



Conference for Artistic and Architectural Research & Collective Evaluation of Design-driven Doctoral Training Programme



Book of Proceedings

Hec m me tion

Conference for Artistic and Architectural Research & Collective Evaluation of Design-driven Doctoral Training Programme

Faculty of Architecture and the Built Environment, Delft University of Technology

The Netherlands, Delft, March 28 - April 1 2022

Recommendation Book of Proceedings Colophon

CA²RE+ Delft RECOMMENDATION: Conference for Artistic and Architectural Research & Collective Evaluation of Design-driven Doctoral Training Programme

Editors

Roberto Cavallo¹ Alper Semih Alkan² Joran Kuijper³

- ¹ Delft University of Technology, Faculty of Architecture and the Built Environment, Department of Architecture, R.Cavallo@tudelft.nl, https://orcid.org/0000-0001-6534-120X
- ² Delft University of Technology, Faculty of Architecture and the Built Environment, Department of Architecture, A.S.Alkan@tudelft.nl, https://orcid.org/0009-0003-4233-4033
- ³ Delft University of Technology, Faculty of Architecture and the Built Environment, Department of Architecture, J.A.Kuijper@tudelft.nl, https://orcid.org/0000-0003-4323-5267

Keywords

Design-driven doctoral research, design-driven research recommendation, architectural research, artistic research

Published by

TU Delft OPEN Publishing, Delft University of Technology, The Netherlands

ISBN 978-94-6366-660-2 DOI: https://doi.org/10.59490/mg.61

This work is licensed under a Creative Commons Attribution 4.0 International (CC BY 4.0) licence Copyright clearance made by the TU Delft Library copyright team © 2023 published by TU Delft OPEN Publishing on behalf of the editors

Design concept, layout, and typesetting

Marko Damiš

Disclaimer

Every attempt has been made to ensure the correct source of images and other potentially copyrighted material was ascertained, and that all materials included in this book have been attributed and used according to their license. If you believe that a portion of the material infringes someone else's copyright, please contact R.Cavallo@tudelft.nl.

Scientific Committee

As mentioned in Section 05, p. 476

Contributors

Sergio Martín Blas, book proposal review Anđelka Bnin-Bninski, book proposal review

Special thanks to

Michele Puddu, text editing Mimi Cepic, text editing Luísa Ferreira Martins, text editing Szymon Kaniewski, text editing Lilani Oei, text editing Nicolette van Dongen, event organization Nathalie Kooijmans, event organization





Conference hosts



CA²RE in association





European Association for Architectural Education Association Européenne pour l'Enseignement de l'Architecture



CA²RE+ Partners

Univerza v Ljubljani







AARHUS SCHOOL OF ARCHITECTURE

KU LEUVEN

















Co-funded by the Erasmus+ Programme of the European Union



Contents

01—Recommendation¹²

Roberto Cavallo, Alper Semih Alkan, Joran Kuijper The CA²RE+ Delft conference in a nutshell 14 Roberto Cavallo Carrying on Design Driven Doctoral research

03—Keynotes—and Workshops

Nathalie de Vries Research by Design in Education and Practice 38 Kees Kaan Connected Brains for Collective Knowing 46 36

Milica Tomić Art Cannot Be Taught 52 Workshop CA²RE+ Partners Institutions Presentations and Discussion on Design Driven Doctoral Research 58 Workshop CA²RE+ Delft Participants Wrap-up Debate on Design Driven Doctoral Research ⁸⁴

Joran Kuijper Walking Tour Delft 80

04—Artefacts, Extended Abstracts—and Papers

94

Greta Allegretti Design Models for the Enhancement of Archaeological Fragile Sites 96

Ipek Avanoğlu Navigating Into a Venture of a Research on an Architecture Without Verticals 104 Nina Bačun Cinematic Space as Constructed Memory in the Essay Film Bonding Humanity (Perhaps Manifesto) ¹¹⁶

Ana Belčič Analysing the Socially Enhancing Elements of Space in Four Senior Cohousing Sites 124

Dorđe Bulajić Composing Images Architectural Montage as Design-Driven Research Tool 136	Gianlu D'Oria Time An E: Taxor Vehic Oper 170
Carla Bulone	
The Use of Graphene in	
Building Construction	Teresa
Potentiality and Questions	Atlas
142	Desi
	Peda
loss Carrasso Hartal Banita	Scho
Jose Carrasco Hortal, Benito García Valero, Francisco Francés	186
García	
Floodlands	

