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Fig. 1 Neighborhood Marijin Dvor
Sl. 1. Četvrt Marijin Dvor

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Re-conceptualizing Common Ground of the Cultural Landscape
Testing the Reality of Sarajevoscape

Preispitivanje zajedničkog jezika kulturnih pejsaža
Analiziranje stanja sarajevskog pejsaža

cultural landscape
European identity
landscape change
new technologies
Sarajevo, BiH
sustainability

kulturni pejsaž
europski identitet
promjena pejsaža
nove tehnologije
Sarajevo, BiH
održivost

This paper discusses the complex processes and practices of global flows within the dynamic nature of European cultural landscapes in a contemporary context. It examines the role of new technologies, recent demographic fluctuations and increasing interconnectedness in cultural landscape reconfiguration. This paper represents an attempt to encourage a shift in thinking on existing environmental resources and sustainable landscape practices, and to question alternative approaches that are sensitive to the cultural interchange process. Substantively, complex and contradictory nature of contemporary cultural identities is addressed in the city of Sarajevo, the capital of Bosnia and Herzegovina.

Ovaj se rad bavi složenim procesima i aktivnostima globalnih tokova unutar dinamičke prirode europskih kulturnih pejsaža u suvremenom kontekstu. Istražuje se uloga novih tehnologija, recentne demografske fluktuacije i rastuća međupovezanost u novoj konfiguraciji kulturnih pejsaža. Rad ima za cilj potaknuti promjene u načinu razmišljanja o postojećim mogućnostima u okolišu i održivim aktivnostima u krajoliku te preispitati drugačije pristupe osjetljive na procese kulturne razmjene. Analizira se složena i kontradiktorna priroda suvremenih kulturnih identiteta u Sarajevu, glavnom gradu Bosne i Hercegovine.

INTRODUCTION

Uvod

Distinctive characteristics of twenty-first century landscapes, old or new, are products of fundamental changes of its natural state by human activity. Moreover, pointed out by the recent studies[1] today's Earth's surface is occupied predominantly by human-dominated ecosystems. Cleary, untouched nature is just a fiction since every epoch and culture leaves its own imprint on landscape. Thus, there can be no doubt that pseudo-natural landscapes do exist. Still, the degrees of human impact on environment vary, as well as degrees of landscape naturalness.

Given the scale changes happening in the age of the Anthropocene, humans have become a major geological force.[2] The plethora of processes between various actors in the environment indicate that there is little hope for understanding these interactions at a global scale unless particularity of complex environmental realities is going to be revealed. The identification of these interactions and specific environment features include understanding of co-dependent and co-evolutionary processes articulated and materialized socially and culturally. Specified by Terkenli[3] the relevance of accepting landscapes as a synthesis of various discourses comes from need of "cultural understanding and interpretation of changing geographical schemata of changing economic, physical as well as social relations".

A common theme across landscape discipline is that traditional landscapes[4] are disappear-ing and are being invaded by new landscapes, which is intimately connected with the shifting nature of cities. Thus, as characterized by researchers, planners and policy makers[5] urbanization, new modes of transportation, globalization and unpredictable factor – calamity are driving forces of landscape change. Furthermore, the realities of the accumulated effects of infrastructural interventions constantly alter ecosystems and material process in foreseen and unforeseen ways.[6]

Consequently, dysfunctional environmental relations have been a major force of landscape transformation, challenging the landscape to cope within maelstrom of continuous disintegration. Broadly speaking, an abundance of conceptual landscape views is to be expected. In this context substantive landscape meaning varies. As Rowntree[7] reveals according to various disciplines and its preferences landscape could be understood differently "as an ecological artefact, material culture, visual resource, a metaphor, and artistic depiction, ideology, and agent of power relations".[8]

Accordingly, selective landscape experience and representation, the ones that favor beautiful and stylized scenarios, is based on individual aspirations of the observer. Looking for visually appealing environmental images, picaresque and surreal landscape beauty, very often intentionally, wilderness of environment, "the squalid villages of the real countryside and including certain agreeable natural features: brooks and groves of trees and smooth expanses of grass"[9] are omitted from landscape images. But such landscape interpretation signifies the exact opposite of what a cultural landscape is.[10] Thus, the major concern of this paper is to question how one could understand, analyze and interpret diverse value system inherent in cultural landscapes.

This paper draws on Wall[11] and the conception of landscape as responsive urban surface "that invokes functioning matrix of connective tissue that organizes not only objects and spaces but also the dynamic process and

1   Sanderson et al., 2002; Foley, 2005
2   Steffen et al., 2011
3   Terkenli, 2001: 198
4   According to Antrop: "Traditional landscapes have been defined as the landscapes which evolved during centuries until the fast and large scale modern changes in 'tabula rasa' style started." [Antrop, 1997: 105]
5   Antrop, 2004; Li et al., 2013; Lokman, 2017
6   Lokman, 2017
7   Rowntree, 1996
8   Stephenson, 2008: 128
9   Jackson, 1984: 3
10   Rapaport, 1992: 34
11   Wall, 1999: 233

events that move through them". Wall[12] refers to a landscape as an urban surface characterized "as extensive and inclusive groundplane of a city, the 'field' that accommodate buildings, roads, utilities, open spaces, neighborhoods, and natural habitats".[13] Moreover, this view on the importance of complex processes in landscape formation is additionally supported by the European Landscape Convention that implies understanding of landscape as "means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors".[14]

