CA²RE ZAGREB
ZAGREB

CA²RE ZAGREB: INTERSECTIONS
November 16-18 2023

VENUE B
jabukovac 10

VENUE A
trg bana
jelačića 3

Google

Venue A: Architects Association, Trg bana Josipa Jelačića 3
Venue B: Academy of Fine Arts, Jabukovac 10
Link for online sessions: https://us02web.zoom.us/j/8054483508

CA2RE Zagreb: Program

Thursday, 16.11.2023.		
10.00-13.30 Venue A	Doctoral day of the Faculty of Architecture: poster session and panel	
15.00-17.00 Venue A	Doctoral day of the Faculty of Architecture: presentation of doctoral programs at FA Ljubljana (Zupančić) and PoliMi (Rocca)	
18.00-19.00 Venue A	CA2RE opening and keynote: **Goran Sergej Pristaš**, BADco. Academy of Dramatic Arts, Zagreb: Moving by Translation	

Friday, 17.11.2023.		
Morning sessions 9.00-13.15 Venue A		
	Room A	
09.00-10.00	Sayyedeh Kimia Mojtabavi: Crossing the Water (Exploring the design possibilities on the water for contemporary landscape architecture)	Debora Domingo-Calabuig, chair Roberto Cavallo Ana Mrđa
10.00-11.00	Nathan De Feyter and Johan De Walsche: Drawing the house where I live - Co-created architectural drawings as a tool for marginalised communities to navigate neighbourhood transitions.	Jorg Schroder, chair Debora Domingo Calabuig Anđelka Bnin-Bninski
11.00-11.15	coffee	
11.15-12.15	Zohreh Zarrinhaghighi: Designing Imagination: The Poetic Possibilities of Uncertainty	Sally Stewart, chair Markus Schwai Claus Peder Pedersen
12.15-13.15	Mar Muñoz Aparici: Exploring Co-Creation Tools for Public Space Activation: Integrating Situated Collective Intelligence in Architectural Design Approaches	Yves Schoonjans, chair Boštjan Vuga Mucio Juca
	Room B	

09.00-10.00	Julio Diarte Almada: Waste pickers as fabricators: An exploratory study to upcycle waste cardboard as a building resource in Asuncion, Paraguay	Tadeja Zupančić, chair Boštjan Vuga Sally Stewart
10.00-11.00	Marina Bauer: Bodily Perception in the Experience of Sculpture	Claus Peder Pedersen, chair Aileen Iverson Pedro Guilherme
11.00-11.15	coffee	
11.15-12.15	Danica Sretenović: Resituated cartography: critique of temporary use in city planning	Roberto Cavallo, chair Boštjan Vuga Jorg Schroeder
12.15-13.15	Taufan ter Weel: Abstract Machine	Aileen Iverson, chair Anđelka Bnin-Bninski Tadeja Zupančić
	Online sessions	
9.00-10.00	Ritsart Gobyn: From Deception to Insight: Possibilities and Limits of the Trompe L'oeil as a Critical Visual Strategy	Matevž Juvančić, chair Michael McGarry Matthias Ballestrem
10.00-11.00	Pedram Pourghasem Omandani: Investigating Soundscape Preferences, Evaluation, and their Relationship with Urban Design, Architecture, and Sound Masking	Matthias Ballestrem, chair Michael McGarry Markus Schwai
	break	
11.15-12.15	Francisco Branco de Brito and Pedro Guilherme: The Characterization of the Physical Factors in the Public Outer Space of the Malagueira Neighborhood: Contributions to Understanding the Place.	Matevž Juvančić, chair Debora Domingo Calabuig Ana Mrđa
12.15-13.15	Carlo Vannini: Integrated approach for a new design culture between architecture and industry. A selection of case studies on the first public housing plan stock in Rome (1964)	Gaizka Altuna Charterina, chair Matevž Juvančić Tadeja Zupančić
13.15-14.00	lunch	
Afternoon sessions **14.00-16.00** **Venue A**		
	Room A	
14.00-15.00	Derya Uzal: Building a Lab: Constructing Realities	Boštjan Vuga, chair Yves Schoonjans Jorg Schroeder
15.00-16.00	Akshatha Ravi Kumar: Mining-Induced Displacement and Resettlement: A Retrospective of the City of Most	Pedro Guilherme, chair Markus Schwai Mucio Juca
	Room B	
14.00-15.00	Nina Bačun: Relational thinking: Cinematic architecture as representational and performative, physical and mediated space	Anđelka Bnin-Bninski, chair Pedro Guilherme Markus Schwai

15.00-16.00	Miljana Nikovic: Belgrade on Screens: Visions of Continuous Discontinuities	Johan De Walsche, chair Sally Stewart Claus Peder Pedersen
	Online sessions	
14.00-15.00	Charlott Greub: Formless Intersection – The concept of silence in music and architecture exemplified by John Cage's 4'33" and the Resor House project by Mies van der Rohe	Michael McGarry, chair Matthias Ballestrem Gaizka Altuna Charterina
15.00-16.00	Aditi Vashisht and Pallavi Jain: Of Identity and Innovation: Developing a pedagogy for new age crafts	Edite Rosa, chair Michael McGarry Sofia Salema
16.30-17.30 Venue A, Room A	Reflections on recent doctoral experiences: **Jana Čulek** and **Aileen Iverson-Radtke**	
19.00-20.30 Venue B	**Intersecting the Artistic Research andHealth Humanities in the Emerging Hybrid Spaces – the ASH project:** A talk, exhibition and drinks, Academy of Fine Arts (Ivan Skvrce, Sunčica Ostoić, Olga Majcen Linn, Nikola Bojić)	

Saturday, 18.11.2023.

