

TERRACED LANDSCAPES: NEW DESIGN SOLUTIONS WITHIN THE
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ABSTRACT

The paper introduces the concept of using artificial landscapes to develop new design principles for sustainable solutions in rural environments in Europe. The introduction defines artificial landscapes in general and gives insight into the potential for permanent transformation of these landscapes. The thesis is that an integral approach that reconciles the existing landscape with the settlement offers a new quality to spatial development. This thesis is explored by comparing two extreme artificial landscapes as case studies: the Dutch polder landscape, reclaimed from the seabed of the North Sea, and the abandoned part of the terraced landscape of the settlement Kojško in Slovenia's Gorica Hills. The conclusion of this experimental approach is that the potential of an artificial landscape is a key element for the design of more sustainable and self-sufficient solutions, especially in rural areas, which seek a strongly formed identity in a permanent transformation process.

Keywords: terraced landscapes, urban design, artificial landscapes, The Netherlands, Slovenia

PAESAGGI TERRAZZATI: NUOVE SOLUZIONI PROGETTUALI NELL'AMBITO DI
TRASFORMAZIONE DI PAESAGGI ARTIFICIALI

SINTESI

Il contributo presenta il concetto di utilizzare paesaggi artificiali per generare nuovi principi progettuali per le soluzioni sostenibili in ambienti rurali d'Europa. Nell'introduzione si definiscono i paesaggi artificiali in generale e se ne evidenzia il potenziale per trasformazioni permanenti. La tesi è che un approccio integrale che riconciliasse il paesaggio esistente con l'insediamento conferirebbe una nuova qualità allo sviluppo territoriale. Questa tesi viene indagata paragonando due paesaggi artificiali estremi come casi di studio: il paesaggio polder olandese recuperato dal fondale marino del Mare del Nord e la zona abbandonata del paesaggio terrazzato dell'insediamento di Kojško nella parte slovena del Collio. La conclusione di questo approccio sperimentale è che il potenziale di un paesaggio artificiale è l'elemento chiave per la progettazione di soluzioni più sostenibili e autosufficienti, particolarmente in aree rurali, le quali cercano una forte identità nel processo di trasformazione permanente.

Parole chiave: paesaggi terrazzati, progettazione urbana, paesaggi artificiali, Olanda, Slovenia

INTRODUCTION

“Landscapes, like cities, evolve and change over time in response to nature’s processes and to human needs” (Lowry, 2005, 11).

If this statement is valid, we humans are also able to actively influence this process of change. It is important to emphasize or study what responsibility human society has in this process, and to determine if we are willing to take it, accept it, and deal with it. As with all physical systems (landscape can be contextualized within the notion of a system when capturing all of its possible aspects), their alteration is a process that involves numerous transformations and constant changes. These have three stages: planning, construction, and decay (Ažman Momirski, 2004).

Natural landscapes

Landscape is “an ambiguous term.” It can be defined in a series of definitional overlaps with related but different terms, such as this definition: “Landscape is related to, but not identical with, nature” (Backhaus, Murungi, 2009, 11). In many western European countries, “nature” can only be found in protected reserves nowadays, and so, ironically, sometimes the most polluted areas are protected as “nature.” The notion of nature stands for “untouched” (by humans). As Forty puts it (2000, 220), there is a distinction between the world in which man exists – “nature” and the world created by man – “culture.”

Artificial landscapes

“The artificial-natural duality has disappeared. Its boundaries have blurred . . . The landscapes of nature

can be as natural (untouched) as artificial . . . Naturartificial is a new way of designing; a transformation of a concept of place” (Cros, 2003, 63).

Historically, the first artificial landscapes arose as nomadic peoples settled down (Figure 1). Land reclamation was a necessity of life, too, as a result of settlement processes. Artificial landscapes, settlements, and the architecture within them are a human product and they are part of culture.

The physiognomy and socioeconomic context determined how much and in what way the existing landscape was transformed. The specific character of the landscape in many cases is not only the cause of the configuration of the settlements but also produces the typology and function of the buildings. Buildings, settlements, and landscape were therefore inextricably linked, either as a part of the landscape structure in cultivated and easy modified landscapes, or in contrast to the landscape in extreme and exposed areas.