Accordingly, multiple and complex changing realities bring to the forefront new challenges for landscape research that questions landscape policy as well as landscape evaluation and assessment methods. The European Landscape Convention[15] emphasized the urgent need for landscape inventorying and monitoring. Reliable data and meaningful indicators for landscape assessment are needed to properly assess the character of the changing landscapes and decide what is valuable for the future. Therefore, the stage and set up of new conditions for an uncertain future of landscape has become a recurring topic in recent work of professionals.[16]

It is critical to comprehend that isolated perception on understanding human–environment relationships are not sufficient, but rather pluralistic approaches are needed to effectively bridge research cores of different views.[17] In that vein, the recognition of the multiple values recaptured in landscapes has resulted in a steadily growing interest to sustain both cultural and ecological landscape diversity that can be also seen in the inclusive methods taken to landscape identification and protection presented in the World Heritage Convention.[18] Similar arguments have appeared within the European Landscape Convention in which a variety of professions and disciplines have emphasized the need for appropriate landscape identification by recognition of "landscapes in law as an essential component of people's surroundings, an expression of the diversity of

their shared cultural and natural heritage, and a foundation of their identity".[19]

The article aims to fill gaps within recent landscape research by addressing interconnectedness between culture and nature. In doing so, Section 2 presents research on landscape as an instrument of cultural power and questions alternative landscape approaches that are sensitive to the process of cultural interchange. Seeking to contribute to the theoretical framework and practical modalities of comprehensive landscape development approach, section 3 explores meaningful concepts of sustainability in reference to cultural landscape and challenges landscape design beyond ecological performance. Substantively, Section 4 explores the complex nature of contemporary cultural identities that are addressed in the city of Sarajevo, the capital of Bosnia and Herzegovina. Using descriptive case study method[20], this work seeks to provide insights of phenomena at general level rather than simply matters exclusively intrinsic to the case study area. Section 5 entails to study landscapes, offering directions for innovative future research that sees technology as an extended network of various materials, social, cultural and environmental relations. Section 6 synthesizes the research findings together with the implications and argues that maintaining cultural diversity through landscape is paramount for cultural sustainability. Finally, this work is seen as productive moment for putting forward visionary ideas for cultural landscapes under technological influence and thus aims to provide a platform for future research.

LANDSCAPE AS AN INSTRUMENT OF CULTURAL POWER

PEJSAŽ KAO INSTRUMENT KULTURNE MOĆI

It is Eliot's[21] conviction that European culture represents the identities which can be discovered in the different national cultures. However, faith of European culture is questionable if countries suffer sustained identity reduction. According to Stephenson[22] connections between culture and identity are not just obtainable through social relationships, but are also profoundly spatial. Parallel with this view, both self-identity and group identity have causal links to the events and history that are related to the tangible environment. Changes that have eroded existing landscapes may nonetheless be important forces of obliteration of locally distinctive characteristics and its meanings, that lead to a break between communities and their past.[23]

Outdated landscape approaches increase the rift between landscape as discipline and the

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12 WALL, 1999
13 CORNER, 1999: 233
14 Council of Europe, 2000: 2
15 Council of Europe, 2000
16 TERKENLI, 2001; BIRKS, 2004; STEPHENSON, 2008; FAIRCLOUGH, 2016
17 BROWN et al., 2005
18 UNESCO, 2008
19 Council of Europe, 2000: 89
20 FRANCIS, 2001
21 ELIOT, 1988
22 STEPHENSON, 2008
23 ANTROP, 2005

reality consisting of diverse forces.[24] Moreover, traditional perspectives to landscape embodies corrosive impact of various ideologies, politics and economy that nurture concealing realities of landscapes. In fact, all landscapes are seen as a repository of cultural values[25], and thus the way how culture manifests itself spatially vary cross-culturally.

In order to address questions raised and problems identified around cultural landscapes it is important to clarify the conceptual confusion about a cultural landscape within various disciplines. Perhaps most directly, Longstreth[26] describes how landscape is very often misinterpreted "as being synonymous with designed landscape – a garden, park, campus, boulevard system, and the like-or with landscaping – the act of manipulating topography, ground surfaces and plan material".

The term cultural landscape was introduced by Sauer[27] stated that "the cultural landscape is fashioned from a natural landscape by a cultural group. Culture is the agent, the natural are the medium, the cultural landscape is the result" The World Heritage Convention defined three categories of cultural landscapes: (1) "clearly defined landscape designed and created intentionally by man" (2) "organically evolved landscape" and (3) "associative cultural landscape".[28]

In this understanding, this work has moved a long way from the definition of cultural landscape by the German geographer Friedrich Ratzel from the 1890s as "the landscape modified by human activity" (as cited in Jones[29]). Rather, this paper discusses construction of landscape as both spatial manifestation and cultural setting.

This work refers to landscape as an urban interactive surface responsive to socio-cultural and technological dynamics, and as such represents an imprint of time and events. This explains how each landscape presents in emblematic form an experience of the discovery, its exploration, engagement, and longer reflection about the unique relationships between humans and non-humans.