**Morning sessions
10.00-13.00
Venue A**

	Room A	
9.00-10.00	Matthew Crabbe: Postcards from Practice - online	Debora Domingo Calabuig, chair Joaqim Almeida Sally Stewart
10.00-11.00	Filip Dubrovski: Design research methodology applied in MSc urban planning city design research and PhD neighborhood social sustainability research	Roberto Cavallo, chair Claus Peder Pedersen Yves Schoonjans
11.00-11.15	coffee	
11.15-12.15	Urška Kristina Škerl: Uberarchitecture	Sofia Salema, chair Johan De Walsche Sally Stewart
12.15-13.15	Karlo Seitz: Atmospheric research of historical architecture - drawing feelings in space and time	Johan De Walsche, chair Anđelka Bnin-Bninski Sally Stewart
	Room B	

9.00-10.00	Merve Ciltas Catalbas and Ahmet Gün: A Study on Increasing Practical Evacuation Knowledge and Awareness through Gamification	Tadeja Zupančić, chair Sofia Salema Boštjan Kenda
10.00-11.00	Krešimir Borošak and Matija Pogorilić: Post Natural Hut	Johan De Walsche, chair Jorg Schroder Boštjan Kenda
11.00-11.15	coffee	
11.15-12.15	Diana Salahieh: Cities as Walkscapes: Tracing (Long-distance) Urban Walking Paths	Roberto Cavallo, chair Pedro Guilherme Ana Mrđa
12.15-13.15	Ana Skobe: Contemporary (Architectural) Photography And Modern Architecture	Jorg Schroder, chair Yves Schoonjans Sofia Salema
	Online sessions	
9.00-10.00	Rossella Gugliotta: Operative Diagram. Transforming Analysis into Design	Edite Rosa, chair Markus Schwai Aileen Iverson
10.00-11.00	Kapil Paharia: Body and Language design performing in puppet	Joaqim Almeida, chair Edite Rosa Anđelka Bnin Bninski
11.00-11.15	break	
11.15-12.15	Sónia Magalhães and Edite Rosa: The Roças (farmsteads) of São Tomé and Príncipe: Strategies for rehabilitation and architectural safeguarding.	Thierry Lagrange, chair Tadeja Zupančić Gaizka Altuna Charterina
12.15-13.15	Barbara Leite and Edite Rosa: Strategies for flexibility in housing design through prefabrication	Gaizka Altuna Charterina, chair Thierry Lagrange Claus Peder Pedersen
13.15-14.00	lunch	
14.00-15.00	Conference closing keynote: **Ivica Mitrović,** Arts Academy Split: Speculative Design Driven Research	

CA2RE TALKS: SPEAKERS, TOPICS AND BIOS

THURSDAY, 16.11. at 18.00, Croatian Architect's Association

OPENING KEYNOTE

Goran Sergej Pristaš: Moving by Translation

The talk will focus the specific ways of organising bodies, movements, gestures, and actions in space (in the work of the performance collective BADco.), from which one may symptomatically read the specificities and phenomenalities of social choreography. Whether it concerns collective choreographies (parades, mass games, social and popular dances) or political/militant actions (demonstrations, blockades, occupations, etc.), or artworks that in a certain way and in certain relations configure bodies in space, govern the movement of bodies, or generate an impression of moving (by moving the camera in film), one may reconstruct this choreographic "object" and insert it into new circumstances, where the suppressed layers of the political might more obviously come to the fore. The procedure therefore rests on speculating about the "unconscious" structures that organise bodies in space, as well as the technologies and forms of their representation in different epochs.

Goran Sergej Pristaš is a dramaturge, founder member of performing arts collective BADco. and Professor of Dramaturgy at the Academy of Dramatic Arts, University of Zagreb. With his projects and collaborations Pristaš participated at Venice Biennale 2011 and 2016, Documenta 12 and numerous festivals, exhibitions and conferences.

FRIDAY, 17.11. at 16:30, Croatian Architect's Association

REFLECTIONS ON RECENT DOCTORAL EXPERIENCES: JANA ČULEK AND AILEEN IVERSON

"Utopia as a Critical Method", PhD by Jana Čulek, TU Delft

Utopia as a Critical Method is a comparative analysis performed through drawing and text, in which six architectural and literary utopias were examined together with the three historical contexts in which they were created. Looking at utopian works created roughly within the twentieth century, the research examined the different worlds which the utopian authors imagined as a critical response to the issues and topics arising within their own historical contexts. The study addressed not only on the works as a whole, but also focused on their parts – namely the numerous social and spatial forms the authors have imagined and depicted. In this way, the research was able to identify both the common and the discipline-specific forms which the utopian authors used, the various tools and techniques through which the critical aspect of their utopian works was developed, as well as some of the most common topics which the utopian works addressed or revolved around.

Jana Čulek is an architect, urbanist and researcher. She is the founder of Studio Fabula, an architecture and urban design office founded in Delft (NL) and recently also in Zagreb. After finishing the Faculty of Architecture in Zagreb in 2013, she continued her education at the post-master programme of the Berlage Center for Advanced Studies in Architecture and Urban Design in Delft. In 2018 she began her doctoral research at the Faculty of Architecture and the Built Environment at the TU Delft, with the Methods of Analysis and Imagination chair, where she also contributed to the master programme as a tutor for various seminars and design studios.

„rabbithole to hybrid: Finding Digital Spatiomateriality through Hybrid Modeling", PhD by Aileen Iverson at TU Berlin

The research develops a hybrid analogue-digital modeling technique whereby physical models embedded with microsensors act as interface to digital modeling, replacing mouse and keyboard. The goal is to gain

sensory access to digital models while they are connected to properties of their spatial context. The ability of spatial and material properties to connect produces inherent reactions in the media, this is the concept of spatiomateriality identified in the research. These reactions during design process allow feedback from the design object and give it agency to affect its own making. The research sees itself as a solution to the current neutrality of digital media.

Dr. Aileen Iverson-Radtke is an architect based in Berlin. She is the founder of air-architects.net and is interested in architecture practiced as analytic making. Aileen has worked on a number of published architectural projects such as the Vitra Campus works by Hadid, Gehry, Ando, and Siza; the National Museum of Jewish American History in Philadelphia, and the BER, Berlin Brandenburg International Airport.