Landscape Design Experience With Boundary Methods and Lessons One Can Draw From Stories Concerning Rural Backgrounds ¹⁵²

Enrico Chinellato, Or Haklai Double Feature

A Design-driven Inquiry into the Counter-practices of World City Monumentality 164 Gianluca Croce, Mariacristina D'Oria **Time-capsule Transcripts** An Experimental Taxonomy of Forms as a Vehicle for a Design Operation 170

Teresa Cunha Ferreira Atlas of Architectural Design in Built Heritage Pedagogies from the School of Porto 186

Ana Catarina da Silva Antunes **Tapadas (Royal Forests and Hunting Reserves) of Portuguese Royal Palaces Resilience Spaces. For a Spatial and Architectural Requalification 192**

Marta Fernandez Guardado Home: Things & Bodies A Thing-based Exploration Into Personal Space 200 Adrian Fuhrich **Reflexive Palimpsest** Designing Curatorship of Post-war Modernism Architecture 212

Sara Ghirardini Designing Preservation Integrating the Architectural Project to UNESCO Tools to Tackle Territorial Fragility: the Tivoli Case as a Pilot Experience 220

Anastasia Gkoliomyti Towards a Non-neoliberal Design Paradigm ISHINOMAKI 2.0 – a Network of Grassroots Community Building 230

Stefan Gzyl Caracas, Departure City Ethnography of Caretaking ²⁴⁰ Jure Henigsman Innovations in Prof. Stanko Kristl's Health Space Designs, Their Humanity, and Today's Relevance 250

Maria Høgh-Mikkelsen **Poetic Expressions** Video and Artefact as Phenomenological Reflection in Constructive Design Research ²⁵⁸

Maureen Selina Laverty Sensory Nourishment Consciously Crafting Sensations in Clothing Design to Support Diverse Sensory Needs 264

Jiaxi Li Coastal Ecological Passage (CEP) as an Innovative Nature-based Defense to Tackle Rising Sea Level 270

Claudia Mainardi Everyday Practice as Paradigm to Study Architectural Contemporary Codes 280	Mar Muñoz Aparici Design Factors for Cultural Building Activation: Experiments Between Public Space Theory and Architectural Practice
Heidi Sørensen Merrild Reversible Tectonics Learnings From the Past	310 Miljana Niković
286	Belgrade on Screens Cut 2: Dis/continuous
Enrico Miglietta The Materialisation of the Joint	Location(s) 320
Re-reading the Brion Cemetery Through the Agency of the Drawing 296	Mariana Pereira Guimaraes The Evaporative City Bioclimatic Adaptation and Regeneration Using Water
Rose-Ann Mishio Healing Homes	326
A Search for the Design of Housing to Foster Wellbeing ³⁰⁴	Bogdan Peric The Hidden Potential of the Dvor Reshaping Semi-private Spaces in Moscow 334

Marie Porrez Interiorities, Embeddedness and the Dwelling 342

Kevin Santus Climate Change and Design Form Operative Research on the Morphological Role of the Ground Level 352

Sara Anna Sapone Precision Wildland Designing Third Landscape Within the Smart City 360

Felix Schmidt-Kleespies Rule-Based Design of Prefabricated, Hollow Section Plywood Wall Units 370 Renzo Sgolacchia Housing Migrant Workers An Exploration of the Rotterdam-Venlo Logistic Corridor ³⁷⁸

Wiktor Skrzypczak Bodily Movement in Architectural Theory and Its Implications for Spatial Composition ³⁸⁴

Isabella Spagnolo Sharing Landscape: Beyond the Urban-rural Dialectic. The FARM 392

Asha Sumra, Arijit Chatterjee Ecologies of Residue Material Movement and the Thinness of Things 400

Yağız Söylev Schools With Future Value 412 Berilsu Tarcan Exploring a Craft-Design Relationship Through Felting

A Process of Making-with Elements of Traditional and Contemporary Culture ⁴¹⁸

Taufan ter Weel Architectural Plug-In Explorative Machine for the Sonic Recomposition of Space 426

Georgios Triantafyllidis Building Information Modelling (BIM) Beyond an Efficiency and Costs' Saving Method. The Use of BIM as a Mediator Towards Collaboration, Sustainable Design and Design Exploration. ⁴³²

Hinnerk Utermann Talking House 442 Halina Veloso e Zarate Data-supported Design in Architecture and Urbanism: The Use of Geospatial Data for Transport Node Design 448