Cultural or landscape identity is not bounded to spatial boundaries. It is dependent primarily on geographical networks and changes through numerous interconnections and interdependencies rather than spatial boundaries. Landscape identity is constantly transforming in reference to both spatial and time components. It might be verbalized and showed at a variable topographical scale, spatial element, or examination unit. The contextualization of multifunctional landscapes is a cultural process – where cultural, as a significant system, interpenetrates the economic and political, even the physical,

systems within a social order. Moving forward, it can be argued that "culture itself is the shaping force"[30] of landscape change. Consequently, as Rapoport[31] claimed "the most modified landscapes – settlements – are cultural landscapes per excellence."

TESTING GROUNDS FOR SUSTAINABLE DEVELOPMENT

ISPITIVANJE OSNOVA ZA ODRŽIVI RAZVOJ

The concept of sustainable development is widely interpreted as a need to achieve sustainability concurrently within environmental, economic and social spheres.[32] Sustainability therefore has enjoyed a great deal of attention in various professional disciplines[33] resulting in significant body of studies that has evolved over three decades. Inevitably, sustainability discourse has received mainstream acceptance, and is a catchword used within various academic, professional and political circles, in the media and everywhere.

However, when we taught about apparent interest in sustainability in tandem with substantial global convocations, the discipline of landscape architecture must critically explore the meaningfulness of concept of sustainable development. And, yet, contemporary theory and the practice of sustainable landscape design focuses primarily on sustainability's ecological aspects while little attention has been paid to distinctions between sustainable development and sustainable landscape design since for a landscape design to be sustainable it needs more than just the use of sustainable technologies. Different views on sustainable landscapes were further debated by Palang et al.[34] calling for additional approach on sustainable landscape design apart from the popular 'pillar approach' consisting of the ecological, social, and economic dimensions of sustainability.[35] Rather, acceptance of a fourth pillar of sustainability – culture, Hawkes[36] represents integration of cultural values into memorable landscape

24 Terkenli, 2001
25 Deming, 2015
26 Longstreth, 2008: 1
27 Sauer, 1925: 46
28 UNESCO, 2008: 81
29 Jones, 2003: 33
30 Taylor, 2008: 7
31 Rapoport, 1992: 34
32 United Nations, 2002
33 WCED, 1987; Holden et al., 2017
34 Palang et al., 2017
35 Antrop, 2006; Soini, Dessein, 2016
36 Hawkes, 2004

forms and spaces. Meyer[37] pointed out on the need of thinking on design of landscape as cultural act that is a product of culture "made with materials of nature, embedded within and inflected by particular social formation; it often employs principles of ecology, but it does more than that. It enables social routines and spatial practices, from daily promenades to commuting to work".

The growing awareness of the need to sustain both cultural and ecological diversity appears to be finding common ground in the landscape, as can be seen for example in the inclusive approaches taken to landscape identification and protection under the World Heritage Convention[38] and the interest in sustainable cultural-natural relationships under the protected landscapes approach.[39]

Seeking to contribute to the theoretical framework and practical modalities of a comprehensive approach to landscape development, this work negotiates antiqued landscape conceptions, one in which beauty is seen as generic and a charming factor, conditional for first contact and experiencing the landscape. It suggests enrichment of experimental possibilities of contemporary landscapes by enlarging perceptions and narratives. In a similar tone, it is significant to be able to challenge landscape design beyond only ecological performance and to take various social and cultural factors into account. In-depth research on landscapes demonstrates that its unique characteristics can facilitate positive changes geared toward sustainable development.

As Meyer[40] argued it is not enough to design landscapes that incorporate best management practices and advanced technologies based on sustainable design principles or just emulate the admirable design from practices. Designed landscapes must follow the path from constructed human experiences through ecosystems.

However, sustainable landscape practices and in particular implementation of new and innovative technological solutions in landscape design is a trend that is unevenly pres-

ent in European countries.[41] All the efforts of European Union to diminish consequences of climate change using innovative solutions[42] seems to be reasonable given the range of its benefits. Thus, there is still discrepancy between countries across Europe and the active usage of innovative technologies becomes the exclusive right of developed countries.

SARAJEVOSCAPE UNDER PRESSURE

SARAJEVOSCAPE POD PRITISKOM

This case study intent to produce knowledge about city Sarajevo that has the potential to inform contemporary practices and enforce creation of a continuity between past, present and future. The method employed in this work aims to build understanding and recognize character of existing cultural landscape of Sarajevo, reading the city backward and forward, looking beyond chaos and examining city with a sharper critical focus. The methods used to develop the case study included multidisciplinary and multimedia archival research on city specificities. By focusing on multidimensional variables attention is given to the current modalities of practices, aspirations, and constrains that are generated over time. Using a descriptive case study method, it attempts to provide answer on how a city could operate effectively and innovatively under conditions of instability.