FRIDAY, 17.11. at 19:00, Academy of Fine Arts ALU, Jabukovac 10

EXHIBITION AND TALK

Intersecting the Artistic Research andHealth Humanities in the Emerging Hybrid Spaces – the ASH project: Ivan Skvrce, Sunčica Ostoić, Olga Majcen Linn, Nikola Bojić

Art, Science & Health MA aims to propose a novel dimension within the field of health humanities directed towards exploring, re-imagining and defining the contribution of contemporary art in social wellness and well-being. In the next 15 months and with the support of EU through Erasmus Mundus Design Measures, Academy of Fine Arts (University of Zagreb, Croatia), Department of Audio and Visual Arts (Ionian University, Greece), Faculty of Media and Communication (Singidunum University, Serbia) and NGO KONTEJNER (Croatia) will work together to create a completely new two-year international MA programme aiming to intensify the role of art research and practice in health humanities and critically re-think the social, environmental, philosophical, economical and biological concept of health in its broadest sense. Nikola Bojić, Sunčica Ostojić and Ivan Skvrce will talk about the project's multidimensional and interdisciplinary approaches. The project is presented through a site-specific installation in the lobby of the Arts Academy.

Introductory Note: Ivan Skvrce (Academy of Fine Arts Zagreb)

Curatorial Practices in Bioart and Design of the New Joint Master Program in Art, Science, and Health (ASH): Sunčica Ostoić, Olga Majcen Linn (KONTEJNER | Bureau of Contemporary Art Praxis)

The New Anatomical Theater: Designing the Real-Time Streaming Space as a Shared Diagnostic Device, Nikola Bojić (Academy of Fine Arts Zagreb)

Exhibition, Talk and Reception with Drinks

SATURDAY, 18.11. at 14.00, Croatian Architects' Association

CLOSING KEYNOTE

Ivica Mitrović: Speculative Design-driven Research

From the modernist perspective, design has been primarily regarded as a problem-solving practice, primarily addressing the clients' needs. However, design has always been a discursive practice. Today design is once again positioned at the centre of the interrelations of various disciplines, no longer through a complete (modernistic) synthesis, but, above all, through their interaction. It is no surprise, therefore, that an increasing number of designers is taking upon some new approaches to design. These "new designers" are acting on the edges of traditionally defined disciplines, removing the borders between them.

Ivica Mitrović is Assistant Professor at the Department of Visual Communications Design at the Arts Academy (University of Split), where he teaches Interaction Design and Interactive Media Design. Since 2001 he has been working on the promotion of new design disciplines such as Interaction Design and Critical and Speculative Design (via platform Interakcije). Together with Oleg Šuran, he was selected as curator for the presentation of the Republic of Croatia at the XXI International Exhibition of the Triennale di Milano and is part of this year's Croatian Pavilion at the Venice Biennale, curating its discursive format. He is also a coordinator of the SpeculativeEdu project.

ABSTRACTS

presenting authors:

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Francisco Branco de Brito, Pedro Guilherme

Merve Ciltas Catalbas, Ahmet Gün

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Nathan De Feyter, Johan De Walsche

Julio Diarte Almada

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Aditi Vashisht and Pallavi Jain

Zohreh Zarrinhaghighi

Nina Bačun

Nina Bačun is a Designer, Educator, and Researcher in Croatia, Zagreb
A multifaceted designer, researcher, and educator exploring the domains of speculative/conceptual design, exhibition/set design, and film art/visual communications. She uses holistic and trans-disciplinary approaches as seen in her work within the Oaza* collective from Zagreb, Croatia. She obtained her MA in Design at the Faculty of Architecture in Zagreb in 2007, and her second MA in Experience Design at the Konstfack in Stockholm in 2011. She is currently exploring the intersections of design, architecture, the built environment, and the moving images within the doctoral program of Architecture and Urban Planning in Zagreb.

RELATIONAL THINKING: CINEMATIC ARCHITECTURE AS REPRESENTATIONAL AND PERFORMATIVE, PHYSICAL AND MEDIATED SPACE

KEYWORDS
cinematic architectural space
cinematic space
mediated space
performative space
representational space
intangible heritage

The research relies on the hypothesis that cinematic architectural space can be read as representational and performative, physical and mediated space (figure 1). Cinematic space is not neutral or passive, being more than a form of expression — a medium in-between constructed and experienced worlds — it is laden with hybridities of the everyday and extraordinary. [1] Cinematic architectural space, imagined, real or hybrid, impacts on narration in film, as well on the memory of the built space (defined by action that happens in it). Cinematic space is mainly assembled through montage (formal or physical), thus it tells stories with spatial manipulation, oftentimes contrary to the usual understanding of architecture, or experiencing space. If so, one could assume, montage can enrich or even enable its performative value. The representational value of cinematic architectural space is barely questionable. Seeing cinematic space as mediated space is more in line with contemporary life, and mass media technology, since our lives are rapidly unfolding within digital realms. Consequently, 'deep'[2] reading of cinematic architectural space might be something meaningful to explore further as a possible new method of exploring space where cinematic space becomes a tool for critical research on architecture, permitting new readings of architectural space, possibly contributing to a new method of spatial research.

One could more easily understand cinematic architectural space if comparing it with the stage scenography. Using a vocabulary and classification borrowed from an architect Javier Fernández Contreras who questions the role of interiors (figure 2) in the construction of contemporaneity, one could assume that cinematic space is also "simultaneously representational (directly alluding to urban scenarios), manipulative (deforming them both visually and spatially), and autonomous (becoming both the content and the objective of their own representation)"[3]. In addition, for Jacques Lévy, a professor of geography and urbanism, expands the definition of cinematic space adding on 'space as environment' and 'spatiality as action[4]. Not only that representational boundaries are crossed, but also disciplinary boundaries between 'real' architecture and 'imagined' one (scenic), which opens up space for relational way of thinking on cinematic space .

