Hosted by The Design School at Arizona State University
Organized by EDRA 51
Conference Committee in collaboration with EDRA Board of Directors

TEMPE
ARIZONA
APRIL 4-7
2020

Proceedings of the 51st Annual Conference of the Environmental Design Research Association

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Introduction

2020 is a peculiar year. At the time I am writing this introduction to the EDRA 51 proceedings, the world is three months into the COVID-19 pandemic global health crisis, one month into lifting the stay-at-home order in Arizona, and two weeks into world-wide protests for Black Lives Matter, an anti-racism movement initiated in the United States. The persistence of systemic racism inherited from slavery and the colonial past is perpetuated in the built environment and many communities around the world today. The recent pandemic crisis and prolonged climate change impacts have revealed the inequitable burdens and exacerbated injustice in minority and vulnerable communities. This is the time to deeply reflect and criticize the current structures and systems in place that are relevant to our work in environmental design research for building just, resilient, and sustainable futures.

This year, the Environmental Design Research Association (EDRA) invited practitioners, researchers, and educators to join the 51st annual conference to collectively rethink how socially embedded, inclusive, and collaborative environmental design may serve as a foundation for transforming society and addressing the major challenges we are facing in the world. Over five hundred and fifty people answered our call for proposals in the early stage. Unfortunately, due to the COVID-19 outbreak, the in-person conference could not take place as planned by the local hosts—the EDRA 51 Conference Committee at The Design School, Arizona State University, in Tempe, Arizona, joined by other ASU faculty, student, and local practitioner volunteers. The participants would have enjoyed the warm sunshine in beautiful spring days of Arizona and various mobile sessions and activities we planned for you: the Taliesin West Frank Lloyd Wright UNESCO world heritage site, Paolo Soleri’s arcology laboratory of Arcosanti, the original space research in desert environment of Biosphere 2, the many wonders of the Sonoran Desert region at Tucson’s Desert Museum, Scottsdale’s McDowell Sonoran Preserves, Phoenix’s Sonoran and South Mountain Parks and Preserves, the river social-ecological systems along the Rio Salado, the cultural heritage of historical and midcentury Phoenix’s architectural sites, the sustainability practices and campus design at Arizona State University, the biomimicry research and practice, and learning about soundscape through a unique sound walk experience. We would have welcomed you and congratulated the EDRA, CORE, and GREAT PLACES award winners at an outdoor plaza luncheon at ASU The Design School with our local delights, and celebrated with old and new friends at the evening banquet in the world renowned Phoenix Botanical Garden accompanied with unique desert landscapes, drinks, food, music, and dance under the stars. Arizona missed you. I sincerely hope you will have a chance to come visit in the future.

When COVID-19 hit the United States in March, many conferences faced the most strenuous situation of deciding whether to cancel, postpone, or shift to a virtual platform and how to handle registrations. The EDRA51 Conference Committee worked closely with the EDRA Board and EDRA Executive Director. Each decision we made together was difficult and taken seriously. With the tremendous help from a newly formed EDRA51 Virtual Committee less than a month before the start of the conference, and with dozens of volunteers who helped to host and manage each session, I am grateful that the EDRA 51 was able to take place virtually with over 350 participants coming from over 14 countries through 270 individual and group presentations and 90 visual presentations, and three plenary sessions—an opening keynote, a closing keynote, and a panel discussion. We addressed how socially embedded collaboration with communities transform environmental design research at all scales to move communities beyond status-quo toward more sustainable and resilient models with adaptive and transformative capacities. In lieu of mobile sessions, EDRA51 responded to the emerging challenges of pandemic urbanism through an impromptu virtual workshop. In addition, EDRA51 hosted a virtual happy hour, serving as a nectar to quench the thirst of connecting with EDRAers in the time when shelter-in-place and social/physical distancing have become a new norm for many. Thanks to everyone who participated and made our first virtual EDRA conference a success.

Thanks to all reviewers who helped in the peer-review process for the conference papers and abstracts, and thanks to the editorial board for overseeing the quality of this document. The EDRA51 Proceedings is a collection presenting the multiple facets of how environmental design research collaborates with academia, not-for-profit organizations, public sectors, and private sectors to lead the charge in transforming people’s relationships with each other, their communities, and their environments toward net positive futures. The EDRA51 Proceedings is organized...
by presentation types—referred full papers, abstracts-individual presentations, abstracts-group presentations, abstracts-pre-conference intensives, abstracts-video shorts, abstracts-posters—in addition to the following conference tracks:

A - Transform Design for Resilience & Sustainability  
B - Transform Education for Our Common Future  
C - Transform in Transitions  
D - Transform Places with People and the Environment  
E - Transform Processes and Outcomes for Equity

Today, our world is more connected and more complex with persistent and prolonged issues, as well as new challenges that exist in every community, including but not limited to: systemic racism, social and environmental justice, climate change and climate justice, environmental quality, biodiversity, health, technology, communication, and education. Our work must continue to reveal and address those challenges, produce new knowledge in environmental research, develop innovative and integrated environmental design solutions and practices, and contribute to policy-making for actionable change. EDRA is fully committed to this work with you.

We look forward to seeing you in EDRA 52!

Sincerely,
Chingwen Cheng, PhD, PLA, LEED AP  
EDRA Chair-Elect & Program Committee Chair  
EDRA 51 Conference Committee Chair

Special Thanks to EDRA 51 Volunteers:

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Taraneh Darvish  
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