Valeria Wiendl Schoolyards I The Impact of Architecture on Child Development Children From 3 to 10 Years Old in Education Spaces in Portugal 456

Xin Xu **Program in Architectural Design of Contemporary Art Museum** Focusing on the Contemporary Art Museum Architectures Designed in Shanghai Central Area since 2010 ⁴⁶⁴

05—Scientific 476 Committee

06—Panelists

486

71 Politecnico di Milano

Fabrizia Berlingieri Jacopo Leveratto Gennaro Postiglione Alessandro Rocca

DAStU_ Department of Architecture and Urban Studies

About Community and Contextualization

When preparing the contribution for the Delft conference, we – Fabrizia Berlingieri, Gennaro Postiglione, Alessandro Rocca, and Jacopo Leveratto as the Politecnico di Milano core team, together with Enrico Miglietta – deliberately wrote some individual reflections on preliminary findings and possible trajectories for the CA²RE project. Even without discussion among us, the summa turned out to be a shared perspective on the values of *community* and *contextualization*. I am now presenting them on behalf of the Polimi group.



CA2RE+ in Delft, 28.03.2022, photo by Fabrizia Berlingieri

The CA2RE+ experience had the extraordinary effect of comparing precisely, with the same tools, research-driven research in different schools. The *plural soul* of the CA²RE consortium resulted, over the three years, as a representative sample of the numerous facets that characterize designdriven research: prototyping, self-reflexive practices, critical observation of contemporary phenomena, media innovation, etc. Different approaches for different schools. However, along the way, the main finding is that similarities and differences intersected the consortium geographies in unpredictable ways: sometimes traditions have been respected and enhanced; in other cases, models and references crossed, creating unexpected relationships far from their original place. This cross-fertilization proved how important it had been the effort to establish a common ground between us as a community. This common ground further

72

sustained a progressive engagement to develop and promote unconventional research paths where the methodological specificity of design-driven research (DDR) could be more clearly formulated. It relates to the consciousness that we, as architects, designers, and artists, are familiar with non-verbal media deriving from an endogenous aspect of our disciplines, that is, to be constantly trained in vision. It is an essential component of our research, the betrayal of which only weakens our contribution to scientific knowledge development.

Indeed, the core of the whole CA²RE+ project has been, as stated in the delivered application, the transfer of design studio behaviors and tutorials to design-driven doctoral research (DDDR) supervision, moving from a typical text-based dialogue to a visual-based experience with shared exchanges around and with drawings and artifacts as moments of mutual learning.

The CA²RE+ project increased the number of PhD presentations and panelists compared to previous CA2RE activities, from which it stemmed out, widening its community of research practitioners (by design/drawing) and improving its network. By applying the didactic approach of design studios to DDDR supervision, the CA²RE+ consortium has managed to substantially advance the doctoral training model from being a support to an experiential learning-through-evaluation experience. Therefore, further actions do not concern the application of replicable protocols. On the contrary, they must insist on the importance of contextualization in DDR training and supervising processes.

Despite the enormous differences among the individual subjects, positions, and tools, coming from diverse disciplinary practices, the supervising processes in this field should encourage candidates to conceptualize research by considering it as a bearer of meaning that can be transmitted, shared, and replicated. It should address evaluation at the balance between personal interest and the topic relevance within the design community, considering that research objectives ultimately remain the observation, critical reflection, and the transformation of reality.

The supervising process should promote innovation in the selection of the subject and mainly in the definition of a specific and contextual process to investigate it. It should encourage looking for a shareable sense of situated rigor that could better respond to a final principle rather than a modal strategy, thus promoting a research philosophy that is open to the evolution and integration of new theories. To do so, the most important thing for candidates, supervisors, and heads of doctoral programs interested in developing and promoting DDDRs, is to find or build a community of reference or a Community of Critical Practices. It is only by establishing an immersive discursive environment and a climate of trust that candidates and supervisors can identify their position within the scientific community. It should stress not only through a projective form of individuation but also by the intersection among different research practices, which could offer a counterpoint to a self-reflective form of positioning through a comparative perspective. The results from CA²RE+ are something we should take care of and nourish. Since it is from the strengthening of this specific Community of Practice, we can enforce the position and role of architectural design culture within the

73

schools of architecture and more widely within our contemporary design culture. CA^2RE -for could be the next step toward the trajectory initiated with CA^2RE and CA^2RE +.