If the Renaissance marks a moment in the history of spatial design, when different systems of representation begin to influence each other[5], nowadays when contact with architecture is no longer only the result of direct experience but often a 'mediated experience', "architecture could not be understood merely as a collection of physical events, but as a collection of 'mediated realities'"[6]. In his work *The Aesthetics of Disappearance*[7], cultural theorist Paul Virilio has produced the most radical contemporary thought claiming that architecture is doomed to disappear, when compared with new media[8]. Virilio writes about the process of translating physical three-dimensional space into two-dimensional space of a screen or projection,

introducing the term "lost dimension", which he calls "zero degree of architecture." The question is if architecture feeds the latest communication systems, or is it threatened by these technologies, as Colomina states. If our understanding of architecture is forever changing, it is now urgent to (re)evaluate the possible perception of cinematic architecture as an intangible heritage (figure 3).

An interesting interpretation of an architectural history suggested by Robin Evans: "architecture was the sole discipline that did not question its representation codes in the early 20th century avant-garde."[9] Nonetheless, Le Corbusier can be considered - the architect pioneer - one of the first modern architects to notice that architecture had shifted from being just a physical construct to becoming inseparable from its construction as media, as Beatriz Colomina[10] indicates. The reason being Le Corbusier was influenced by the film and montage of his friend Soviet film director Sergei M. Eisenstein. Le Corbusier did not use media to neutrally represent reality, but to fabricate new forms and formats of architectural reality. Despite his considerable built oeuvre, as Contreras writes "he was an architect of images as much as tectonics; probably the first who succeeded in uniting these two categories, using reality to produce images and vice versa,"[11] which could be considered as anticipation of a relational way of thinking common to contemporary thinking in the time of mass media.

In contemporary societies the articulation of various scenarios makes spaces representational and performative at the same time, which is and always was the main characteristic of cinematic spaces. Today, more than ever before, cinematic spaces with their liminal nature came closer to the built spaces and their 'fluid' nature (programs). Contreras differentiates: 1) The direct experience of space as a fragment of a larger, complex whole, 2) The articulation between physical and mediated spaces, 3) The internet and online platforms where different media and systems of representation and their endless crossovers have replaced in many cases the physical experience of space. Which proves that contemporary thinking is relational, especially when reflecting on space and spatial design.

The question is how can cinematic architectural space — in-between reality and fiction - representational and performative, physical and mediated — affect existing architectural discourse and practice in space design in order to improve it?

1   According to professor of Fine Arts Sofia Gonçalves: 'Cinema is also a means in which we see, precast and shape […],
    the reality-fiction interface,' as for cinema, 'there is neither a definitive reality nor an absolute fiction.' Sofia Gonçalves,
    "Vacant lots and insurmountable territories: Communication design between reality and fiction, between expansion and
    degrowth," in Image in the Post-Millennium: Mediation, process and critical tension, eds. Maria João Baltazar and
    Tome Saldanha Quadros (Portugal: Esad/idea and Onomatopee, 2021), 38-39.

2   Deep reading of cinematic space could be defined as an active critical reading accoplished according to the specific parameters
    and criteria especially related towards spatial design.

3   Javier Fernández Contreras, Manifesto of Interiors: Thinking in the Expanded Media (Genève: HEAD — Publishing, 2021), 9.

4   Jacques Lévy, "On space in cinema," Annales de géographie, Volume 694, Issue 6 (2013), 689-711. https://www.cairn-int.info/
    article-E_AG_694_0689--on-space-in-cinema.htm.

5   Contreras, Manifesto of Interiors: Thinking in the Expanded Media, 7.

6   The mediated reality framework can thus best be understood as a multi dimensional, interrelated taxonomy.https://
    mediatedreality.info/ p. 18

7   Virilo announces dematerialization of architecture: "The question today therefore is no longer to know if cinema can do without
    a place but if places can do without cinema […] The aesthetic of construction is dissimulated in the special effects of the
    communication machines, engines of transfer and transmission; the arts continue to disappear in the intense illumination of
    projection and diffusion. After the age of architecture-sculpture we are now in the time of cinematographic factiousness, literally
    as well as figuratively, from now on architecture is only a movie." In: Paul Virilio, The Aesthetics of Disappearance (New York:
    Semiotexte, 1991).

8   New media is seen as film and video.

9   Robin Evans, The Projective Cast: Architecture and its Three Geometries (Cambridge:
    The MIT Press, 1995), 119.

10 Beatriz Colomina, Privacy and Publicity (MIT Press, 1994), 104.

11 Contreras, Manifesto of Interiors: Thinking in the Expanded Media, 7.

Figure 1 Screenshots from the essay film Bonding Humanity (Perhaps Manifesto), 2022.

INTERIOR SPACE

Perspective drawing	Painting	Theatre	Conversation	Exhibition
Orthographic drawing	Photography	Cinema	Radio	Installation
Diagram	Illustration	TV	Music	Performance
Model/Mock-up	Collage	Cartoon	Literature	
Software 2/3D - BIM	Comic	Videogame	Magazine	
Digital Reality			Publicity	
		(n) Online		Direct Experience
		...		

