



Nicola Scardigno

# LANDSCAPE AS FORMA MENTIS

Interpreting the integral dimension of the anthropic space. Mongolia

## Informazioni per il lettore

Questo file PDF è una versione gratuita di sole 20 pagine ed è leggibile con



La versione completa dell'e-book (a pagamento) è leggibile con Adobe Digital Editions. Per tutte le informazioni sulle condizioni dei nostri e-book (con quali dispositivi leggerli e quali funzioni sono consentite) consulta [cliccando qui](#) le nostre F.A.Q.



**Nicola Scardigno**

Ph.D., research associate and adjunct professor of architectural design and landscape design at DICAR, Department of Civil Engineering and Architecture of the Polytechnic of Bari. He obtained a 2-year research bursary from the University of Wales (2011-2013) and a research bursary from ISUF International Seminar on Urban Form (2014-2015). His research mainly investigates type-morphological aspects derived from formative and transformative process of landscapes with the aim to identify design principles.

# READING AND DESIGN

A series edited by Giuseppe Strappa

Scientific committee: Michael Conzen, Claudio D'Amato,  
Jean-François Lejeune, Franco Purini, Ivor Samuels

In what is now the vast field of architectural publishing, this new series of books intends to carve out an its own space by offering readers essays, research and observations on architectural topics related to the study of the built environment and the design instruments that derive from its interpretation.

Today, architecture is a universe on the move that contains many different interpretations of the term 'design'. Much of it (what occupies the most column inches in field literature) seems to have gradually distanced itself from the more urgent issues to do with the construction of real cities, in order to investigate problems associated with the visual arts and communication, the market for image and its consumption. After all, in the climate that this condition fosters, in the need of being seen as different, modern-day designs almost always end up, in fact, resembling each other without a common principle justifying transformations, like a revolution that, in worrying about the change it provokes, has forgotten the reasons behind its goals. By avoiding the overwhelming wake of an individualistic interpretation of architectural expression, this series intends to put forward studies that have concentrated on tackling the problem of the tangle relationship with the existing world: with the changes that modern cities have undergone, with consolidated urban fabric studied in terms of its evolutionary processes, with the territory interpreted, despite many contradictions, as a collective and fundamentally architectural manifestation. It intends to present, in short, studies on architecture considered in its civil aspects.

A second feature identified by the books in this series will be their relationship with the current conditions of crisis in cities and territories. Few periods in the history of architecture have featured such an acritical acceptance of the conditions that determine the construction of architecture. The problem also affects obvious issues to do with language: we are moving towards the use of a metahistoric, locationless, simplified, 'hollow' language, a process that is largely due to the enormous squandering of resources typical of Western society, the exemption from the elementary needs that bind things together. This condition has ended up making it impossible to interpret the real differences, the relationships of consistency between the elements that make up a building, an aggregate, a city or a territory.

It is for this reason that the series will also include research on the proper use of resources, on the essential role played by the right proportion between means used and goals to be achieved. And also research on architectural and urban organisms formed by processes of continuous improvements and upgrading that prove how the wise and balanced use of resources leads to true innovation, as well as beauty.

All work published in this series undergoes a double-blind peer review process.

In this series:

- G. Strappa (a cura di), *Studi sulla periferia est di Roma* (2012)
- M. Maretto, *Saverio Muratori. Il progetto della città/ A legacy in urban design* (2012, 2015)
- M.R.G. Conzen, *L'analisi della forma urbana. Alnwick, Northumberland*. Edizione italiana a cura di Giancarlo Cataldi, Gian Luigi Maffei, Marco Maretto, Nicola Marzot, Giuseppe Strappa (2012)
- E. Barizza, M. Falsetti, *Roma e l'eredità di Louis I. Kahn* (2014)
- P. Carlotti, D. Nencini, P. Posocco, *Mediterranei traduzioni della modernità* (2014)
- G. Strappa, *L'architettura come processo. Il mondo plastico murario in divenire* (2014)
- E. Prandi, *L'architettura della città lineare* (2016)
- E. Barizza, *La forma tangibile. La nozione di organismo dalla svolta di Roma al progetto di Venezia* (2017)
- M. Falsetti, *Annodamenti. La specializzazione dei tessuti urbani nel processo formativo e nel progetto* (2017)
- A.R.D. Amato, *Architetture di recinti e città contemporanea. Vitalità del processo formativo delle strutture a corte* (2017)
- G. Strappa (edited by), *Observations on Urban Growth* (2018)
- M. Maretto, *London Squares. A study in landscape* (2018)

Nicola Scardigno

# LANDSCAPE AS FORMA MENTIS

Interpreting the integral dimension of the anthropic space. Mongolia

Readers who would like to find out any information about books and journals published by FrancoAngeli can visit our website [www.francoangeli.it](http://www.francoangeli.it) and sign up the “Notify” service to receive via e-mail our latest news.