Transforming artificial landscapes

Industrialization, the resulting population growth, and the onset of suburbanization have severed that link. This process is symptomatic of the foundation of cities but it intensified significantly with the onset of globalization in the 1980s. This decoupling is not only spatially visible but also stems from socioeconomic reasons, because the landscape is no longer the new population’s source of economic livelihood. The landscape is transformed into settlements, functional industrial agriculture, nature parks, or tourist areas. It is no longer part of the whole, and degenerates into a backdrop. In Europe the transformation of artificial landscapes is most obviously seen in the transformation into settlements and transformation into functional industrial agriculture, and is as such generally accepted. However, if humanity is indeed able to actively influence this process of change, it could be worthwhile to explore new potential dynamics of landscape transformation, with the aim of getting a grip on how strategic design solutions could contribute to a landscape that is part of the whole again. The identity of a region that is designed in this way, rooted in the built areas as well as in the landscape, has sustainable potential.

The form of the urban landscape

The European landscape is increasingly blending with its urban areas. This phenomenon has been called the “landscaped city” (Germ. *Zwischenstadt*, *der verstädterten Landschaft*, or *der verlandschafteten Stadt*; Sieverts, 1997). Changes to this landscaped city are spontaneous, and they appear to be disorderly, anarchic changes that arise unplanned and result in a geometrically unarranged system. The phenomenon of *Zwischenstadt* is usually observed from the development of the city. It can also be seen from the development and status of the landscape. This forms the basis of



Figure 1: “Lepenski Vir is the key site which epitomizes most of the important elements that characterize sequences of occupation across the Mesolithic-Neolithic transition in The Danube Gorges region in the north-central Balkans” (Borić, 2014).

Sieverts' observation that "the shaping of the landscape where we live can no longer be achieved by the traditional resources of town planning, urban design, and architecture. New ways must be explored, which are as yet unclear" (Sieverts, 2000, 12).

Sieverts emphasizes the instability of the landscaped city or urbanized landscape, in contrast to David Loewenthal, who emphasizes the slow process of landscape change and consequently its stability and security. This perspective relates primarily to landscapes that are listed on the World Heritage List (Cultural Landscapes, 2015). These are cultural landscapes, which are part of our collective identity and protected because they illustrate the evolution of human society and settlement over time.

People used to consider the physical space and environment as more enduring than themselves. This perception builds the impression of permanence and stability because slow, unnoticeable change of the landscape stands as a secure factor of group identity (Kučan, 1999).

Uncontrolled, anarchic spatial changes (like the landscaped city) have at least two characteristic extremes: (1) one resulting when the space is destroyed in a chaotic social situation (as in war); (2) one in which the lack of strategy, order, and spatial order (in an otherwise seemingly orderly society) leads to the transformation of space without a strategy and vision. Natural or social catastrophes compress spatial processes into a narrow time frame: the changes of the 1990s in the Balkans, Beirut, and other war zones generally last for centuries. Spatial development processes become more visible due to wars and natural disasters. Such pathology offers the opportunity to explore the logic of how architecture and urbanism as a transient physical form arise, develop, and disappear (Ažman Momirski, 2004).

On the contrary, the "landscaped city" is an invisible process in the built-up area between the old historical city and the open landscape. The result is something that could be called new living landscapes, man-made landscapes, living topographies (Cros, 2009), and also "artificial landscapes" (Ibelings, 2008). The ways we respond to these artificial landscapes are closely linked to how we look at them.

Of course, this development cannot be halted; but if we want to use the landscape characteristics and qualities in order to reestablish the lost relationship between the landscape and buildings it could be useful to look at it from another point of view. The aim could be to classify the essential spatial qualities of landscape, and to develop the potential of these spatial qualities.

Forms of cultivated landscapes

"While garden architecture has a distinct form, the form of the man-made landscape is inherent in living and working the land. The landscape architectonic form is latently present in the man-made landscape in the interaction between the technical and functional frame-



Figure 2: *View of Haarlem with Bleaching Grounds, around 1670 (Annenberg Learner, 2015). The Museum of Modern Art in Zürich, Jacob van Ruisdael (1628–1682), oil on canvas, 62.5 x 55.2 cm, Prof. Dr. L. Ružička Foundation, 1949.*

work and the natural substratum. Unlike in the case of 'architecture and landscape,' the basic form, the spatial form, and the metaphorical form remain latent; they are included in the technology of the layout of the land and in the organization of the program" (Steenbergen, 2008, 13).

