TEACHING-LEARNING-RESEARCH: DESIGN AND ENVIRONMENTS

• Paper / Proposal Title:
Design Thinking Diagram: A Tool for Decision-Making

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• Abstract (300 words):
Humans are fundamentally designers — humans create artifacts, shelters, communities, and landscapes. Design is a complicated process and involves conceiving, representing, and executing constructions across a wide range of scales. Various methods and approaches to design have been theorized over the last several decades resulting in a wide range of design process diagrams and strategies. The task outlined here was to develop a tool to help structure the ongoing decision-making that is part of any design process, to present a comprehensive range of topics that designers could consider as they evolve a scheme. To this end we are introducing the Diagram — provisionally termed the Design Studio Matrix until 2020 — as a working tool that frames a broad range of ecological, cultural, and material factors; it is designed to support the design process, and thus to play a key role as a teaching tool primarily within design studios. Specifically, the Diagram is presented as a decision-making tool for a wide range of design courses. The Diagram is organized as a circular “sunburst” structure and is based on the concept of “assemblage” as developed by Gilles Deleuze and Félix Guattari. Overlaid with information from many other sources it features a vertical axis (Territoriality and Flows) and a horizontal axis (Content and Expression); within each quadrant are three concept terms that further structure the Diagram. The resulting twelve terms are intended to be used primarily in design studio courses. The Diagram is intended to be non-hierarchical, flexible, and culturally neutral, allowing for customization and broad inter-connectivity between...
terms. It has been employed in several interdisciplinary studios at the University of Calgary. Preliminary results demonstrate that students find the Diagram useful as they research, structure, and develop their projects.

**Author(s) Biography (200 words each):**

**Graham Livesey** is a Professor in the School of Architecture, Planning and Landscape at the University of Calgary where he teaches design, architectural theory/history, and urban design. He holds a BArch degree and a MArch from McGill University, and a doctorate from the Technical University of Delft. Previously he was the Associate Dean (Academic – Architecture), Director of the Architecture Program, and a principal of Down + Livesey Architects. With Down + Livesey Architects he worked on a variety of projects including the Art Gallery of Calgary, the Alberta College of Art & Design, and Discovery House (a second stage women’s shelter). He has served with a wide range of organizations, including the Association of Collegiate Schools of Architecture, the Alberta Association of Architects, and the Council of Canadian University Schools of Architecture. He was the Interim Executive Editor of the Journal of Architectural Education during 2013. Recent publications include: Ecologies of the Early Garden City: Essays on Structure, Agency, and Greenspace (Champaign, Illinois: Common Ground, 2019); and Canadian Modern Architecture, 1967 to the Present (New York: Princeton Architectural Press, 2019) co-edited with Elsa Lam. In 2019 he was elected to the College of Fellows of the Royal Architectural Institute of Canada.

**Enrica Dall’Ara** is a researcher, educator and practitioner in Landscape Architecture, founder and director of the Italian firm P’ARC, based in Cesena (www.p-arc.it). Her contribution to landscape architecture practice has been recognized nationally and internationally with numerous awards and publications on magazines, books and design exhibitions. Among her recent projects: Urban Renewal of the Pavaglione Courtyard in Lugo (Ravenna, Italy), with stARTT Office, First Prize of a national design competition, awarded Best Completed Project, Category Urban/Landscape Projects, at the international S.ARCH Awards 2018, and recipient of a Honorable Mention at the Gubbio Awards 2018 which recognizes exemplary projects of regeneration of historic city centers and landscape contexts; Landscape Project for the ASA Landfill (Bologna, Italy), winner of a Special Prize at the Brand&Landscape Award 2016 (Milano, Italy); Ciòtutes, ephemeral gardens, within Think Town Terni, First Festival of Architecture in the Umbria Region (Terni, Italy, 2010), showed at the exhibition on Italian Design “Contemporaneità del Tutto” in Köln (Germany, 2012).

Dall’Ara is an Assistant Professor at the School of Architecture, Planning and Landscape, University of Calgary (Canada). She was an Adjunct Professor of Landscape Architecture and Gardens and Landscape History at the University of Bologna (Italy) from 2008 to 2016.
Fabian Neuhaus is an Associate Professor in Planning at the University of Calgary (UofC) with the School of Architecture, Planning and Landscape (SAPL). He has received his doctorate in urban planning from UCL, UK. His research interest is temporal aspects of the urban environment and co-create planning processes with a special focus on Habitus, Type and Ornament in the sense of Activity, Technology and Memory. Over the past decade, he held teaching and research positions at UCL in the UK and at FHNW in Switzerland. His research output includes journal articles, including in Urban Planning or Information, Communication and Society, and books such as Studies in Temporal Urbanism or Emergent Patio-Temporal Dimensions of the City. He has previously worked with architecture and urban design practices in the UK and Switzerland and on research projects at universities in Switzerland, Germany the UK and Canada. With a focus on physical form he has worked extensively on typology and its connection to accessibility, aging and participation. Currently, he heads a research project on design pedagogy. He leads the Richard Parker Initiative at SAPL, exploring stakeholder collaboration in the planning processes, providing thought leadership and a platform for civic discourse on NEXTCalgary.ca.

Sandra Abegglen is a Researcher at the University of Calgary (Canada) where she explores the learning and teaching in the Design Studio and supports the Teaching and Learning Online Network TALON (https://taloncloud.ca). Sandra has a MSc in Social Research and a MA in Learning and Teaching in Higher Education. She has over eight years’ experience as a Senior Lecturer in Education Studies. Her research interests are in peer mentoring, creative learning and teaching, visual narratives, identity and qualitative research methods. She has published widely on emancipatory learning and teaching practice and playful pedagogy. Her latest (co-edited) book published by Routledge is entitled ‘Understanding Education and Economics’. Find her personal website at https://sandra-abegglen.com/.

Mary-Ellen Tyler has forty years of Canadian and International experience in a variety of cross-cultural, professional, and graduate design education roles in both private and government sectors and has been a tenured professor at three Canadian Universities. Mary-Ellen has worked in community development and local services delivery with rural and remote First Nations communities and Tribal Councils in British Columbia and Yukon. She has been a member of international design and education project teams in Thailand, Ecuador, China, and Mexico. She is a former Dean of the Faculty of Environmental Design and currently serves as interim Associate Dean (Planning and Landscape Architecture) in the School of Architecture, Planning, and Landscape at the University of Calgary.