The publisher and the authors thank the owners of the images reproduced in this volume for the granting of reproduction rights. They apologize for any omissions or quotation errors and ensure to make the necessary corrections in the next reprints in case of error reports.

Drawings and pictures contained within the book are by the author.

Graphic design by Antonio Camporeale.

To access the online attachment, you have to follow carefully the Italian online instructions that appear on the Multimedia Library (Biblioteca multimediale) area of the website [www.francoangeli.it](http://www.francoangeli.it), register and enter the EAN code 9788891768803 and the email address used during registration

Copyright © 2018 by FrancoAngeli s.r.l., Milano, Italy.

All rights reserved. As you download this e-book, you do accept all the license conditions described in [www.francoangeli.it](http://www.francoangeli.it).

To find out any information about books and journals published by FrancoAngeli, please join us on the World Wide Web at [www.francoangeli.it](http://www.francoangeli.it)

# Contents

<b>Presentation</b>	pag.	7
<b>Landscape as a form of life</b> <i>by Karl Kropf</i>		
<b>Introduction</b>	»	11
<b>Part I   Methodology</b>		
<b>Landscape: from epiphenomenon to reality</b>	»	17
1. Brief overview on theoretical positions concerning the landscape	»	17
2. Landscape between history, culture and natural environment	»	20
2.1 History (of the landscape)	»	25
2.2 Culture (of the landscape)	»	28
2.3 Natural environment (of the landscape)	»	30
3. Landscape as paradigm of thought	»	32
<b>Systemic-scalar reading of the landscapes</b>	»	35
1. Landscape as conceptual model	»	35
2. Built component (of the landscape)	»	41
3. Social component (of the landscape)	»	43
4. Economic component (of the landscape)	»	46
5. Environmental/Natural component (of the landscape)	»	48



## Part II | Case study: Mongolia landscape

<b>Critical systematization of knowledge</b>	pag. 55
1. Periodization of historical-settlement data	» 55
2. Formulation of a GIS database	» 58
<b>Critical reading of environmental and anthropic characters</b>	» 59
1. Natural matrix as <i>a priori</i> compositional structure	» 59
2. Phases of the anthropic structuring process	» 69
3. Main settlement types	» 81
3.1 <i>Ger</i> or <i>yurta</i>	» 82
3.2 Buddhist monastery	» 101
3.3 Informal urban settlement	» 131
<b>Hypothesis of a synoptic scheme</b>	» 159
<b>Appendix</b>	» 165
1 <sup>st</sup> document: Chronotaxis	» 165
2 <sup>nd</sup> document: Nomad people interviews	» 179
3 <sup>rd</sup> document: <i>Ger</i> dimensional aspects	» 186
4 <sup>th</sup> document: <i>Ger</i> assembly phases	» 188
5 <sup>th</sup> document: Glossary on Buddhist religion/monastery	» 193
6 <sup>th</sup> document: Historical organization of the semi-sedentary Mongolian society	» 195
<b>Bibliography</b>	» 197
Part I - Methodology	» 197
Part II - Case study: Mongolia landscape	» 199
<b>Index of Proper Names</b>	» 203

# *Presentation*

*Landscape as a form of life*  
by Karl Kropf

To set a scene. Early morning, a street in London, busy with buses and cars and people walking to work carrying shoulder bags, brief cases and backpacks, others with wheelie bags heading to the train station. Amidst them, a well dressed woman stands next to an abandoned, rusting telephone booth and draws heavily on a cigarette. After taking another sip of coffee from her paper cup she resumes an animated conversation. Her face gives shape to a dance of expressions, one following on from another. She could be in a film, bringing to life the drama of an emotional script. Instead, she is alone, a single, solitary figure standing in a London street. There is no one there beside her and she is holding a coffee in one hand and a cigarette in the other – but no phone. Still, she must be only one half of the conversation. The other half is somewhere at the end of the mobile signal, the woman's phone tucked away, out of sight under her neat coat and scarf. The conversation continues and after she takes a last long drag from her cigarette and flicks it into the street, she walks off to catch her bus.

Then, from behind a litter bin, you notice part of a blanket twitch along the ground. You guess there is a person sitting on the pavement, with no other place to live, leaning against the back side of the bin. People walking past stop and bend down, reaching to drop something. You guess again they are dropping coins into a hat or tin, prompted perhaps by compassion, guilt or that sense that it all too easily could be them, living a nomadic life in a settled city.

