roy, H. Allcroft), from which in the twentieth century landscape archaeology was born. Spatial archaeology grew from different foundations, although sources of inspiration for both disciplines lay in the fields of the natural sciences, particularly geography. Special attention is paid to the person of O. G. S. Crawford. Developments in research into historical landscapes during the second half of the twentieth century are analyzed, and the basic tendencies that made decisive contributions are named. Topics include the beginning of dynamic processes of investigating the prehistoric environment, the swing towards research into

settlement history at scales of territorial wholes or regions, the application of spatial models of the new geography, and intensive research into medieval rural settlement. Settlement and historical geography, and the application of GIS to the study of archaeological landscapes, are also considered. The conclusion emphasizes the non-destructive essence of the methods employed in landscape archaeology. It is these, indeed, that provide further perspectives for the development of this discipline and its timeliness.

1. The Concept of Landscape: Past and Present

The landscape as a theme in archaeological research has become a lasting center of attention for a significant part of the professional public since the huge potential of aerial archaeology was recognized. This occurred in the 1920s and 1930s, when the British geographer and archaeologist O. G. S. Crawford was able to use photographs taken by air force pilots over southern England to identify networks of prehistoric fields, trackways, and fortified enclosures. This was the beginning of the explosive development of aerial archaeology. The results have fundamentally broadened our knowledge of the formal shapes and variability of prehistoric settlement features (in particular demonstrating the existence of a vast range of ditch enclosures) and of entire buried landscapes with hitherto unknown settlements, cemeteries, cult centers, production areas, and communications. At the same time, the discovery of thousands of new settlement locations has increased the absolute number of archaeological sites (find spots), which among other things has made more effective site protection possible. In the interwar period another important method of data collection began to flourishsurface collection surveys (in which the search for material remains-artifacts, ecofacts-of ancient settlement activity is conducted on the surface of ploughed fields). The landscape is a phenomenon claimed both by the positivist or modern scientific archaeology and also by the "subjectively" oriented postmodern archaeology. Each has found in this concept inspiration for the expansion of its paradigms.

Landscape archaeology is an alternative to the tradition of settlement archaeology, particularly in three senses: First, it operates with data from a larger contiguous territory, making it possible to study settlement processes in the framework of larger spatial structures (e.g. settlement areas and regions). To create a model from such structures is one of the primary tasks of contemporary (theoretical) archaeology. Second, it is preoccupied with the internal cultural landscape (settlement spaces) and with those components that do not have preserved physical remains or are not recognizable by traditional means. Third, it applies non-destructive (or at least less destructive) methods of data collection, which bring results that would not be obtainable by use of more traditional approaches. Given the aims of landscape archaeology, the results include the identification of the forms of settlement structure and their location within the landscape, and the continuity of settlement areas. At the same time, non-destructive means of research are much more considerate of the archaeological part of cultural heritage, and significantly contribute to the protection of monuments.

Many peoples have developed an understanding of landscape as a source of foodstuffs and raw materials or as something that retreats before civilization—a refuge for man in

a technocratic age. A few link the landscape to the lives of our forebears or with the history of settlement processes. It is to these that we can present models of the relationship between human communities and their natural environment that show how they shaped it in the gradual long term process of human actions upon the landscape.

1.1 Perceptions of the Landscape and their Reflection in the Arts

The civilizations of classical antiquity viewed the landscape as a manifestation of ideas about the fulfillment of life's aspirations (the bucolic landscape, warm sun, springtime, lush vegetation, fertility). Landscape as a phenomenon became a lasting theme of Western culture from when the agricultural civilization of the European Middle Ages was drawing near to its end. At that time, rational thinking, industrialization, long distance trade, and mature market relationships were being pushed irreversibly to the foreground. The majority of the Medieval population were firmly linked to their roots in the natural environment, and lived on sources offered by this environment which humans could transform, adapt, and reproduce. Medieval peasants, the most numerous social group in the society of that day, were fully imbued with the landscape that surrounded their everyday horizons-and perhaps could be said to be consumed by it. They therefore felt no need to examine their environment from the outside and to consider it an autonomous or detachable part of reality. Medieval cosmology saw no difference between natural and anthropogenic landscape components. The further into the past one looks, the more the relationship between people and nature had this character. The fundamentally important question is how far the people of archaic times were able to judge the mutual associations and relationships between individual elements of their ecosystem. Was the gradual degradation of the natural environment (and its abrupt, catastrophic reversal) in prehistory and in the Middle Ages the result of landscape exploitation the consequences of which they were unable to assess in advance? Or were the people of the distant past aware of the dangers but compelled by social or demographic pressures to act against the most natural means of their existence within the landscape?

Around the middle of the first millennium AD, the ever-increasing number of town dwellers began to see nature as more distant from their immediate environment and experience, and the free landscape began to a greater extent to be understood as an artifact. Considered to be formed in some way by natural forces and man, the landscape was at the same time something with its own internal dynamics, secrets, and poetry, a space worthy of the attention of artists. In the period of European Romanticism, a reaction of people against rigorous Rationalism, estrangement from and disillusionment with modern civilization, this relationship with the landscape came to a head. Nature became a temple and forgotten paradise to which it was necessary to return and in which it was necessary to seek out the ancient roots of human nature. It was not only the "natural" landscape to which the Romantics sought a way back but also a landscape with a memory in which the relics of human works of the distant past played an important role. For Romantic poets and painters, the return to the womb of nature was thus not only a return to the original natural environment but also to the past, to human history. Merging into the landscape was for the Romantic spirit the most propitious means of coming closer to the thought processes and perceptions of the world of the ancestors, who had lived in this environment so long before.