Landscape providing identity

"Landscape" seems to be an ambiguous term: landscape is related to, but not identical with, the environment; landscapes are related to, but not identical with, places; every landscape is a scene, but "landscape" is not identical to "scenery."

How these landscape scenes can be used to depict the identity of a region can be illustrated with Ruisdael's seventeenth-century painting *View of Haarlem with Bleaching Grounds* (Figure 2). "A blue sky filled with puffy cumulus clouds dominates this painting. Depicted from a raised vantage point, the landscape, occupying the lower third of the canvas, is flat and expansive. In contrast to the large, amorphous clouds above, the land is marked by carefully plotted fields, tidy houses, and detailed greenery. Sky and earth are separated by a nearly straight horizon line, broken only by the towering architecture of St. Bavo's left of center and the silhouette of another smaller church in the distance. Sunlight

touches the clouds as it streams down, illuminating the bleaching field in the landscape's middle ground. Like similar paintings of the period, Ruisdael's painting is not an image of nature unmediated, but of natural resources harnessed for the benefit of civilization. It is an image that speaks to the harmonious, but hard-won relationship between the Dutch and their land" (Annenberg Learner, 2015).

Perhaps the artificial landscape offers more far-reaching potential if it is viewed in a different way. This could lead people to see that landscape could play a role in actual discussions about identity. Nowadays only a few metropolises are still able to determine the identity of a region, and the balance between the core and surrounding areas is shifting more and more towards the outer conurbation area or edge of the open landscape. Therefore, it is necessary to consider if the identity of the built environment could also be created by the outer continuous network of the city and landscape areas.

Identity is a contradictory notion: it means both the condition of being the same or exactly alike; sameness, oneness (for example groups united by identity of interests), and the condition or fact of being a specific person or thing; individuality. Its meaning has a link with the essence, fundamental nature, or most important quality that makes something what it is.

From this point of view, the artificial landscapes in Europe offer new design opportunities to reconcile the landscape with the built structures. The identity of a region that is designed in this way is rooted in the built areas as well as in the landscape, and thus has sustainable potential.

RESEARCH FOCUS

The paper introduces the concept of using artificial landscapes to develop new design principles for sustainable solutions in rural environments in Europe. First, artificial landscapes are defined in general, giving an insight into the potential for the permanent transformation of these landscapes. In order to avoid falling back on the preset standard solutions provided by modernist design instruments, it is assumed that an integral approach that reconciles the existing landscape with the settlement offers new quality to spatial development. The integral approach makes it possible to strengthen the area's regional characteristics and identities and to combine these in a strategic design.

This thesis is tested by comparing two extreme artificial landscapes as case studies and also simultaneously coming up with new design principles to transform

these landscapes. Therefore, it is necessary to choose and explore different types of artificial or constructed landscapes that are diverse in their topographic character as well as in the pace of the dynamic transformation process. These are:

- The polder landscape in the Netherlands,
- The terraced landscape in Slovenia.

The Dutch polder landscape reclaimed from the North Sea seabed and the abandoned part of the pre-alpine landscape of the Gorizia Hills were selected for the artificial landscape case studies because of their characteristic topographies. The pressure on the landscape of the Dutch polder, on the one hand, and the depopulation processes that result in abandoned landscapes in the Gorizia Hills region on the other were also selection factors.

The case study results are presented in such a way as to give better insight into the spatial consequences of the classified design parameters and to focus on the sustainable impact of the thesis. Thus an experiment was implemented in the research model at a specific location in the Gorizia Hills, the settlement Kojško. The design experiment "New Energy Landscapes" develops different scenarios in the transformation process of landscape and settlements. The determined period of the experiment started in 2012 and ends in 50 years' time, which will also serve to prove the transformation's sustainable impact.

METHODS

"The best way to capture the complexity of landscape as a concept is to look at a particular landscape" (Blackbourn, 2011).

Observation involves looking at and recording the existing setting in a structured way. Various aspects of two selected landscapes are compared in the paper:

- Natural conditions,
- Reasons for existence,
- Artificiality,
- Connecting landscape and settlements / buildings,
- Landscape identity.

With these observations as a foundation, the underlying patterns were brought to light. The correlational approach seeks to document the naturally occurring relationships between the two selected phenomena.