In ways that are both curious and familiar, the scene is an embodiment of a way of life – or the ways of life that make up a community. If we start from an essential beginning – organisms interacting with their environment – we can allow our curiosity to uncover the assumptions and habits underpinning our familiarity and begin to get a richer, more direct understanding of ourselves and the places we create. We can begin to see that the meaning we attribute to things arises within the form of life that we lead. For the most part we are not conscious of the structure of that ‘form’. We need to be bumped out of our habits and assumptions to see how they, in fact, constitute that form. I was bumped out of mine when observing the scene in London because I was thinking over the contents of this book. In it, Nicola Scardigno has revealed a very different set of habits that nevertheless form an intimate, long standing relationship between a people and their landscape – organisms in an environment.

Scardigno’s significant efforts help us to see the assumptions and habits – the forms of life – that would make the vast, high plains, the tracks and enclosures, the *yurts* (*ger*), temple complexes and semi-formal settlements of Mongolia seem familiar. What are the habits and assumptions that make nomadic life feel normal? What does it mean within that form of life to be or become sedentary or ‘settled’? What skills and experience have value? Working through the sections in the book we are brought closer to some kind of answer to these questions. What also becomes clear is how well the case of Mongolia illustrates ‘landscape’ as the mutually modifying interaction between the environment and ways of life. A form of life is an ‘interpretation’ of the environment in which it emerges. Survival demands adapting to the characteristics of the environment so that the adaptations – as habits of life – become signs of the characteristics around which the habits have been formed. Landscape, or as Carl Ortwin Sauer would have it, the morphology of landscape, is an expression of that relationship and interaction between organisms and their environment. Landscape is a form of life. Scardigno helps us to read the Mongolian landscape and make sense of its characteristics not just as isolated, foreign curiosities, but as elements in a complex of habits developed over millennia in a particular place.

This is to prefigure one of the principal conclusions of the Scardigno’s book. «Contrary to what one might think, it is completely impossible to disentangle the exquisite ‘scenographic’ and predominantly natural characteristics of the Mongolian landscape from its social, economic and built characteristics».

To get us to this point, Scardigno carefully and deliberately lays out a clear path from an exploration of the concept of landscape and its precursors through a rigorous method of analysis, an astonishing and detailed set of data and a synthesis investigating how they fit together.

The work draws on and extends a number of rich seams of thinking. Most directly, it builds on the *Scuola muratoriana* – in particular the works focussing on the concept of territory by Saverio Muratori, Giancarlo Cataldi, Alessandro Giannini, Gianfranco Caniggia, Gian Luigi Maffei and Attilio Petruccioli. I think it is also fair to say Scardigno's work lies within the broader filone or vein of thinking that runs from Alexander von Humboldt and Alfred Russel Wallace through to Otto Schlüter, Carl O. Sauer and J. B. Jackson. On the one hand, the richness, depth and beauty of the 'data' bring to mind Humboldt and Wallace. The GIS mapping and detailed analyses of temple complexes are superbly executed and should provide a foundation for extensive further research and analysis. On the other hand, the synthesis of the material in terms of process is firmly rooted in the *Scuola muratoriana*. The inextricability of natural, social, economic and built elements begins to make sense when we see that they are woven together over time.

This point is vividly illustrated by photographs and diagrams that show the range of settlement types in Mongolia. What stands out so clearly is that the range of cultural habits and their physical manifestation in buildings and artefacts are also inextricably woven together 'in time' – but not in a uniform flow. That is, contrary to what one might think, the *yurt/ger* persists as a type, even when people are otherwise settled in a single place. The habits of daily life are built around and inform the configuration and details of the *ger* so it remains an obvious and habitual way to build and live. This does not preclude, however, integrating more recently developed artefacts. One of the most striking photographs in the book's appendix is of a *ger* standing at the foot of a grazed hillside. Staked into the ground next to the *ger* on one side is a satellite dish, on the other a small photovoltaic cell and poking out from behind the *ger* is the back wheel of a motor scooter.

In my view this highlights the fertility of the book and points to another of Scardigno's concluding thoughts. The work should prompt us to,

«act in the awareness that the meaning of landscape is now oriented towards a wider field of scientific research where it is possible to experiment with practices in sustainable development, the results of which must necessarily rely on a plurality of specific skills inherent in the components identified in the book: natural, economic, social and built».

This would seem to embrace and take forward a view expressed by Muratori in his *Civiltà e territorio*,

«Territory is the basis and life of civilization.... To know and understand the territory is to know and understand the people in their individuality and potential. Without the notion of territory as an objective reality, science is not possible, nor psychology, philosophy nor life itself».