The recommendation is to develop this crossing further, thus strengthening the relationship between professors and candidates from different countries and schools. Beyond expanding its network to even more international audiences, indeed, the next CA2RE should increase educational activities to value our community as a faculty. Intensive courses, workshops, and masterclasses could be the next common ground where professors and candidates from various programs participate, strengthening relationships and exchanging knowledge.

Enrico Miglietta

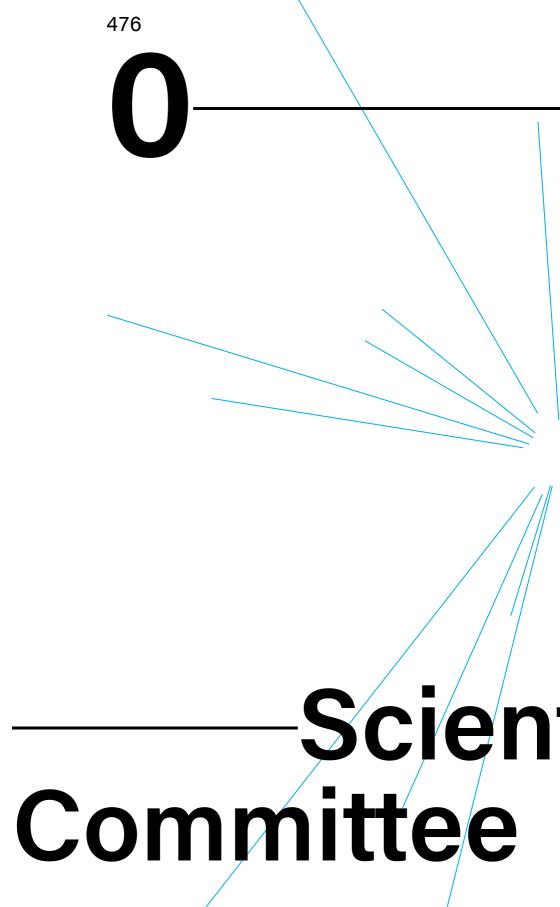
Politecnico di Milano - KU Leuven

This reflection on the recommendations for the CA²RE+ Consortium stems from genuine individual experience and seeks to draw some insights from it. I have been privileged to participate in the events by witnessing in some way the two sides of the operation, as a presenter starting with the event held in Gent in 2019 (OBSERVATION), and as part of the organizing committee for the Milano 2020 event (COMPARISON), presenting various aspects and moments of my investigation on a total of four occasions.

As a candidate of the Milanese Doctoral School, I can say with certainty that the impact of participating in a multitude of occasions has been critical, both in terms of enriching my doctoral research and my path as a young researcher. The first shift for personal exploration through design came when encountering the research, methods and disciplinary frameworks even just glimpsed during the session at the Faculty of Architecture of the Sint-Lucas School in Gent, then in the other presentations, and certainly in the more advanced ones, the quality of the research was often flanked by the contamination of methods and strategies, where subjective viewpoints were analyzed via rigorous, often experimental processes, rather than through rigid paradigms, both regarding the strictly architectural discipline and to artistic practices in general.

This invitation to an open, frank, non-judgmental dialogue has produced, at least for me, in the moment of encounter, the possibility of approaching ways of doing research that completely subverted and enriched my initial premises. It also allowed me to become acquainted with affine research developed in a different School, thus leading to an initial series of meetings, then to a research stay, and finally to a joint PhD programme between Politecnico di Milano and KU Leuven, which imbues my research with diversity on multiple layers that I now consider an indispensable prerogative for its conclusion.

As already mentioned, in the wake of the previous notes, I also believe that the possibilities offered by a program of continuous exchange of





478 **Roberto Cavallo** Faculty of Architecture and the Built Environment, TU Delft; EAAE, ARENA

Alper Semih Alkan Faculty of Architecture and the Built Environment, TU Delft

Daniel Rosbottom Faculty of Architecture and the Built Environment, TU Delft

Kees Kaan Faculty of Architecture and the Built Environment, TU Delft

Salomon Frausto Faculty of Architecture and the Built Environment, TU Delft

Angeliki Sioli Faculty of Architecture and the Built Environment, TU Delft

Mark Pimlott Faculty of Architecture and the Built Environment, TU Delft

Esther Gramsbergen Faculty of Architecture and the Built Environment, TU Delft 479 **Maurice Harteveld** Faculty of Architecture and the Built Environment, TU Delft