One may reason that there is nothing revolutionary about a city's development, globalization, and in particular, its implications on the cultural landscape re-formation. However, Sarajevo, the capital and the largest city of Bosnia and Herzegovina (Bosnia hereinafter), is an exemplary case of how globalization under a specific social, economic, and political regime can radically influence a once strong cultural milieu.[43]

Sarajevo has been described as a typical Balkan city[44]; an Ottoman city with an enduringly Turkish appearance[45]; as the most Yugoslav of Yugoslav cities[46]; a city of pluralism, religious tolerance, and mutual understanding[47]; and as the popular 'European Jerusalem'[48]. Situated in the heart of South-eastern Europe, Sarajevo has for centuries represented a strategic position and symbolic crossroads connecting central Europe, the Adriatic Sea and the Mediterranean. Although, the boundaries of Sarajevo territory were highly unstable over the history, today's city is formed longitudinally along the Miljacka River, in the well-concealed valley surrounded by the Dinaric Alps (Fig. 2), which extends from the Ottoman core that lie side-by side to Austro-Hungarian center, to the socialist and post-socialist extensions.

To large extent, Sarajevo landscape's distinctiveness grew out from coexistence of multi-

Fig. 2 Sarajevo topographic map
Sl. 2. Topografska karta Sarajeva

37 Meyer, 2008:15

38 UNESCO, 2008

39 Brown et al., 2005

40 Meyer, 2008

41 Török et al., 2012; European Commission & Directorate-General for Research and Innovation, 2014

42 Madelin et al., 2016

43 Husukić, Zejnilović, 2017

44 Todorov, 1983

45 Spangler, 1983

46 Donia, Fine, Hamer, 1994

47 Mahmutćehajić, 2003

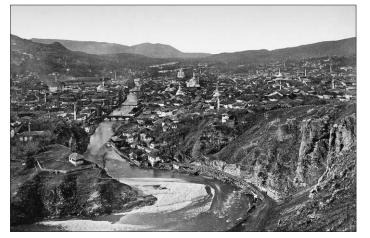**48** Koštović, 2001

Fig. 3 Panorama of Sarajevo (circa 1875) shows widely scattered layout of city and harmonious connection between the nature and the city as an outstanding feature of the Ottoman legacy

Sl. 3. Panorama Sarajeva (oko 1875.) pokazuje područje prostiranja grada i skladnu povezanost prirode i grada kao vrijedno obilježje osmanske ostavštine

Fig. 4 Panorama of Sarajevo (circa 1900) shows abrupt change in city scale and the new layers added during the Austrian-Hungarian rule

Sl. 4. Panorama Sarajeva (oko 1900.) pokazuje naglu promjenu u veličini grada i nove slojeve pridodane za vrijeme austrougarske vladavine

ple histories (Figs. 3-5) that have played a significant role in shaping spatial morphology as well as human psychology and behavior. The enormous variability of Sarajevo landscapes is significant due to its highly alternating geomorphological configuration where the natural features give the space the character of authenticity, diversity, and intricate landscape and spatial values.

Fertile ground for creation of variable identities and thus variable cultural landscapes is the result of grievously shaped city by its histories and fusion as Grabrijan and Neidhardt [49] noted between the 'emotional East' and the 'rational West'. Therefore, specificities of Sarajevo cultural landscape are not outstanding in terms of singular artefacts, neither architectural nor ecological, but in its composite landscape which portrays struggle of generations to cultivate environment under the influence of various conquerors.

Current condition of cultural landscapes is being built for centuries and evolved from both local and external influences. Moreover, in commenting on Bosnian art, Grabrijan and Neidhardt [50] recognized specific values evident not only in Bosnian art but also in the way how they designed spaces and cities according to himself, in human scale "Bosnian man is not a mystic, but a realist and that is from where all this realistic and cubic architecture emerges, which is at the same time comfortable, humble and democratic."

Urban fabric of Sarajevo demonstrates visible traces of once highly consistent and shared set of values in the traditional cultural landscapes. Notwithstanding its size and position in the city, legacy of Eastern influence, although altered (Fig. 6) in the form of organic planning, irregularity and fluidity of spaces. Most notable, is the image of the Ottoman core, which was an echo of homogeneous and harmonious relationships between man, space and nature.

On the other hand, Western influence is presented through Austro-Hungarian part (Fig. 1) of the city and characterized by rigid planning, regularity and symmetry. Denial of existing systems of values and architecture in human scale is interrupted with the western principles of design in which massive street rows of buildings formed corridor-like streets and enforced monumentalism. Contrary, in contemporary cultural landscapes the set of values, underlying concepts and schemata are additionally branched.

The overall Sarajevo landscape is the personification of diverse, alternative, and coexisting vision of ideal landscapes, and the tensions between them lead to complex, confusing but a dynamic landscape nature. Landscapes like this are not exclusive occurrence of city of Sarajevo but are ever present image, a reality of cities across region, Europe and world. As noted earlier, this is not simply a question of existence of various landscape formats, but a matter of awareness of a landscape as four-dimensional reality absorbed and molded by Sarajevans from pragmatic endeavors.

Thus, contemporary Sarajevo cultural landscape (Fig. 7) is more difficult to analyze since it covers a cohabitation, tensions and clash of different orders. Fractured and caught up in the vision of recent economic and political forces, traditional cultural landscape is induced with the new schemata, disparate from traditional unitary model of relationships. At first glance, unobtrusive and sometimes irritating, but loud enough to convey a message of its trans-formation, that prompt one to try to envision spatial synthesis.