European understanding of space (and thus landscapes) is marked by a typical dualism, differentiating between worldly (profane) and sacred (sacral) places. This approach is a typical expression of mythological thought, adopted into the Christian worldview and spreading from there into diverse secular ideologies; it is linked to the emotional experience of space. This dualistic model is, however, shaken by the discoveries of science, atheism, and the secularism of the modern age—it has come to the crossroads of one antithesis with another (the profanation of the sacred, or the secularization of the profane).

1.2 Contemporary Views of the Landscape in Philosophy and the Natural Sciences

Since the landscape can be seen from many standpoints, the definition of this phenomenon will always be dependent on who is formulating it. Philosophers, natural scientists, sociologists and historians all have differing views on its essence, characteristics, and significance. Even within a single region, attitudes change over time. The Czech word for landscape, *krajina*, is of Old Germanic origin (in modern German the word *Landschaft* is used). Originally, in the Early Medieval period, this word designated the land tended by a single peasant; the landscape (*krajina*) was thus understood merely as that part of the world perceived by an individual working a specific piece of land. Anything that happened over the horizons of this space was in a different landscape. At the beginning of the second millennium, the term took on a new meaning for the first time, that of a domain, estate, or similar, thus gaining a political importance.

Philosophy, as the integrating discipline of human knowledge and thought, attempts to distinguish between the content of the meanings oscillating around the term "landscape" (nature, region, space, territory, homeland, home, etc.) and at the same time seek their mutual differences and relationships. According to contemporary philosophy, it is necessary first to consider the landscape as a territory. This is, of course, a term used in the natural sciences that is bound up primarily with the secondary biotic components in nature. The importance of the term "landscape" is better understood if confronted with the words "land" and "landman." These encompass the inward relationship of human individuals to the places in which they were born and brought up. The landscape is thus a human phenomenon, having the character of a horizon closer than the world and related to the skyline of the home. Thus, landscape is a limited space of our homeland; it is the visualization of ourselves in the horizon of a space excluded from the surrounding (outer) world, in relation to which the here and now is understood.

Traditional, mechanistic natural sciences have deemed (and still deem) the landscape to be a passive result of the actions of the biotic and abiotic elements represented within it. This reductive view means that the landscape does not have its own regularities, such as can be distinguished from the regularities of its elements. At the present time, however, that view is changing in connection with the input of several—particularly ecologicallyoriented—natural sciences. The landscape is increasingly being seen, in the intentions of social or anthropoenvironmental research, as a phenomenon with internal dynamics, structure, and memory, rather like a living system. These concepts have been formulated in recent years by a number of landscape ecologists and botanists (including M. Gottlieb, M. Lapka, J. Sádlo, and V. Brůna in Bohemia). In their view, the landscape is a phenomenon that should be seen from the perspective of long intervals of time. Hitherto, approaches to landscape ecology have been based on a scheme typical of a technical civilization: attention has been focused only on the contemporary landscape, with occasional glimpses into a past in the order of decades, and never centuries, millennia, or further. In this way, the landscape is divested of a temporal dimension, which is nevertheless still present. In a heterogeneous landscape, for example, it is possible to see traces of geological, evolutionary (biological), historical, and existential time created by human individuals with social relationships, and also in natural structures. And it is precisely archaeology that can aid landscape ecology in connecting to its view of topicality, understanding the history of the landscape, and laying bare its memory. The landscape can be seen as a phenomenon that admits of a personality. This understanding corresponds to the well-known phrase genius loci (the aura or spirit of the place), and associated with it is the observation of the landscape as a whole. The subordinate elements (such as population types, societies, and artifacts) do not make up the landscape mechanically, but their positions in the landscape may be interpreted in their context. According to Sádlo, landscape memory is connected with the fact that the landscape has it own cybernetics, that is, concrete, specific means of self-organization. At the same time, there is a capability for regenerating its original state. The bearer of memory in the landscape is structure, and the memory again is a medium for generating structure: the landscape is thus a self-structuring system.

Contemporary American landscape ecology (Forman, Godron) defines the landscape as a heterogeneous part of the Earth's surface, comprising assemblages of mutually related and influencing ecosystems which on a given part of the surface are repeated in similar forms. The evolution of landscape is the result of specific long-term geomorphological processes, the forms of settlement of the landscape (Man is adjudged to have an important role in landscape ecology), and local short-term disturbances to individual ecosystems. At the same time, attention in landscape ecology is drawn to three characteristic traits. They are structure (i.e., distribution, energy, material, and types of organism in relation to size, form, number, type, and the spatial organization of ecosystems), function (interactions between spatial elements), and change (the reconstruction of structures and functions of the environmental mosaic over time).



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Biographical Sketch

Martin Gojda studied archaeology and history at the Charles University, Prague (1975–80). Since 1980, he has been a full-time research fellow of the Institute of Archaeology, Czech Academy of Sciences, Prague. His special interests include landscape-and settlement archaeology, aerial reconnaissance for past landscape studies, early medieval period, theory, and methodology. Apart from 60 journal papers he has published books including: *The Development of the Settlement Pattern, The Ancient Slav: Settlement and Society, The Archaeology of Landscape*, and *One Land, Many Landscapes* (with T. Darvill). Apart from the Czech Republic, he also has helped to launch and to practice aerial survey in Poland. In 2000 he was honored with a Golden Emblem of the Minister of Culture and Heritage of the Republic of Poland for his contribution to the protection of Polish national heritage. He lectures at the Charles University (Prague), at the West Bohemia University (Pilsen), and at the Commenius University (Bratislava, Slovak Republic).

