

Preface

A network of engaged individuals teaching new information technologies at the International Master of Landscape Architecture program MLA at Anhalt University established the annual Conference on Digital Landscape Architecture DLA at our school in 1999. The DLA has to date been held in Istanbul, Malta, Zurich, Munich, Aschersleben, twice in Boston, and frequently on our local campuses in Bernburg, Dessau and Köthen. In 2020 and 2022; the DLA was hosted by Harvard University. Harvard was able to organize the DLA 2022 as a full hybrid conference when the Pandemic still limited traveling. The Journal Digital Landscape Architecture JoDLA which we have developed for the conference is listed in the international citation database Scopus. This publication is supported academically by eighty reviewers and board members. Here, we wish to thank them all for their committed long-term support.

Having 64 papers (from more than 20 countries) which successfully meet the standards of the review process coordinated by the founder of DLA, Prof. Erich Buhmann, and his editorial team once again guarantees a very substantial conference.

The 24th international conference on digital landscape architecture is now back at our internationally known campus in Dessau. Prof. Dr. Matthias Pietsch, this year's local host, is also organizing DLA 2023 as a hybrid conference in collaboration with Prof. Dr. Nicole Uhrig and Prof. Trevor Sears. Even now having more than two years of experience in organizing virtual lectures and conferences, meeting all the additional needs for an international conference in a hybrid format is still a challenge and requires many university resources. We are very thankful for the team spirit of so many colleagues at Anhalt University, and to the board members of the DLA for their support once again.

This year's main theme "Future Resilient Landscapes" is a core issue in several research efforts of Anhalt University. Our keynote speakers will widen our view on the challenges environmental design faces in coping with global change.

As we are able to work with a digital twin of our globe, we can focus on how to use the tools of digital landscape architecture in order to meet the challenges of global warming.

All positively reviewed papers are available as open access papers at Wichmann publisher and the outcome of the conference will be published DLA 2023 in Dessau at <https://www.dla-conference.com/> as in the past.

We are looking forward to welcoming many of you again in person in Dessau in 2023 and hopefully in the following years as well. At the same time, we looking forward to seeing the many participants who for a variety of reasons will be virtually attending the 24th Digital Landscape Architecture Conference.

Köthen, March 15, 2023

Prof. Dr. Jörg Bagdahn, President Hochschule Anhalt / Anhalt University

Foreword

Future Resilient Landscapes

As we move forward in the 21st century, the world is facing unprecedented global changes that require a new approach to landscape architecture. Resilience has become a crucial factor in designing and man-aging our landscapes in response to natural and man-made hazards, such as climate change, urbanization, and environmental degradation. Therefore, the theme of this issue of the Journal of Digital Landscape Architecture, “Future Resilient Landscapes”, is timely and relevant. The term “Resilient Landscape” refers to a landscape that can withstand and recover from shocks and stresses caused by various hazards, including extreme weather events, sea level rise, and biodiversity loss. Achieving resilience requires an integrated approach that considers ecological, social, and economic factors and leverages technology and innovation. This issue of the journal features a range of articles that showcase how digital tools and techniques can contribute to building resilient landscapes. The articles cover various topics related to resilience, including global change and hazard response, landscape and building information modeling, geodesign approaches, digital technologies, and related case studies. The use of UAV imagery and remote sensing in landscape architecture is explored in detail, along with the role of mobile devices, the internet-of-things, and ‘smart’ systems in landscape architecture. Algorithmic design and analysis of landscapes, visualization, animation, and mixed reality landscapes are also discussed. Finally, the issue examines the role of digital fabrication in landscape architecture and how to teach digital landscape architecture in academia and professional practice. In conclusion, this issue of the Journal of Digital Landscape Architecture provides a comprehensive overview of the current state of research and practice in the field of resilient landscapes. We hope that the articles will inspire and inform landscape architects, planners, and researchers to adopt a more integrated, collaborative, and innovative approach to building a sustainable and resilient future. We thank all the authors, reviewers, and editors who have contributed to this issue and made it possible.

If you’ve managed to read this far, then we’re lucky. Didn’t you get the feeling that the lyrics seemed somehow interchangeable, terribly generic and oddly impersonal? Did you perhaps think something like “what in the world happened to this guy (the author), wasn’t he writing more reflectively and engagedly before”? Well, then you are spot on. The above part of the foreword was written by a chatbot, built on top of large language models, fine-tuned using both supervised and reinforcement learning techniques. Any simpleton can use this relatively new breed of AI technology to generate endless texts while leaning back and staring at the screen of their mobile phone themselves, following, for example, the latest news from the Norwegian Flat Earth Society. Or watching cat videos. Or consuming some other comparatively important thing. Great, isn’t it? Now, right now, we have arrived in the digital age. Not quite as exciting as we might have thought. Recently, when an exhilarated and nervous young interviewer asked the famous, now 95-year-old Noam Chomsky, whether software like ChatGPT would replace people’s language learning in the future, for example French, Chomsky twisted the corner of his mouth for a tenth of a second. Then he muttered something like, “Don’t worry about it too much”. Anything new is eyed anxiously until it goes out of fashion, becomes commonplace, and then is forgotten. Yes, AI will become big, but no, DALL-E and the other applications will not put the landscape architect out of work. Let’s be happy

and also a little proud that the DLA conference has been ploughing the field of digital landscape architecture for well over 20 years without getting obsolete or out of fashion. Such stamina is the only way to prevent flat hype and create what is called substantial progress. Progress is happening slowly but steadily, and each year a new tenuous layer of research and application is laid over the substance that has been worked out so far. Finally, back to the main theme of the conference. Creating or preserving resilient or even sustainable landscapes is a noble goal and an important task. We don't know anything with certainty, but we are rather sure that this task cannot be mastered without digital technology and methodology. Thank you all for working diligently on this expedient challenge.

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