Heidi Sohn Faculty of Architecture and the Built Environment, TU Delft

Anders Kruse Aagaard Aarhus School of Architecture

Joaquim Almeida Departamento de Arquitectura, Universidade de Coimbra

Naime Esra Akin Aarhus School of Architecture, EAAE

Oya Atalay Franck Director of the ZHAW School of Architecture, Design and Civil Engineering; EAAE, ARENA

Matthias Ballestrem HafenCity University Hamburg; EAAE

Michela Bassanelli Department of Architecture and Urban Design, Politecnico di Milano

Fabrizia Berlingieri Department of Architecture and Urban Design, Politecnico di Milano 480 **Anđelka Bnin-Bninski** Faculty of Architecture, University of Belgrade; ARENA

Inge Bobbink Faculty of Architecture and the Built Environment, TU Delft

Manuel Bogalheiro Departamento de Arte dos Media, University Lusófona of Porto

Ignacio Borrego Institute of Architecture, TU Berlin

Boštjan Botas Kenda Academy of Fine Arts and Design, University of Ljubljana

Marco Bovati Politecnico di Milano

Laura Cipriani Faculty of Architecture and the Built Environment, TU Delft

Graça Correia Departamento de Arquitectura, Universidade Lusófona Porto

Johan De Walsche Faculty of Design Sciences, University of Antwerp; EAAE, ARENA

481 **João Paula Delgado** Department of Architecture and Civil

Engineering, University of Beira Interior **Débora Domingo Calabuig**

Universitat Politècnica de València; EAAE

Dan Dubowitz Manchester School of Architecture

Riet Eeckhout Faculty of Architecture, KU Leuven

Paolo Fusi HafenCity University Hamburg

Lidia Gasperoni Institute of Architecture, TU Berlin

Pedro Guilherme Departamento de Arquitectura, Universidade de Évora

Christoph Heinemann HafenCity University Hamburg

Urs Hirschberg Faculty of Architecture, Graz University of Technology, ARENA

Matevž Juvančič Faculty of Architecture, University of Ljubljana

Sergio Koch University Lusófona Porto 482 **Thierry Lagrange** Faculty of Architecture, KU Leuven

Fabio Lepratto Department of Architecture and Urban Design, Politecnico di Milano

Jacopo Leveratto Politecnico di Milano

Mona Mahall HafenCity University Hamburg

Sergio Martin Blas ETS de Arquitectura, Universidad Politécnica de Madrid

Michael McGarry Queen's University Belfast

Ida Nilstad Pettersen Faculty of Architecture and Design, NTNU Trondheim

Ralf Pasel Institute of Architecture, TU Berlin

Maria Rita Pais Universidade Lusófona Lisbon

Claus Peder Pedersen Aarhus School of Architecture; EAAE, ELIA

Gennaro Postiglione Department of Architecture and Urban Design, Politecnico di Milano 483 **Paul O Robinson** Faculty of Architecture, University of Ljubljana

Alessandro Rocca

Department of Architecture and Urban Design, Politecnico di Milano

Edite Rosa

Departamento de Arquitectura, Faculty of Architecture, University Lusófona of Porto

Mia Roth-Čerina

Faculty of Architecture, University of Zagreb; EAAE

Sofia Salema

Departamento de Arquitectura, Universidade de Évora

Markus Schwai

Department of Architecture and Planning, Faculty of Architecture and Design, NTNU Trondheim

Sally Stewart

Mackintosh School of Architecture, Glasgow School of Art, UK, EAAE

Eli Støa

Department of Architecture and Planning, Faculty of Architecture and Design, NTNU Trondheim 484 **Ana Telles** School of the Arts, University of Évora, Portugal; ELIA

Maria Topolčanská Akademie výtvarných umění v Praze, Czech Republic, ELIA

Manuela Triggianese

Department of Architecture, Faculty of Architecture and the Built Environment, TU Delft

Johan Van Den Berghe Faculty of Architecture, KU Leuven

Esther Venrooij LUCA School of Arts, Ghent

Liselotte Vroman Faculty of Architecture, KU Leuven

Boštjan Vuga AA School of Architecture, London

Jürgen Weidinger Institute of Landscape Architecture, TU Berlin

Gesine Weinmiller HafenCity University Hamburg

Katrina Wiberg Aarhus School of Architecture 485 **Tadeja Zupančič** Faculty of Architecture, University of Ljubljana