PERCEPTION – THINKING

9

Figure 2 Javier Fernández Contreras's diagram from the book Javier Fernández Contreras, *Manifesto of Interiors: Thinking in the Expanded Media* (Genève: HEAD — Publishing, 2021), 9.
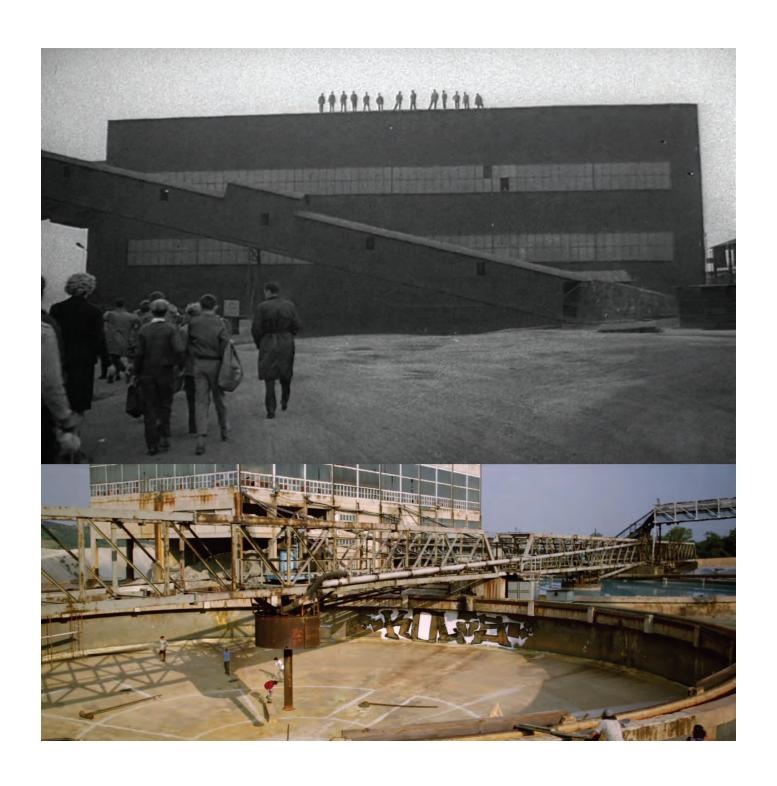
Figure 3 Top image: Makavejev, Dušan (1965) Man is Not a Bird, original title: Čovek nije tica (film). Used with the permission of the owner of the rights Avala Film Way, Belgrade.
Bottom image: Lezaić, Nikola (2010), Tilva Rosh, original title: Tilva Roš (film).
Comparative comparison of cinematic spaces, in a period of half-century difference, from the year 1965 and 2010, of industrial city Bor in Serbia with its 'ghosted' landscapes of contemporary globalisation.

Marina Bauer

She has been present on the art scene since the mid-1990s, and has received several awards for her work. From 2002 to 2016 she taught sculpture at the Academy of Fine Arts, University of Zagreb, Department of Sculpture and Art Education. Since 2016, at the same Academy, she has been teaching the course Introduction to the Psychology of Art as an adjunct assistant professor, and is preparing a doctoral thesis "Bodily perception in the Experience of Sculpture".

BODILY PERCEPTION IN THE EXPERIENCE OF SCULPTURE

This practice-based doctoral research aims to investigate bodily perception as an important and vital segment of visual art which has so far been insufficiently acknowledged in the context of creating, experiencing and exhibiting art. The topic stemmed from an analysis of the author's previous artistic work, in which an important segment of experience was recognized in the active role of visitors. As sculpture is usually thought to be experienced primarily visually, this segment has raised many questions about the possibilities and significance of haptic and kinesthetic perception, body memory, bodily empathy and physical interaction, as well as traced some intersections among different disciplines.
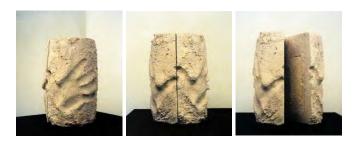
Figure 1: "Take it in Your Hands", 1994

The research was conducted on several levels: monitoring and studying one's own creative process during practical work, researching authors whose works require physical interaction with the audience, analysing ways and levels of bodily perception while experiencing sculpture, researching visitors' experiences using the focus group method, and studying two theories from the field of psychology of education which include bodily perception in considerations about the ways in which we gain, process and express knowledge.

The research into the work of artists who focus on bodily perception has shown that this approach offers a rich source of inspiration and possibilities, thus the thesis presents artworks that entail active physical participation on the part of the viewer in order to be fully experienced. This includes artworks that require completion through participation and imagination of visitors (Robert Morris, Franz Erhard Walther), artworks that use materials and objects as catalysts for interaction between visitors (Lygia Clark), artworks that instruct visitors to establish active relationships with exhibited items and objects (Erwin Wurm, Vlasta Žanić), artworks based on constructions and installations (Antony Gormley, Carsten Höller, Ernesto Neto, Hélio Oiticica, Jesús Rafael Soto), and artworks that stimulate the viewers with their

visual properties (Anish Kapoor) or offer them an enhanced perceptual experience and a total immersion into the ambience of the exhibition (Olafur Eliasson).

Figure 2: Works by A. Gormley / R. Morris / F. E. Walther / F. West / E. Neto / E. Wurm / L. Clark

Physical involvement allows visitors to connect with a work more intensely and gain a more profound experience, which is confirmed by the results of two qualitative studies conducted using the focus group method, with visitors of the author's interactive exhibitions "Introverts" and "Encounter with Ourselves". The results show that physical interaction enhances the interest of visitors, broadens and changes the experience, gives a sense of participation in the creation of the work, and enables a better understanding of the work.

Figure 3: "Introverts", interactive installation, 2013

These findings are supported by Howard Gardner's theory of multiple intelligences and Neil Fleming's theory of learning styles (VARK model). Both theories come from the field of psychology of education and both include bodily perception in considerations about the ways in which we gain, process and express knowledge. They show how our bodily aptitudes are involved in creating and experiencing the works of art, and how kinesthetic modality (one of the four VARK modalities, associated with physics and reality, focusing on practical research and our own experience) is important in the creative process and communication with the audience.

In an analysis of ways in which bodily perception is present in experiencing the work of art, this research has demonstrated that bodily perception plays an important role both in

artworks that allow direct physical contact, and in artworks that we experience only by looking. Beside haptic touch and physical interactivity, the author has shown that many artworks and traditional expressive means rely on bodily perception through memorized bodily experience (body memory) and awareness of one's own body (proprioception). This includes tactility, expressiveness of materials, the size of the work, the placement of the work in space, and the representation of position and movement (stability and instability) in figurative and abstract forms. Gardner (in his theory of multiple intelligences) mentions the internal mimics as an important segment of physical intelligence in experiencing the works of art. Art historian David Freedberg and neuroscientist Vittorio Gallese describe it as bodily empathy, an internal bodily simulation that we experience thanks to a system of mirror neurons and related empathic feelings. We feel bodily empathy when we look at real or depicted movements and actions, but also when we look at traces of actions shaping the surface of sculptures and supporting the visual characteristics of the artworks, indirectly including bodily perception.