49 Grabrijan, Neidhardt, 1957
50 Grabrijan, Neidhardt, 1957: 13
51 Martín-Díaz et al., 2018
52 The Development Strategy of the Sarajevo Canton until 2020, 2016: 33

In a situation where a dense urban context is superficially understood, and where the scope of most spatial interventions is limited by circumstances, it can be argued that today's cities are a political ideology reflection. In this sense, Sarajevo is not an exception. Driven by the profit logic, the overriding objective of the authorities was to get the city to be visually attractive to the substantial number of foreign investors. The fragile and precarious nature of contemporary urban development in Sarajevo offered instant progress but harmed local culture by introducing spatial dynamics unfamiliar to the local society.

The vanishing of traditional landscape values, land consumptions that favors densely built areas leaving just traces of open public spaces, squares and parks, is the reality of contemporary Sarajevo. Increasing Sarajevo landscape vulnerability is further intensified by uncontrolled housing constructions, predominantly on the slopes of the city. Although, the trend of illegal housing constructions dates back to the seventies, as Sarajevo was a powerful industrial center where many jobs were opened, and more and more people moved into the city, situation after the last war (1995) is even more alarming. Due to a very complicated and long-term procedure for obtaining a building permit, which can last up to three years, and fact that the legalization of illegally constructed houses is much cheaper than the approval of all permits before construction itself, Sarajevo is now facing with the many negative consequences, one of them being high risks of potential geomorphological hazards.[51]

According to the Development Strategy of the Sarajevo Canton until 2020[52] the environ-mental legislation is in a rather advanced stage and basic strategic documents (Cantonal and Local Environmental Action Plans) have been adopted, but there is a lack of co-ordination between the bodies for document implementation. However, due to non-enforcement of environmental protection regulations, specific topographic features of Sarajevo caused many problems to contemporary development, in which air pollution, risks for watercourses and security of water supply, land, cultural-historical and natural heritage, are increasing. Despite the tendencies to follow European regulations for sustainable development and a desire to overcome traces of post-war and post-socialist urban processes, interventions in the built environment of Sarajevo lead its development towards unsustainable directions.[53]

As noted by Husukić and Zejnilović[54] a major difficulty of urban development of Sarajevo is the complexity of planning bureaucracy and stagnancy of the legal framework, with mechanisms that are not able to support rationalized strategic decisions. Indeed, such planning system turned out to be misleading. It was Beck's[55] conviction that what is essential is not more rules, procedures or technologies, but more attitudes, feelings, images, narratives. This consideration, however, does not oppose necessity of planning system or diminish the role of technology in city progress, but rather advocate for more flexible planning system able to cope with on-going globalization processes.

Altered process of experiencing traditional and contemporary cultural landscapes with pre-created system of values predominantly imposed via communication media and based upon tourist literature, tv, newspapers, neglect cultural diversity and primordial values, reduce clearly distinct cultural landscapes. By understanding as first processes of traditional cultural landscapes one may

Fig. 5 Panorama of Sarajevo (2015) shows Sarajevoscape as a stratification of previous and present-day urban dynamics, with an interplay between the natural and built environment
Sl. 5. Panorama Sarajeva (2015.) pokazuje pejsaž Sarajeva (*Sarajevoscape*) kao stratifikaciju prethodne i sadašnje urbane dinamike uz međupovezanost prirodnog i izgrađenog okoliša

Fig. 6 View from mountain Trebević towards old town
Sl. 6. Pogled s planine Trebević na stari grad

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53 Martín-Díaz et al., 2018

54 Husukić, Zejnilović, 2017

55 Beck, 1995

Fig. 7 Intimidating masses of contemporary architecture
Sl. 7. Zastrašujući razmjeri suvremene arhitekture

make a shift to a multifaceted cultural landscape of the 21st century in a way that is analogous to inherited environment. This explains rationale for this research and how crucial is to establish evidence of variability within numerous forms of cultural landscapes and broaden research that include moment of time and cross-cultural diversity.

Typically, various forms of cultural landscapes are being observed in isolation from one another. Yet neither can be understood fully from one another. To lean on the argument above, one cannot understand the Ottoman part of the city outside of the context of Austro-Hungarian neither outside of the context of socialist city. It is essential to reconsider sequences of city that are physically evident in build form but also to analyze processes that are result of contrast of space juxtaposition.

Over the past years in Sarajevo, significant landscape modification has been evident. Although, changes in landscape did not received much attention of authorities it is critical to acknowledge consequent landscape transformation as initiators of vehement changes of environment-behavior relationships. What concerned us here is the way in which the traditional landscapes are neglected but also the ways how contemporary cultural landscapes are perceived. It seems that, in that context, the idea of the future landscapes and its underlying schemata will follow path lead by powerful set of spatial relations based on massive culture and consumerism culture. However, there is a need to study together apparently irreconcilable environments as one system that co-exist to-

gether. At very least, it seems right to acknowledge that no manmade landscape can be chaotic (i.e. random), any more than the culture can be.[56]

THE ROLE OF TECHNOLOGY
IN SHAPING CULTURAL LANDSCAPES

ULOGA TEHNOLOGIJE
U OBLIKOVANJU KULTURNIH PEJSAŽA

Technology is everywhere. Undoubtedly, consciously or unconsciously, technology is imprinted in each sphere of human life. It changes so rapidly that what is current one moment may be obsolete the next. As result, the present available knowledge and technique supported by great technological achievements has enabled the development of hybrid environments that require significant inputs of materials and natural resources. Furthermore, integration of technologies in design, construct dynamic and responsive environments that challenge conventional model of relationships between man and nature.[57] This ability to create new conceptual methodology for landscape is based, according to Johnson and Gattegno[58] on "emerging world of robotic ecologies, where matter at all scales is programmable, parametric, networked, and laden with artificial intelligence."