And life itself implies a constant process of adjustment, adaptation and learning. Our environment changes, not least because we ourselves change it and, in the same process, we change ourselves. We create things, adjust and adapt to them and in the process of interacting with them, discover and learn new things that can change our habits and prompt us to formulate new ideas for new creations. That last step, the projection from idea to object – *il progetto* – or design, is central to Scardigno's whole endeavour. A further point he emphasises is the importance of understanding the landscape and its inextricably intertwined elements in order to improve the way we design. In this respect, looking at, describing and analysing the landscape is not enough.

«The purpose of historical analysis of the formation and transformation of landscape is not simply to be able to preserve the original nature of the place. Rather, the aim should be to identify positive generative practices within the process that provide useful indications to inform designs for the transformation of the landscape with an awareness of their consequences. So, contrary to what one might think, the analysis is not aimed at the museumification of the landscape, nor providing fodder for designs based on the a-critical plundering of forms belonging to the past. Instead, the aim should be to uncover mutually beneficial relationships between the physical environment, humans and their settlements so that the wisdom embodied in those relationships can be infused into the ongoing design of the landscape itself».

The implications of these points in our own lives brings me back to that scene in London with the woman standing in the street 'having a conversation with herself' disconnected from the homeless person sitting by her feet. This book should motivate us to see not just exotic and foreign landscapes as worthy of attention as examples of the inextricable intertwining of natural, social, economic and built elements. It should prompt us to uncover our own habits and assumptions in order to make our home environment seem curious – so that we might challenge bad habits and find better ways to live.

## *Introduction*

I would start explaining the reason for Landscape as *'forma' mentis*. The Latin term *forma mentis* indicates an inborn condition of man's thought: a specific way to think and act, or even a habit of a person or a community derived from a precise theme-pragmatic orientation. In the particular case of this work, said orientation embodies man's attitude to inhabit the natural environment, to transform it – re-thinking/re-designing it – in line with specific spatial-temporal conditions. Nonetheless, the idea of 'form', in addition to allude to an inborn and ideal condition of man's thought, recalls a merely physical dimension generated by the logic interaction of acting components that define – 'in the making' – its essence. In other words, an idea of form is studied, which is not determined through an abstract process but through a search of laws that govern it and have the purpose to recognise what is stable and durable in what is contingent. This idea of **form as structure, form as transformation identity, form as evolving process** is attributed to the landscape, object of this essay, in the attempt to re-define the notion – of landscape –, bringing it back to the original condition of man-nature relation: sort of first derivative of the interaction between 'the being' (man) and 'the entity' (reality). In the effort to trace the cultural origins of the issue, the attempt is to link the matter to a paradigm of thought linked to a dimension constituting man, his awareness. Hence the need to consider the implications that each landscape embodies and consequent need to recognize its essence: by rationaliz-

ing its formative/transformational process through the elaboration of a 'model' that operates at the level of scientific explanation and which is able to decrypt its meaning, by unifying its identity character to the 'in the making'; and by systematizing its knowledge through the progressive identification of relations between components and scalar level of complexity concerning the landscape itself. In other words, an attempt is made to formulate a unifying cognitive-evaluation of the concept of landscape by defining an analysis tool of logic-classification type, aiming at the phenomenological-synthetic reading of all elements making up a landscape with the purpose to steer relative design choices with awareness. The application-experimental field of the research is the territory of Mongolia. A multi-faceted landscape, apparently scarcely anthropized, whose essence and balance are based on a silent and constant interaction process between environmental, social-economic and settlement conditions based on the co-existence between permanent and non-permanent culture.

Since this research is conducted during a Ph.D. in architecture, the primary goal was therefore to test a form of knowledge of Mongolian landscapes to finalize to the 'design act'. In this view, it is appropriate to specify the following: based on the author's educational background and goals to pursue in the research, the following work, despite being based on historic-anthropological information, is not intended to be exhaustive in this respect. Rather, the historic-anthropological data was decrypted in a critical and conjectural manner, with the purpose to fit it within a project research aimed at identifying the so called 'lines of strength' of reality, which are decisive and generalized in the behaviours, thus able to be translated as settlement principles typable at the various landscape scales. Furthermore, the analysis of the anthropic component of Mongolian landscapes mainly focused on examining those settlement forms sufficiently documented and appreciable in a complete form – rather than in form of ruins –, typologically substantiated by the relationship established with the host environment and directly involved by current transformational scenarios concerning the landscape heritage of Mongolia.