In the practical part of the research, the author creates a process typical of kinesthetic modality, conducting a "conversation" with the material, relying on bodily experience and inner bodily sensation, as well as on the results of the research based on the focus group method. The resulting work consists of six plasterboard boxes of different sizes and proportions which visitors can enter and experience in relation to their own body. It promotes interaction and offers a layered physical experience through proprioception, haptic perception and bodily empathy. It was developed through several phases and the experience also includes specific movements that depend on the differently shaped entrances, as well as on the design of the interior.

Figure 4: "Encounter with Ourselves", boxes of different size and proportion provoking specific experience and body movements

In the final phase, both the internal and external surfaces were coated with variety of materials and processed in different manners, attracting tactile exploration and evoking bodily empathy.

Figure 5: "An/other skin", final phase materials and surfaces

Keywords: sculpture, bodily perception, physical interaction, kinesthetic modality

THE IMPORTANCE AND ROLE OF DESIGN DRIVEN RESEARCH APPROACH

This practice-based research is founded on investigating my personal creative process leading to understanding it in a new light through the theory of learning styles - Neil Fleming's VARK model, and Howard Gardner's theory of multiple intelligences. VARK model describes experience-based approach to knowledge as kinesthetic learning style, along with describing visual, aural, and read/write learning styles. We function in all of the modalities, but we also

have preferences. Kinesthetic preference represents thinking (learning) through doing, and according to Fleming it is the most common preference. Gardner's theory, on the other hand, recognises bodily-kinesthetic intelligence, and that put together, opened deeper understanding of my sculptural practice and confirmed the relevance and importance of creative work and research by thinking through making.

The understanding of kinesthetic modality gave me also new perspective on underlying closeness and overlapping of different disciplines such as sculpture, architecture, dance, performance art, product and fashion design, interior design etc., and I also noticed that authors whose works include bodily interaction in experiencing them, are prone to create in many of these disciplines. Understanding kinesthetic modality made it obvious why Franz West is exhibiting chairs, Ernesto Neto sculptural waistcoats, and many other visual artists/sculptors tend to get involved in performative and dance projects.

Krešimir Borošak, **Matija Pogorilić**

Krešimir Borošak and Matija Pogorilić are architects from Croatia who completed their bachelor and master thesis at the Faculty of Architecture, University of Zagreb in 2023. They worked as student - teaching assistants at the "KM3" studio workshop led by professor Idis Turato, which is a part of a master study program focused on Post Anthropocene architecture as a discipline dedicated to the Planet as a whole, one which supported by diagrammatical thinking mediates and manages protocols but also strategizes and situates hyper-complexity.

Post Natural Hut

The installation called "Post Natural Hut" evokes the problem of abandoned architecture as a consequence of the development of technology. One of the main questions that this artefact tries to assess is what is "nature" in the Post Anthropocene world and what should be sheltered as a precious indicator of our evolution.

As the technology radically evolves and thus imminently changes the way we use it, a lot of processes and interactions quickly become obsolete. Through an endlessly cyclical set of seasons, time slowly erodes, bleaches and breaks "old" technology, which becomes substituted with better and more efficient systems.

The simplest, most common building materials are used to "conquer" a part of an outdated industrial building, as if it was some unexplored part of nature. After all, everything that is out of use is slowly reverting back to nature, not becoming much more than a rock, passively standing the test of time. Associative form of the installation provokes the contrast between homely and industrial, announcing the domestication of a space that is out of use.

This primitive structure is essentially a canopy that serves as an interior pavillon where visitors can observe and write their thoughts and visions concerning the questions posed by the state of the society and technology today. The "book" of ideas will be archives into a time capsule, to be read in 100 years while observing the similarities and cyclical nature of epochs before and those in the future.

The abandoned architecture becomes an integral part of nature. 'The primitive hut' as a symbol of the begging of architecture is now made of parts of new nature, nature made by humans.

A brief description of the hut:

It is universal to build a shelter using the parts found in nature one inhabits.
The symbolical Primitive Hut evokes the idea of the Post Natural Hut for a time when nature and human heritage is becoming indistinctive.
Evolutionary, we have always instinctively protected what was rare from imminent decay that outside conditions bring.
What was once naturally found fire is now a testament to our knowledge, time and way of thinking.

*spatial installation development
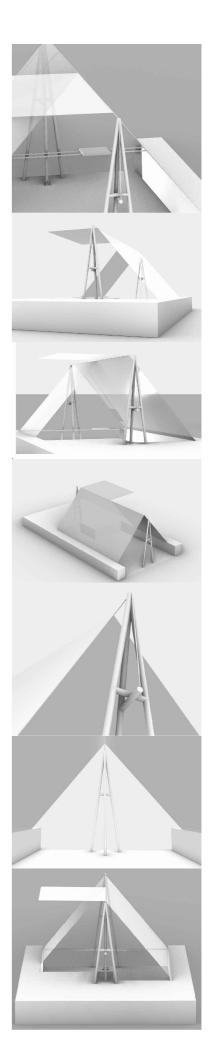
<u>Francisco Branco de Brito</u>, <u>Pedro Guilherme</u>

Franciscco Branco de Brito is a doctoral candidate at the University of Evora, where he earned his master's degree in 2020. He is president of União das Freguesias de Évora (São Mamede, Sé, São Pedro e Santo Antão), Portugal. He has been involved in the following research projects: RESISTANCE: Rebellion and resistance in the Iberian Empires, 16th-19th centuries, Malagueira: Património de Todos, and Os Moinhos do Rio Degebe: contributos para a salvaguarda da sua memória.

Pedro Miguel Hernandez Salvador Guilherme is an Architect and a Researcher. Graduated in architecture at the Faculty of Architecture (Lisbon University, 1991). Master's degree in urban engineering (Coimbra University, 1996). PhD degree in Architectural Theory (Faculty of Architecture, Lisbon University, 2016). Is Assistant Professor (2021/09-) of Architectural Theory at the Department of Architecture of the School of Arts and tought Architectural Drawing (2017 to 2021). Is Assistant Director and teacher at the PhD in Architecture (CHAIA/IIFA).

