

Table of Contents

Editorial	V
Systems Thinking in Landscape Design Processes	1
<i>Stephen M. Ervin (Keynote at DLA 2016)</i> Cybernetic Design Cycles.....	2
<i>James F. Palmer (Keynote at DLA 2016)</i> A Landscape Assessment Framework for Visual Impact Assessment in the USA.....	10
<i>Mehli Bozkurt</i> Digital Age for Observations: The Use of GIS for Analysing Observations and Behaviour Mapping	18
<i>Jeffrey Nesbit</i> Topological Thinking: Digital Systems in Landscape Urbanism	28
<i>Joerg Rekitke, Yazid Ninsalam</i> Sliced Ecosystem: Modelling Transects of Vulnerable Marine Landscapes	36
<i>Muge Unal, Cengiz Uslu, Ahmet Cilek</i> GIS-Based Accessibility Analysis for Neighbourhood Parks: The Case of Cukurova District	46
<i>Siyuan Wu, Mintai Kim</i> The Relationship Between the Pedestrian Lighting Environment and Perceived Safety	57
<i>Cheng Yuning, Yuan Yangyang</i> Systematic Thinking and Digital Design: Simulating Natural Waterscape Design with the Software ArcGIS	67
Landscape Visualization and Analysis	77
<i>Ahmet Benliay, Isa Eren Akbiyik</i> 3D Modelling Creating Tool for Landscape Design: Camera	78
<i>Brent C. Chamberlain, Rebecca Liu, Jessica Canfield</i> Using Landscape Visualization to Inform Streetscape Design	84
<i>Benjamin H. George</i> Distributed Site Analysis Utilizing Drones and 360-degree Video	92
<i>Ulrike Wissen Hayek, David Waltisberg, Nina Philipp, Adrienne Grêt-Regamey</i> Exploring Issues of Immersive Virtual Landscapes for the Support of Participatory Spatial Planning Support	100

<i>Ruben Joye, Hari Sacré, Sven De Visscher</i>	
Immersive Environment: Discussing Child Friendly Urban Spaces with Teenagers	109
<i>Philip Paar, Kathrin Grotz, Burak Kahraman, Jan Walter Schliep, Timm Dapper</i>	
The World's Tallest Plants in a Glasshouse: Creating a Utopian Virtual Reality Diorama	118
<i>James F. Palmer</i>	
Assigning a Fixed Height to Land Cover Screen for Use in Visibility Analysis	125
<i>Michael Roth, Christian Tilk</i>	
Here Comes the Sun: A Prototypical GIS-based 4-dimensional Rooftop Solar Potential Analysis to Support the Energy Turnaround	133
<i>Ping Xu</i>	
Feng-shui – Ancient Geodesign as a Clue: Identifying Predictive Landform Models of Mountain Flood Impact Zones	141
Geodesign Concepts and Applications	149
<i>Meliz Akyol, Hayriye Esbah Tuncay</i>	
A Portrayal of Uncertainty: Revealing Problems and Opportunities of Landscape Change via Sleuth Cellular Automata Model	150
<i>Michele Campagna, Pierangelo Massa, Roberta Floris</i>	
The Role of Social Media Geographic Information (SMGI) in Geodesign	161
<i>Siqing Chen, Virginia Lee</i>	
The Spatial Planning of Australia's Energy Landscape: An Assessment of Solar, Wind and Biomass Potential at the National Level	169
<i>Tuğçe Onuk, Hayriye Eşbah, Ebru Erbaş Gürler</i>	
Presenting Geodesign Approaches in Practice: Case of Çırpıcı and Kamil Abduş Urban Parks in Istanbul	179
<i>Brian Orland</i>	
Geodesign to Tame Wicked Problems	187
<i>Muhammed Ali Örnek, Melike Ersoy, Yasin Çağatay Seçkin</i>	
Estimating Stormwater Runoff from the 3D-model of an Urban Area in Istanbul	198
<i>Sina Röhner, Michael Roth, Christian Tilk</i>	
Cloud-based Visibility Analysis for Energy Infrastructure: Investigating the Cost-efficiency and Validity as Preconditions for Practical Implementation	207
<i>Nastaran Tebyanian</i>	
Reflecting Time in Computer-aided Landscape Design and Analysis: Developing an Application for Modelling Seasonality and Resiliency in Small Scale Landscapes	214

<i>Barty Warren-Kretzschmar, Carlos Lincon, Hrishikesh Ballal</i> Geodesign as an Educational Tool: A Case Study in Cache Valley, Utah	222
Mobile Devices for Geodesign	233
<i>Gulsah Bilge, Sigrid Hehl-Lange, Eckart Lange</i> The Use of Mobile Devices in Participatory Decision-making	234
<i>Alexiei Dingli, Maria Attard</i> The Valletta Travel Information Service	243
<i>Paul Haynes, Eckart Lange</i> Mobile Augmented Reality for Flood Visualisation in Urban Riverside Landscapes	254
<i>Mark Linquist, Paul Galpern</i> Crowdsourcing (in) Voluntary Citizen Geospatial Data from Google Android Smartphones	263
<i>Ole R. Sleipness, Benjamin H. George, Amanda Hughes, Sriram Ramineni</i> Hidden Dimensions: Illuminating Landscape History through Mobile Apps	273
<i>Yalcin Yildirim, Taner R. Ozdil</i> Adopting Soundscape Technology to Assess Urban Landscape Performance	281
Teaching Methods in Digital Landscape Architecture	291
<i>Michele Campagna, Ana Clara Mourão Moura, Júnia Borges, Chiara Cocco</i> Future Scenarios for the Pampulha Region: A Geodesign Workshop	292
<i>Pang Li</i> Teaching Landscape Design with Grading Studies: An Experiment Based on High Fidelity DTM	302
<i>Muhammed Ali Örnek, Yasin Çağatay Seçkin</i> Development of an Educational Video Game for the Teaching of Landscape Grading Principles	308
<i>Emine Çoban Sahin, Duygu Ozgur</i> Landscape Awareness of Childhood in Computer Games: In the Case of “Minecraft”	316
<i>Hans-Georg Schwarz-v.Raumer, Johannes Jörg, Mohammed Alfiky</i> Respecting the Role of Agriculture for an Untegrated Landscape Development at the Urban-rural Fringe Using Geodesign Tools	327
<i>Carolyn Westort</i> Coding Landscape: Teaching Computer Programming to Landscape Architects	337

Chen Ye, An Minghan

The Application Research of 3D Immersed Virtual Reality Interactive System in
Landscape Architecture Design Course..... 346

Invited Paper 355

Carl Steinitz

Geodesign Dynamics 356

Acknowledgements 369

**Early Conference Announcement & Call for Papers for the
International Conference “Digital Landscape Architecture
DLA 2017”** 373