Moving forward, Frampton and Cava[59] asserts that "due to the complexity of technological systems in the built environment, the architect will have to coordinate these systems with a new cybernetic approach to fully realize the interrelationships between them".[60] The failure to adequately address technology, Kaufman-Osborn[61] advocates, is underlined by the fact that technology is seen as a thing or object to be installed or manipulated. It is not enough to optimize building performance or emulate spectacular forms by giving techno-character to environment. More importantly, since humans are embedded in the environment socially, ecologically, and technologically, there is need for apprehension of technology as an extension of what it means to be human.

One thing seems certain; cities are not immune to the technological progress. It will be increasingly hard to control overriding technological character of built environment. Through such endeavors there are only sporadic intentions to foresee the cultural poten-

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56 Rapaport, 1992: 39
57 Cantrell, Holzman, 2016
58 Johnson, Gattegno, 2016: xvii
59 Frampton, Cava: 1995
60 Allen, 2007: 31
61 Kaufman-Osborn, 1997
62 Rice, 1992

tial of this cybernetic approach. Decidedly, as argued by engineer Peter Rice[62] there is myth about technology, "The feeling that technological choice is always the result of a predetermined logic. The feeling that there is a correct solution to a technical question is very common. But a technical solution like any other decision is a moment in time. It is not definitive."[63] Frampton and Cava[64], accordingly, argue that implicit in Peter Rice's writing on technological systems is "that a technological device is a cultural choice and not simply a matter of reductive logic".

Discussing on inflexion of global culture, transformative nature and emerging landscapes that favors diversity there is a need to recognize the importance of the spaces of transmissions and permeable boundaries of our age. An additional key issue concerning globalization and communication flows is creation of a hyperspace that according to Castells[65] is a major reason of "the destruction of human experience, therefore of communication, and therefore of society" on a global scale. As such, technocratic society lead to human bewilderment that eventually come up with distorted image of belonging. In contrary, to Castella's concern for estrangement of society, Baudrillard[66] sees enormous possibilities "a state of fascination and vertigo linked to this obscene delirium of communication".

In this regard, questioning range of possible identities within the European 'cultural space' and cultural landscapes, Morley and Robins[67] acknowledge co-existence of local and cosmopolitan culture. Moreover, they express skepticism about idea of 'Europe without frontiers' concerning the actual reflections of new technological forms on the information and communication media. Borderless flow of information, people and goods besides countless benefits irretrievably are creating tensions between global and local leaving concept of Euro identity as a vulnerable and anxious phenomenon.[68] If we are to understand the current possibilities of technology and its role in re-formation of cultural landscapes, we must understand the context in which there are planning to be developed. For instance, the European Union has sought to harness communication technologies in order to promote stable ground for creation of European identity. In addition to many questions raised around crucial meaning be-

hind the Euro-identity, it is uncertain what European culture promotes.

Research on cyborg landscapes in which responsive technologies play a key role, "the cyborg speaks to a smartness that goes beyond an environment laden with ubiquitous computing devices"[69], goes hand in hand with technological progress. New modalities represented through high-tech, designed landscapes, are embodied in the existing framework of city interrelationships and very often are contrasting them. It can be said that newly formed sequences of cities are created predominantly to function as closed systems. One thing, however, remains unclear. If technology is becoming driving force in landscape research and practice how this will affect countries across Europe? How many countries, cities, in Europe or the world, in the future will have chance to taste the beauty of innovative technologies applied to environmental design? For sure, not many of them. It is argued that high-tech landscapes are exclusive right and privilege of developed countries. The city of Sarajevo is just one example of city in which variability of cultural landscapes is purely existential in nature. As already pointed out, there is huge discrepancy between developed and developing countries in terms of usage of innovative technology and its application in landscape design. Thus, it seems reasonable to broaden partial studies on specific cultural landscapes by synthetizing and providing general statements of landscape evolution threatening whole landscape. At the same time, studies on isolated bits of cultural landscapes very often becomes irrelevant when placed in wider context. Consistency of research with the support of adequate data is essential no matter are we talking about traditional or contemporary cultural landscapes. Moreover, identification of commonalities of various landscapes and detecting specific schemata will lead to precious body of evidence and good entry point for landscape research.

Having said that, it must be highlighted that major concern of this work is not to deprive landscape of technocratic society or to exclude various possibilities driven by technology, but rather to reinvest a design with now largely understand layer of meaning, one perhaps more primordial in its sensory apprehension. In such a view, this work embraces notions of multifunctional landscapes as reaction to an existing socioecological and cultural network that do not exclusively operate in present but instead create fertile ground for future changes. This article, with its focus analysis on cultural landscape, may not put an end to the affected disenchantment that so often indicates itself into our contemporary discourse, but it will give a traceable start to further elaboration.