In further steps, to discuss fresh, new views of landscape, the University of Ljubljana and Saxion University of Applied Sciences held two workshops¹ for students to experiment with creating a new relationship between culture and nature. Workshops as a period of discus-

¹ Each workshop lasted one week; one workshop took place in the Netherlands and one in Slovenia. The international architectural and urban design workshop "Constructing Landscapes" took place in the Gorizia Hills in October 2011. The purpose of the workshop was to study the landscape dynamics and development of a settlement in the Gorizia Hills and to compare various man-made (or built) landscapes. Architecture students of the University of Ljubljana and urban design students of the Saxion University of Applied Sciences worked closely together, and were given feedback by teachers and professionals. Excursions and lectures were part of the program. Scenarios for the future development of the Gorizia Hills were designed within five working groups.

sion, which emphasized the exchange of ideas and the demonstration and application of knowledge and skills, were used as a research method. This method was meant to stimulate the establishment of innovative design solutions and exchange of ideas. The workshop was used as a dynamic community, generating new designs through guided exercises and assignments. During the first workshop students analyzed several Dutch artificial landscapes, in order to learn about the relationship between nature and buildings, or culture, in the relevant areas. The focus was on the spatial relationships, not the functional relationships. In the second workshop, the students created a design for the Gorizia Hills. The assignment was designed to give insight into the spatial relationship between nature and culture in this area, and to enhance this relationship through a strategic design.

ARTIFICIAL LANDSCAPES IN THE NETHERLANDS AND ARTIFICIAL/TERRACED LANDSCAPES IN SLOVENIA

Case study one: Artificial landscapes in the Netherlands

The Dutch landscape was used to illustrate that recognizing the artificiality of the landscape can lead to a sustainable design, in which buildings and landscape are connected and create an identity together.

“The Netherlands are not only almost entirely built landscapes ... the awareness of the artificiality of any spatial operation is part of a collective consciousness and is deeply rooted in the mentality of the designers of this artificiality. In Dutch architecture, urbanism and landscape architecture sounds self-conscious because it is the foundation of the national myth of the heroic struggle against the water. The idea that this country is not a natural phenomenon, but exists because of human ingenuity and technology to implement water management, by working at various levels. The note of artificiality stimulates the creativity of designers, who are not bound to consider proposed restrictions on what can and cannot take place. This provides the space in the Netherlands to imagine the inconceivable and to think the unthinkable. Since the Netherlands largely consists of polders and even the most natural-looking landscapes are manmade or have at least been cultivated and maintained, nature and culture here, even less than elsewhere, are mutually exclusive components” (Ibelings: 2000, 10).

Nagele, a polder village, a new village on a new land, is an example of this description (Figure 3).

The Netherlands has an area of 41,528 km², of which seventy percent is situated below sea level. It has about 16,515,057 inhabitants and its population density is 397.7 inhabitants/km².

The Netherlands has always been forced to be creative with the space that was suitable for building. The country is largely artificially drained (polders) and the



Figure 3: Urban design of the polder village Nagele, 1954 (Aldo van Eyck i.s.m. De 8 and Opbouw). The Noordoostpolder (northeast polder) was the second polder after Wieringermeer to be created as part of the Zuiderzee Works. Both combine functional hydraulic engineering and agricultural frames of reference with traditional ideas on planning and landscape. M.J. Granpré Molière was involved in parceling the polder landscape. Noordoostpolder was laid out between 1936 and 1942. Most of the villages, among ten built between 1949 and 1956, were designed by the architectural section of the Wieringermeer management of the traditional Delft School. Only Nagele was claimed by the modernist architects and urbanists of the Amsterdam functionalist circle De 8.

sea is kept out with great technical ingenuity (dikes). It was essential to design carefully within the new landscape; there were several reasons this artificial landscape could not be disregarded when it came to arranging it with buildings. First, the technical reason for this was that the seabed was not strong enough to build on in every area equally. The appropriate spots had to be determined carefully, whereby the potential fertility of farmland also had to be taken into account. The second reason, which was unforeseen at the time the polders were reclaimed, was the power of the elements of nature. What was underestimated, for example, is that there is a difference between the climate at sea and the climate on land, and that therefore a seabed was not automatically fit to inhabit. The new land was so bar-



Figure 4: *Zaanse Schans, the Netherlands (Cris Toala Olivares).*

ren and vast that the pioneers often went literally insane because of the hard, continuous wind. Therefore it was necessary to plant trees and carefully construct windbreaks and hedgerows around the heirs and villages. This proved that the newly created artificial landscape had to be transformed even more before it was even habitable. Buildings and artificial landscape in the Netherlands are inextricably linked. Urban design and landscape architecture are essential disciplines in the Netherlands, not a luxury.