The Characterization of the Physical Factors in the Public Outer Space of the Malagueira Neighborhood: Contributions to Understanding the Place.

The Malagueira Neighborhood has been under development since 1977, designed by architect Álvaro Siza. It emerged as a response to the post-dictatorship housing needs and the consequent migration of people from rural areas to the city of Évora. The urgency demanded the construction of a large number of houses, gradually leading to the creation of a new neighborhood consisting of 1200 housing units.

While there was a shortage of housing, the priority was to complete the houses in the new neighborhood. However, urban development always requires the consideration of public space. Álvaro Siza, drawing inspiration from the Historic Center of Évora and North African architecture, envisioned the streets in a minimalist way and reinterpreted the existing natural landscape, creating a green space for public enjoyment with the assistance of landscape architect João Gomes da Silva.

The topography of Évora highlights the "old city," as Álvaro Siza referred to the Historic Center when drafting the neighborhood's descriptive memory. This led the architect to consider the relationship between the new construction area and the existing city as a structuring axis. The initial plan for the Malagueira Neighborhood starts at the Alconchel Gate, the closest intramural access to the neighborhood. This intention demonstrates the fluidity that the architect envisioned for public space, as a continuous act that is sown within an already defined and constructed area and unfolds into the structuring of new streets. Recognizing the structuring physical aspects of the place where the neighborhood was implanted during the design process made the design a unifying element of physical moments that enhance social relationships.

Figure 1 - orthophoto map with Malagueira (in color) and surrounding space (in black and white). On right is Historical Center of Évora

In this proposed article, we aim to showcase the physically organized typological factors, namely: the pre-intervention existing topography, highlighting the differences from the topography of the "old

city"; the identification of waterways in comparison to the current layout and the impact of the landscaping project; existing pedestrian and vehicular pathways in 1977 and the existing network today; the impermeable areas resulting from the intervention, distinguishing between completely impermeable and partially permeable surfaces.

In this research, we employ photographic records, aerial photogrammetric records, and cartography as the basis for locating the described elements and overlaying the data obtained in archives, enabling us to compare the existing reality at the time with the present reality. The use of architectural tools allows us to achieve results using the same methodology as in design practice, with graphical elements serving as means of verification, validation, and communication. This methodological approach enables us to explore, during the process, different layers of information that facilitate a cross-analysis between physical factors such as topography and hydrography or the distance between impermeable areas and waterways.

At the core of the adopted methodology is photography, which allows us to capture the place at specific moments. In this research, the use of this methodology is particularly important as it enables us to interpret the place at these different moments and graphically synthesize this information, complementing the traditional architectural methodology based on drawing. Aerial photogrammetric recording takes us even further. It allows us to deconstruct hundreds of images to create a three-dimensional model, thereby opening the possibility of analysing the neighborhood at any given time with its colours, textures, and details. It is important to emphasize that this methodology does not exclude drawing or on-site observation. This approach to research allows us to intersect methodologies, enhancing the achieved results and enabling their cross-reference during the research process. In our presentation, we will provide an example of this methodological intersection applied to a specific area of the Malagueira neighborhood, as represented in figure 2.

Figure 2 - orthophoto map with Malagueira (in color) and surrounding space (in black and white). An aparthotel was planned in this place, but until now it is a place intersected by footpaths.

The analysis of the described factors enables us to understand the genesis of the existing public outer space and assess its suitability for current living conditions. This evaluation becomes crucial as discussions regarding the classification of the neighborhood as a "National Monument" and its inclusion on the UNESCO World Heritage list continue.

The classification of the neighborhood is based on recognizing its architectural and historical value, closely associated with housing, but also on the value of other programs and dynamics that need to be thoroughly understood. As per our study so far, the public outer space in the Malagueira Neighborhood differs from the space in the city at the time of its construction and even from the public outer space constructed in Évora over the last 50 years. This well-founded perception, supported by architectural practice-based tools, will provide a solid foundation for comprehending the architectural value of the ensemble and, consequently, aiding in its classification.

The study we propose to present is part of an ongoing doctoral thesis on the public outer space of the Malagueira Neighborhood and its contributions to rethinking new models applicable to expansion areas.

Merve Ciltas Catalbas, Ahmet Gün

Merve Giltas Catalbas is a research assistant at Altinbas University, Department of Interior Architecture and Encironmental Design since 2019. She is a doctoral student at the Department of Informatics, Architectural Design Computing Graduate Program at Istanbul Technical University (ITU). In 2022 she graduated from Istanbul Technical University, Architectural Design Program with master's degree. She graduated from Altinbas University with a Bachelor's degree in Architecture and a Bachelor's degree in Interior Architecture and Environmental Design within the double major program.

She was interested with urban studies, urban inequalities, and social background of urban boundaries at master's degree. She is interesting to continue urban studies, big data in the intersection of computational social sciences and data driven research.

A Study on Increasing Practical Evacuation Knowledge and Awareness through Gamification

EXTENDED ABSTRACT

While cities designed to meet the basic needs of society, they should also be prepared for structural, environmental, and social **disaster** resilience. Evacuation process as a behavioral component of disaster resilience is one of the issues addressed at spatial and urban scales immediately after the earthquake. Timely and safe **evacuation** in social and urban vulnerable communities is also critical in risk management. With rapid and dense urbanization, disaster evacuation has become an urban problem. Evacuation plans and drills may not be sufficient in the actual crisis and unforeseen problems may arise (Daude, Chapuis, & Taillandier, 2019). In contrast, a well-planned and self-organized evacuation can reduce casualties (Yao & Zhang, 2021). By integrating geographical and social data with high level of detail, it is possible to simulate a community's evacuation scenario, and the simulations produced are suitable tools to study how the overall dynamics of an evacuation can be affected by environmental factor (Daude, et al., 2019). Within the framework of emergency evacuation plan and behavior models, there are studies in the literature that aim to produce safe evacuation plans and improve the current situation with **evacuation simulations** produced at micro and macro scales or integrated of these two scales[1].