In this work – developed during a Ph.D. program entitled 'Architecture: Innovation and Heritage' within a consortium between the University of Roma Tre and the Department of Civil Engineering and Architecture of the Polytechnic University of Bari – I wish to express my sincere thanks to: Matteo Ieva for the competence, passion, care and seriousness according to which he followed the development of this work; Karl Kropf for the sincere interest shown in the re-

search and motivation to continue the studies on landscape morphology; Eugenio di Sciascio and Loredana Ficarelli (respectively Rector and Pro-rector of the Polytechnic University of Bari) for giving me the opportunity to undertake the research on Mongolian landscapes; Baatar Ochirbat, President of the Mongolian University of Science and Technology, for the hospitality during the three research missions in Mongolia; Giuseppe Strappa for having accepted to publish the essay in Nuova serie di Architettura FrancoAngeli 'Lettura e Progetto'; Antonio Camporeale, for being able to render the research contents, graphically impeccable.





*Part I*

## **Methodology**



# *Landscape: from epiphenomenon to reality*

## **1. Brief overview on theoretical positions concerning the landscape**

In the attempt to shed light on a current theme as that of the landscape, the unbounded custom of literary references allowed to open the horizons of this study to those scientific contributions that inevitably substantiate – or at least should – the cognitive and design phase of the landscape. In addition to an analytical reflection on the anthropic component of the landscape, the disciplinary spheres of ecology, geomorphology, so called human geography and anthropology have been analysed in particular. This in order to support a precise belief: that the term landscape is expressing more and more a condition of *unicum* – that is synthetic – combining human action and environment. Obviously this belief is almost antithetical to those theoretical positions that in discerning the natural world from the anthropic one, seem to strictly attribute different meanings to terms like environment, territory and landscape. Terms that after all refer to a common idea: the place inhabited by man and organized by him.

Rosario Assunto, Italian philosopher and theorist of landscape aesthetics, attempts to specify the differences between the terms landscape, environment and territory. In fact, in a dated article entitled '*Paesaggio, ambiente, territorio: un tentativo di precisazione concettuale*', the author begins by: «...specifying the concept of territory that assumes almost

exclusively a spatial meaning and more extensive-quantitative rather than intensive-qualitative value. In fact, the term territory refers to a more or less vast land area that can be delimited according to geo-physical classifications (mountains, rivers), according to language differences, according to political-administrative boundaries that may coincide with geo-physical and linguistic boundaries, or ignore them: in this case, these are historical-traditional boundaries or conventional boundaries – the latter almost always arbitrary: it is the instance of territories called provinces... With regards to the concept of environment, we shall say that it has two meanings: a biological meaning which refers to physical life conditions favoured or hindered by the configuration of certain locations (longitude, altitude, elevation above sea level, exposure, precipitations, seasonal temperatures, geological conformation of the soil and sub-soil, hydrography) and a historical-cultural meaning... Therefore the environment is more than territory, as the environment is the territory that is biologically, historically and culturally classified. The territory lies in the environment, with the addition of life, history and culture: thus environment and territory are not, so-to-say, interchangeable terms: compared to the environment, the territory is raw matter while the environment is the territory as nature and man have organised it for purpose of life... Lastly, Assunto defines the landscape «...as shape that the environment confers to the territory, as matter implemented by the latter – or better, to be more precise: landscape is the form in which the *a priori* synthetic unity is expressed (in the Kantian sense: non-unification of data perceived separately, but necessary unit conditioning their evocation in the consciousness) of matter (territory) and content-or-function (environment)»<sup>1</sup>.

Such selection of theoretical contributions referring to various subject areas, allowed interpreting the meaning of landscape with a systemic approach. In other words, some critical evaluations were carried out in respect to the:

- **disciplines of ecology and geomorphology**, which, despite being born from descriptive/romantic approaches of natural entities (ecology) and analytical/descriptive approaches of the soil form (geomorphology), began more or less in the '70s to read natural and morphological information concerning the soil in relation to anthropic interventions. In other words: from a mainly naturalistic/botanical interest, recent studies focused on the dual notion of man-natural environment<sup>2</sup>;

- **disciplines concerning the building sphere**, characterised by the co-presence of technical (urban planning) approaches or those based on the assumption of abstract settlement models (Ebenezer Howard) or based on perception (Kevin Lynch) or schematization (Aldo Rossi); on the other hand, those approaches of structural nature

<sup>1</sup>Assunto R., 'Paesaggio, ambiente, territorio: un tentativo di precisazione concettuale', in *Rassegna di urbanistica ed architettura*, 1980, n. 47/48, pp. 49-51.

<sup>2</sup>The reference mainly concerns fairly recent and current studies on Human Ecology.