Yet the Netherlands succeeded in attaching their identity to the landscape. For example, traditional postcards from Holland show tulip fields, windmills, and dikes (Figure 4). All these elements are part of the transformed, artificial landscape. The windmills were used to regulate the water level in the polders, the dikes prevented the water from coming in, and the wide colorful tulip fields represent agriculture in the polders.

Case 2: The terraced landscapes of Slovenia

Slovenia has exceptionally diverse landscapes in a small territory of 20,273 km², which is inhabited by 2,063,371 people. Its wealth of diversity also results from the fact that Slovenia lies at the intersection of four major European regions (the Alpine, Pannonian, Dinaric, and Mediterranean regions) and four different cultural spaces (German, Romance, Hungarian, and Slavic). This variety and the transitional nature of Slovenia's regions constitute its main geographic characteristic and

are important elements of its identity. Slovenia does not have a terrain favorable for settlement and the population density of Slovenia is 101.8 inhabitants/km². Urban areas in Slovenia cover less than five percent of its land. The capital, Ljubljana, is the only Slovenian city with a population of over 100,000 inhabitants (Statistični urad, 2016). The major part of Slovenian territory is woods (about three fifths of the territory), the rest is cultural landscape (over one third of the territory). The plains, fields, basins, and valleys have slope inclinations between 0° and 2°, which accounts for 14.3% of the territory (Perko, 2001, 113). The rest of the territory has a hilly configuration that required the settlers, who were more aware of their direct dependence on nature in the past, to adapt to it, acquired the knowledge and experience to grow their crops on the sides of hills or mountains by planting on graduated level areas built into the slope. Farmers were particularly careful to retain and maintain their fertile soil. Terraces maximized arable land in variable terrains and for different cultures, reducing soil erosion and water loss at the same time. These terraces made it possible to create appropriate growing conditions for cultivating fruit trees and grapevines, and to produce high quality crops.

Slovenia's Spatial Development Strategy (OdSPRS (2004) defines agriculture as the main guardian of its cultural landscape. Terraced landscapes represent a hidden concern for land cultivation and a long-standing commitment that is transmitted from one generation to



Figure 5: Constructed terraced landscape in Jeruzalem (Matevž Lenarčič). In the Slovenian Hills after the Second World War the land was taken over by state-owned companies, which were faced with the fact that 70% of the vineyards needed renovation. The first terrace plantations appeared and the vineyard landscape began to change character after 1957 (Belec 1968). Terrace plantations made mechanized work possible, thus decreasing manual labor, reducing processing costs, allowing for higher quality grapes, and reducing soil erosion and land movement to a minimum. Terrace renovation carried out in the national, public, or social sector encompassed 80 to 90% of all areas (Simonič, 2014).

another. A quality cultural landscape is becoming one of Slovenia's principal values and comparative advantages (Ažman Momirski, 2008, 115). Terraced areas, which form a part of the cultural landscapes in Slovenia, are built and constructed landscapes (Ažman Momirski et al., 2007; Ažman Momirski, Kladnik, 2008, 2009, 2015), which can be found in more than 90% of municipalities in Slovenia, covering a little less than 97% of the territory of Slovenia.

Terraced landscapes are complex systems composed of various subsystems including water management, biodiversity, land stability, agricultural systems, and so on. These features or subsystems are interdependent and they are very delicately balanced. Terraces can be divided according to agricultural use. Probably the oldest terraced slopes in Slovenia were agricultural, both for the cultivation of crops and pastures, but later on farmers also cultivated grapevines, fruit trees, and olive trees there. Various forms of terraces were built, taking

into account natural conditions such as climate and terrain, and different agricultural purposes, with variations of terrace platforms and terrace slopes. These can vary even within the same settlement area, particularly after the second half of the twentieth century. Prior to this, the terraces were built by hand and the construction of terraces was a labor-intensive job, which the community usually performed together. The use of construction and agricultural machinery has changed the modes of terrace production and construction terraces, and consequently the image of the terraced landscape. Some of the most beautiful terraced landscapes in Slovenia emerged only after the 1960s (Figure 5).