63 Frampton, Cava, 1995: 387

64 Frampton, Cava, 1995: 387

65 Castells, 1983: 4

66 Baudrillard, 1985: 132

67 Morley, Robins, 1995

68 Morley, Robins, 1995

69 Cantrell, Holzman, 2016: 47

CONCLUSION

ZAKLJUČAK

The last decades of the twentieth century shaped a vigorous debate in contemporary landscape thinking that is further stretched as noted by Girot and Imhof[70] by the juxtaposition of science and memory, of exponential growth and history. Consequently, it is argued that a multitude of heterogenous ideologies that attempt to define a world, created a schism between the way a landscape is comprehended scientifically and the way it occurs cognitively, mnemonically, and emotionally. Indeed, scientific literature in stark contrast with a romanticized landscape vision has never been so inextricable as it is now.

From a research perspective, underlining content of contemporary landscape narrative does not have an easy formula. Practitioners need to penetrate the unique anatomy of cultural landscapes by understanding the set of rules by which diverse information are encoded in the city DNA and translated into space. Ultimately, the genetic code imprinted in cultural landscape is far from being simply descriptive but conjure invisible presences. As such, the various landscape repertoire found cross-culturally as unique system of meanings, attitudes, norms, and beliefs, under the influence of global culture becomes increasingly complex and unpredictable. Cultural landscape mutations brought highly variable and heterogeneous character of landscapes in which global and local endlessly interpenetrate creating blurred cultural boundaries.

It is apparent that restructuring cities and landscapes may have resulted in highly fragmented environments. As it is the case in Sarajevo, landscape fragmentation is further intensified when "laws, regulations, planning and administration for landscape are formulate in separate division, where values related to nature and culture are separated from experimental and social values".[71] To move forward, it is essential to find the way how to accommodate changing realities and unforeseen circumstances within enough flexible system of landscape relations.

Regardless of variety of concerns presented above, this is not a discipline specific problem, but it extends beyond professions, calling for a multidisciplinary and comprehensive approach. As Appadurai[72] argues, the landscape itself may perhaps be best understood as a subject of "various constraints and incentives (some political, some informational, and some technoenvironmental) at the same time as each act as a constraint and a parameter for movements in the others".

Without exception, all landscapes are bearers of culture, and thus historical and cultural values are strongly intervened in each sphere of landscape existence. It is, however, important to realize that landscape and identity creation are a dialogue repetitively in process. Therefore, attention should be given to consequences of continuing globalization and increasing pressure on cities to keep abreast of emerging technologies. Not surprisingly, in thinking how cities might resist contemporary challenges, authorities often, as it is presented through Sarajevo case study, prioritize attractiveness of city over adaptability and fluidity. Yet logically, such practice has been deprived of responsibility for society. The seductive nature of technology produced a change of paradigm between society and space but also between image and the object. Depiction of technology as a tool to manipulate with environment exclusively to be visually appealing produces not image of reality but an illusion.

This work is seen as a productive moment of putting forward visionary clues for cultural landscapes under the influence of technology and thus aims to provide a platform for future contemplation on interconnectedness of culture, technology and landscape. Accordingly, it does not refute the enormous possibilities of innovative technologies that resulted in worldwide interconnectedness, transportation, expansion of media communication, etc. Indeed, a central assertion is that, after all, innovation is a social responsibility. This entails to study landscapes, offering directions for innovative future research that sees technology as an extended network of various materials, social, cultural and environmental relations. What follows is an attempt to observe the relation of technology and culture as a crucial initiator of sustainable global and local changes, that moves far beyond elite circles of techno science.

Decidedly, this work addresses the need for careful consideration of technological choice responsive to environmental realities and everyday life. Rather than superficially propagating postulates of sustainability, the redirection of landscape development is seen as an expansion of concept of sustainability beyond ecological health realm into social practice and the cultural sphere. Moreover, it is redirecting landscape development from an ego-centric to a more eco-centric practice.

[Proof-read by Elvira Čolo, MA engleskog jezika i književnosti]

70 Girot and Imhof, 2016
71 Herlin, 2004: 401
72 Appadurai, 1996: 35

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Fig. 2 Donia, 2006: 31

Fig. 3 https://www.galabri.com/histori/shqiptar/flaggs/bosnja/pics/sarajevo.jpg

Fig. 4 http://www.balkan-sehara.com/images/slikenc/2015/Prica2-Nadan/kdq16p.jpg

Fig. 5 Photo: Julian Nitzsche, 2015

Fig. 6 Photo: Julian Nitzsche, 2012

Fig. 7 Photo: Authors

Sažetak

Summary

Preispitivanje zajedničkog jezika kulturnih pejsaža
Analiziranje stanja sarajevskog pejsaža

U radu se raspravlja o složenim procesima i praksama globalnih tokova u dinamičnoj prirodi europskih kulturnih pejsaža u suvremenom kontekstu. Istražuje se uloga novih tehnologija, recentna demografska fluktuacija i povećana međupovezanost u ponovnom oblikovanju kulturnog pejsaža. Taj proces uključuje razmatranje fragmentacije postojećih pejsaža kao odraz procesa fragmentacije u širemu prostornom kontekstu. Nadalje, postavlja se pitanje promjenjivosti krajobraza unutar različitih kultura koji se odvijaju u kontinuiranom procesu nastajanja novih prostora. Ovaj rad nastoji potaknuti promjene u razmišljanjima o postojećim ekološkim resursima i održivim praksama u upravljanju pejsažem, ali i preispitati drukčije pristupe koji su osjetljivi na proces kulturne razmjene. Svi su pejsaži bez iznimke nositelji određene kulture pa stoga povijesne i kulturne vrijednosti snažno utječu na svaki njegov segment.