It is not always possible to identify the relationship between settlements and the terraced landscape when terraces cover slopes from the bottom to the top of the hill. This relationship is more readable where the cultural landscape is well overgrown by the forest. There, the mostly abandoned agricultural land is more distant from



Figure 6: *In the settlement Kožbana most of the agricultural land, which is overgrown with trees today, was abandoned in the second half of the twentieth and the beginning of the twenty-first centuries, because many people moved out of the village. Inhabitants mostly cultivate smaller plots of land for self-subsistence (Lučka Ažman Momirski).*

the settlements and the terraced landscape remains only in the immediate vicinity of villages, where it draws attention to the integration of arable land and settlements (Figure 6).

In parallel with the identity of Slovenia's landscape, typical agricultural products have contributed to regions' visibility and identity traditionally, and still do so today.

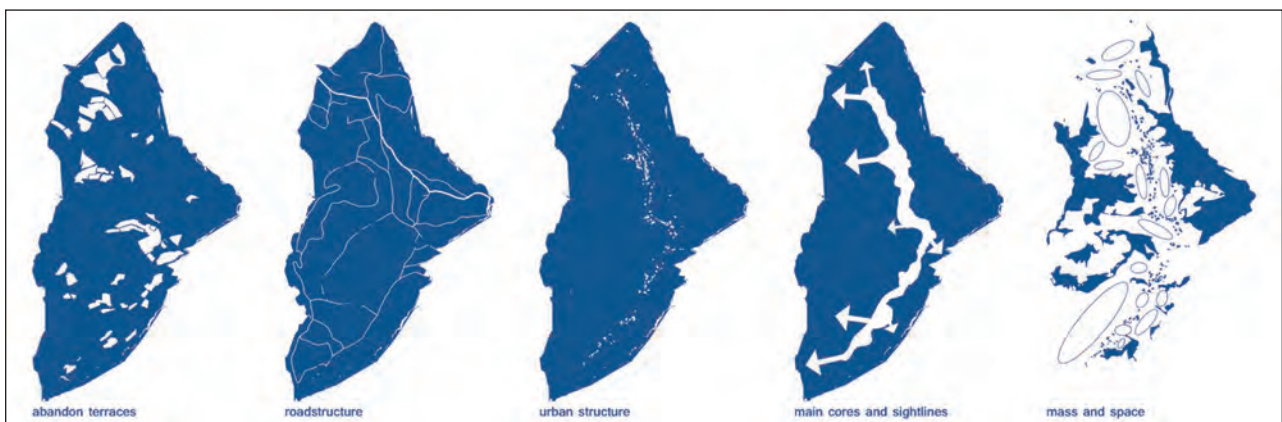


Figure 7: *Analysis of Kojsko (Ruud van der Maas).*



Figure 9: Ground plan of “New Energy Landscapes” (Ruud van der Maas).

the Gorizia Hills) to become a self-supporting village by 2062. Kojško, which was the economic and cultural center of Brda before the First World War, today has around 300 inhabitants and the character of a peripheral village. Five features stand out in the analysis of Kojško (Figure 7): abandoned terraces that reflect social and other changes; accessibility, which is very good in part of the village because the main road runs through it between Dobrovo (the modern center of the municipality of Brda) and Nova Gorica; a settlement structure concentrated along the ridge; nodes and stunning views; and land areas where it is possible to carry out spatial interventions.

A gradual strategy is used to integrate this new energy and sustainable landscape into the existing terraced landscapes (Figure 8). The chronologically developed scenarios provide insight into the standard of self-supply. According to the planned steps Kojško will be in-

dependent in energy, food supply, and transportation by 2042 and will produce a surplus starting in 2014. This surplus can be used to develop new energy landscapes on other abandoned terraces, based on the Kojško case study. The strategy takes into account that assessing resources will be of fundamental importance for humans in the future. The growing world population requires increased agricultural production and energy, which will in turn affect water and land resources.