Složena i kontradiktorna priroda suvremenih kulturnih identiteta razmatra se na primjeru Sarajeva, glavnoga i najvećega grada Bosne i Hercegovine. Smješten u srcu jugoistočne Europe, grad Sarajevo stoljećima je imao važnu stratešku poziciju i simbolički predstavljao raskrižje koje povezuje srednju Europu, Jadransko more i Mediteran.

Cjelokupni sarajevski pejsaž personifikacija je vizije raznolikih, drukčijih i supostojećih idealnih krajolika, a napetosti između njih dovode do njegove složene i zbunjujuće, ali dinamične prirode. Ovakvi pejsaži nisu karakteristični samo za grad Sarajevo, već su oduvijek prisutni kao slika stvarnosti gradova diljem regije, Europe i svijeta. Međutim, to nije samo pitanje postojanja raznih krajobraznih formata nego i pitanje svijesti o krajoliku kao četverodimenzionalnoj stvarnosti koju apsorbiraju i oblikuju sami stanovnici Sarajeva iz pragmatičnih razloga. Stoga je suvremeni sarajevski kulturni pejsaž teže analizirati jer pokriva suživot, napetosti i sukob različitih elemenata. Razbijen i zarobljen u viziji nedavnih gospodarskih i političkih snaga, tradicionalni kulturni krajolik potaknut je novom shemom, različitom od tradicionalnoga unitarnog modela odnosa. Na prvi pogled nenametljiv i katkad iritantan, ali dovoljno glasan da prenese poruku svoje preobrazbe koja potiče predviđanje prostorne sinteze. Upravo u tom kontekstu ovaj članak istražuje potrebu obnove kulturnih krajobraza u Sarajevu kao izazov putem kojeg bi autentična kultura mogla ponovno zaživjeti kao reakcija na sve ono što se percipira kao prijeteći oblik kulturne hibridnosti.

Ovaj rad na produktivan način predstavlja vizionarsku predodžbu kulturnih pejsaža pod utjecajem tehnologije te ima za cilj postaviti temelje budućega razmišljanja o međupovezanosti kulture, tehnologije i pejsaža. U skladu s time, on ne odbacuje goleme mogućnosti inovativnih tehnologija koje su dovele do globalne svjetske međupovezanosti, transporta, ekspanzije komunikacijskih mogućnosti putem medija itd. Doista, središnja je tvrdnja da je, napokon, inovacija društvena odgovornost. To podrazumijeva potrebu proučavanja pejsaža, kao i ponudu smjernica za buduća inovativna istraživanja koja tehnologiju smatraju proširenom mrežom različitih materijalnih, društvenih, kulturnih i okolišnih odnosa. Iz toga slijedi pokušaj promatranja odnosa tehnologije i kulture kao ključnog pokretača održivih globalnih i lokalnih promjena koje daleko nadilaze elitne krugove tehnoznanosti.

Grad Sarajevo samo je jedan primjer grada u kojem je varijabilnost kulturnih pejsaža osnova njegove egzistencije. Kao što je već istaknuto, postoje velike razlike između razvijenih i zemalja u razvoju glede korištenja inovativne tehnologije i njezine primjene u projektiranju pejsaža. Stoga se čini razumnim proširiti parcijalne studije o specifičnim kulturnim krajolicima sintetiziranjem i pružanjem općih informacija o evoluciji krajolika koja prijeti cijelom krajoliku. Istodobno, studije o izoliranim dijelovima kulturnoga krajobraza vrlo često postaju irelevantne kada se postave u širi kontekst. Konzistentnost istraživanja uz potporu adekvatnih podataka od temelje je važnosti bez obzira radi li se o tradicionalnim ili suvremenim kulturnim krajobrazima. Štoviše, prepoznavanje sličnosti različitih krajobraza i otkrivanje specifičnih shema dovest će do dragocjenog dokaza i adekvatnog ishodišta za istraživanje krajobraza.

Ovaj se rad bavi potrebom pomnjivog razmatranja tehnološkog izbora koji odgovara stvarnosti okoliša i svakodnevnog života. Umjesto površnog propagiranja postulata održivosti, preusmjeravanje razvoja krajolika smatra se proširenjem koncepta održivosti izvan područja ekološkog zdravlja u društvenu praksu i kulturnu sferu. Usto, razvoj krajolika preusmjerava se od egocentrične u ekocentričnu praksu.

Biographies
Biografije

Erna Husukić – PhD Degree obtained at International Burch University, Sarajevo, BiH, Department of Architecture. Her research interests revolved around contemporary urban milieu and urban studies with a particular interest on urban transformations, city regeneration and urban memory. Her current research work is focused on marginal spaces, urban ruins and cultural dimensions of globalization.

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