A new farm building is designed in the abandoned terraces of former vineyards (Figure 9). The shape and the location of the new building is partly influenced by the living requirements of a self-supporting village (with focus in this case on three aspects: energy, food supply, and transportation). The project identifies the current qualities of abandoned terraces, and subsequently develops and proposes new connections or the development of connections between the deteriorating

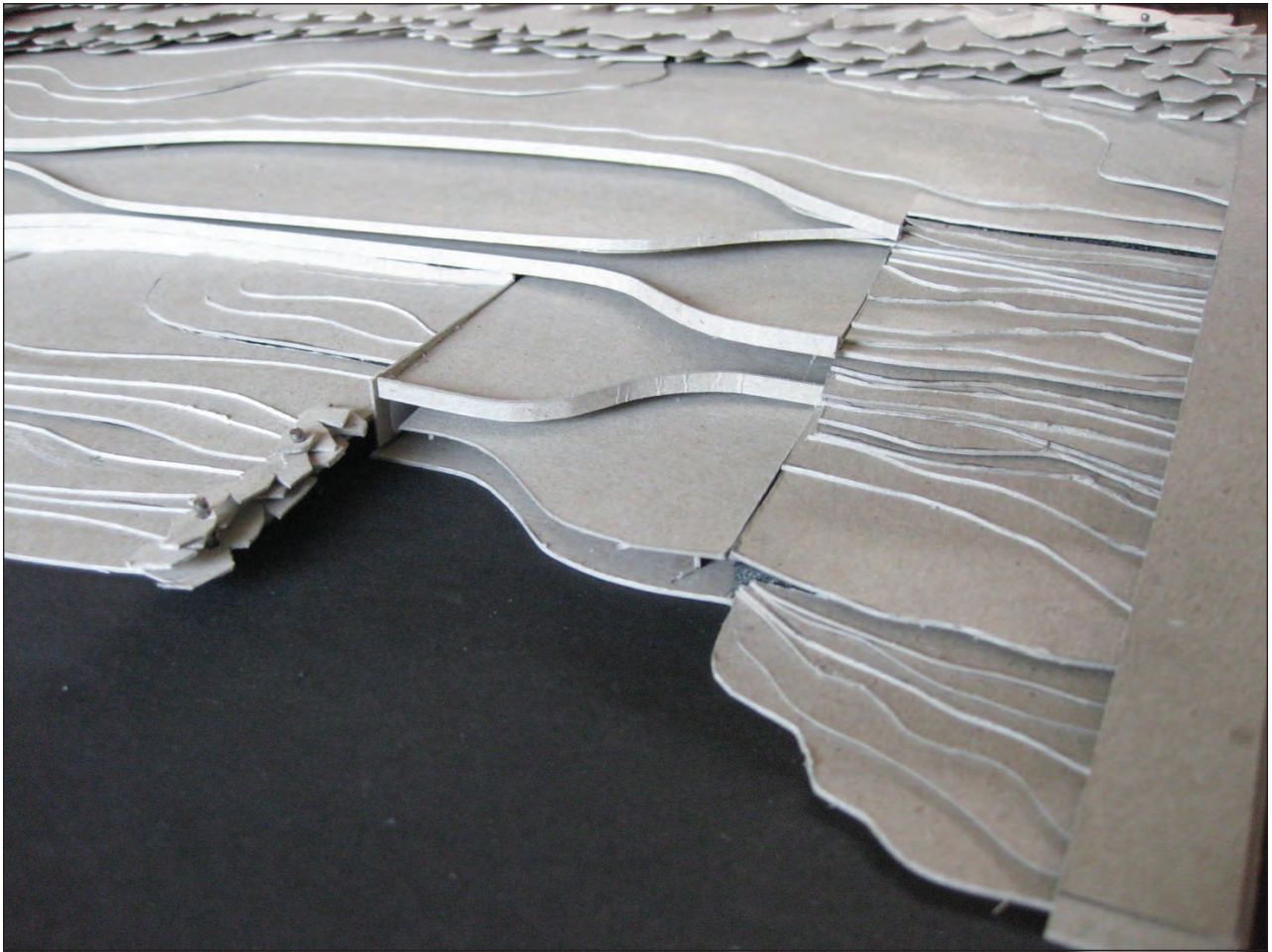


Figure 10: Model of “New Energy Landscapes” (Ruud van der Maas).

landscape pattern and the existing built structure of the terraced landscape (Figure 10). The design is based on including high-tech architecture with the application of local energy resources (mainly solar panels and new hydrogen technology) and simultaneously meeting requirements for food self-sufficiency in individual settlements. The solution relies on the consideration that smart, resource-efficient technologies, well adapted to the location and inhabitants’ needs, can significantly reduce the use of inputs as well as emissions.

CONCLUSION

The discussion reflects on the experimental results in order to reach more specific conclusions. The experimental approach clarifies that there is a synergy of different tools that are able to strengthen each other if the process of transformation is guided by the landscape. Small-scale solutions allow the integration of self-sufficient communities as well as regional approaches of “New Energy Landscapes.” The specific design solutions are able to react

flexibly to the users’ needs and form a counterpart to the generic approach of standard design solutions. Although the published design results are still too superficial, the experiment gives clear insight that the defined design instruments offer a huge range of resilient design solutions. It seems worthwhile to develop this experiment further and to achieve more elaborated solutions. We suggest continuing the project with a multidisciplinary team in order to optimize a sustainable transformation by using the spatial characteristics of the artificial landscape.

Design strategies instead of masterplans

The goal of a sustainable urban development plan should be to anticipate and respond to different developments adequately.

Traditional urban master plans assume an ideal end state. In practice it is almost always necessary to adapt these master plans at some point. A fixed master plan as an end result can easily lead to “trouble areas,” whereas designs open to future, unpredictable developments could make it possible to align quality and user needs

on an ongoing basis. Being able to design for flexibility and impermanence is one of the hardest – and yet most important – challenges for an urban designer. Urban Nomads aims to explore the potentials of dynamics of change, in order to get a grip on how flexible design solutions could be created: strategies for dealing with changing circumstances and “just in time” design in close cooperation with the international field.

Artificial landscapes – terraced landscapes

The conclusion of this experimental approach is that the potential of an artificial landscape is a key element for the design of more sustainable and self-sufficient solutions, especially in rural areas, which seek a strongly formed identity in a permanent transformation process.

Like everything else, terraced landscapes also change. There are global issues that influence these changes, such as global economics and climate change, and there are local influences such as depopulation, deintensification, and the development of new ways to maintain and build terraces.

Consequently, terrace systems change in terms of cultural significance, in form, in social networks (because of different lifestyles), and in production (which is changing from a subsistence economy to a market economy). A careful evaluation of the changes that will accommodate how people live in, work with, and inhabit terraced landscapes is required. Terraces will survive in their complexity and uniqueness only if they meet the needs of the people living in terraced landscapes.

TERASIRANE KRAJINE: NOVE OBLIKOVALSKE REŠITVE
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POVZETEK

Prispevek raziskuje potencialne umetnih krajin v razvoju novih načel vzdržnega oblikovanja v evropskem podeželskem prostoru. V uvodu so opredeljene prvine umetnih krajin in nekatere njihove preobrazbe. Stavbe, naselja in krajine so neločljivo povezani. Predpostavili smo, da integralni oblikovalski pristop omogoča še boljše usklajevanje krajin in naselij. To tezo smo dokazovali s primerjavo dveh izbranih umetnih krajin, ki se razlikujeta tako v topografskem pogledu kot v hitrosti dinamičnega procesa preoblikovanja krajine. Primerjali smo nizozemsko poldersko krajino in krajino opuščenih terasnih zemljišč v Goriških brdih. Zanimale so nas prostorske posledice opredeljenih oblikovalskih parametrov in osredotočili smo se na vzdržni vpliv podmene. Preizkus je bil opravljen na raziskovalnem modelu na lokaciji vasi Kojško v Goriških brdih. V procesu oblikovanja novih energetske krajin so bili razviti različni scenariji, ki so nam omogočili vpogled v prostorske posledice preobražene krajine in naselij. V zaključku smo ugotovili, da procesu preobrazbe v prostoru, ki upošteva krajinske prvine in zakonitosti, sledi sinergija različnih prostorskih parametrov in oblikovalskih orodij, ki se med seboj krepijo. Posledično so prostorske rešitve številne, vzdržne in omogočajo izbiro.

Ključne besede: terasirane krajine, urbano oblikovanje, umetne krajine, Nizozemska, Slovenija

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