Information on the best evacuation practice is often delivered through traditional training approaches such as videos, posters, or evacuation drills. However, these methods can be ineffective in terms of knowledge acquisition and retention; serious games are innovative approaches to educate and train people in a gaming environment (Feng et al., 2018). By building a comprehensive scenario within the context of earthquake evacuation, the utilization of **gamification method** can effectively enhance evacuation knowledge and awareness. Moreover, this approach can address the challenges of inaccessible technological tools, internet connection, which often hinder immediate guidance of communities after the earthquake. Relying on recalled information can increase the complexity and intensify the sense of panic specifically within the realm of spatial cognition, in the building that needs to be evacuated and during exterior evacuation, which is the next step of spatial evacuation.

Playing a game for **interior** and **exterior evacuation**, and preparedness steps before the earthquake can increase the practical evacuation knowledge and earthquake awareness. Interior

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[1] The studies on micro, macro scales, and integrating micro and macro scale evacuation strategies: https://docs.google.com/spreadsheets/d/1GdbXjhrnt98t165kKmwO9fUY1JKd5Gsy3OcW0VuNJCQ/edit?usp=sharing

evacuation addresses the more individualized evacuation process and accepts social interactions at a micro scale. In contrast, exterior evacuation focuses on collective behavioral dynamics of larger groups, like movement patterns on macro scale. Social and physiological factors, as well as decision-making mechanisms played crucial roles for exterior evacuation. As a result of the literature research, it was seen that most of the studies focused on interior evacuation regarding the application of gamification. There are mostly housing evacuation scenarios or individual evacuation instances. The number of integrated studies in evacuation simulations is also quite low. Furthermore, there a notable gap in investigation of evacuation process collectively in public space, such as religious or educational facilities, universities, and shopping malls. In these spaces, interior and exterior are intertwined and so the exploration of team-based evacuation scenarios is needed.

Based on the identified gaps existing in the literature, this study proposed a new integrated model framework. This model can enable (1) increasing the level of knowledge and learning the scenario of transition, and (2) help anticipating unforeseen needs and requirements that may arise during earthquake cases by ensuring secure transition to safe area in case of panic. This is achieved through the development of gamified evacuation application utilized for both interior and exterior space. The utilization of gamification approach instead of traditional evacuation methods can also increase the interaction with real and virtual environments. This approach potentially recreates evacuation situations and so self-sufficient evacuation cycle can be established. The motivation of this study is to provide victims with a more immersive experience of the evacuation process. It aims to achieve this by simulating and analyzing human behavior, panic responses and the effect/influences of stress during earthquake evacuation, covering the entire process comprehensively. Ultimately, the knowledge acquired through these simulations aims to inform the establishment of essential protocols within emergency assembly areas. Furthermore, the insights gained from this study will help to aid in identifying vulnerable and congested routes and unforeseen human behaviors that contribute to the improvement of overall evacuation strategies.

Geologically, Türkiye is situated in a border region where Arabian and African lands drift northwards toward Eurasia. In the northern part of the country, there is a major earthquake fault named North Anatolian Fault and has historically been the site of many strong earthquakes. Because of the population density and construction exposure, Istanbul has been identified as one of the highest seismic risk due to the disaster hazard because of the population, the urban planning as mass construction. Within this scope Turkish presidency and all the official units of Turkey focus on the disaster risk management and disaster risk reduction strategies. One of these strategies involves increasing knowledge and awareness about building drill to the emergency assembly areas. In this regard, it is critical to carry out field experiment to understand the behavior patterns that show how people perceive the earthquake evacuation and how can we increase the knowledge and the awareness of the earthquake. As mentioned above gamification and game-based learning are effective techniques that increase this awareness. The Takenaka Corporation used virtual reality (VR) technology to simulate evacuations in case of diverse disasters. This research not only engage researchers and professionals but also ordinary

citizens, and through this technology citizens can experience virtual escape from hazards and planning of escape, evacuation drill etc. (Takeichi, N. et al., 2018). Technological tools make people ready to disasters and these experiences show that this kind of technologies and groundbreaking tools can be implemented disaster vulnerable countries like Türkiye. In this sense, it is also aimed to understand the affordances, potentials, and limitations of using these technologies within the scope of Türkiye as disaster risk reduction strategies. Within these aims in mind, main research questions addressed as follows:

What are the potentials, affordances, and limitations of reality technology-based gamification methods in disaster risk reduction?
What are the effective ways of integrating interior and exterior evacuation practices?
What are the strategies for conducting collective evacuations during earthquake?

Methodologically, this study starts with a content analysis to understand existing evacuation process. Then, it progresses into a case analysis phase which contains trend evacuation system analysis in developed countries and the studies which have game-based learning system for evacuation process. Research process continues with analyzing the findings of field trip as technical research that involves both observations and semi-structural interviews conducted with officials and citizens. After literature research, model proposal process starts by using the data based on the findings of content analysis, literature review, and field research. In an experimental context, it is planned to collect objective data and categorization of acquired knowledge. During the process of testing the proposed model's efficiency and effectiveness and synthesizing it with game-based learning, it is also planned to use the acquired knowledge gained to render the implicit behaviors visible (Figure 1) [2].

LITERATURE REVIEW

RUNNING THE MODEL

CONTENT ANALYSIS

MODEL PROPOSAL

MODEL EFFECIENCY TEST

Current Evacuation Processes

CASE ANALYSIS

CASE ANALYSIS SYNTHESIZING

FIELD EXPERIMENT

PRODUCTION OF KNOWLEDGE

game-based learning for disaster evacuation systems

experimental plane

using the knowledge gained to make the implicit behavior visible

Trend Evacuation System Analysis

I field trip - technical research
II observation
III semi structured interview with officials and victims

I objective data collection process
II collective data collection process
III categorization of the knowledge

I learning the current disaster evacuation process
II synthesizing with game-based learning
III testing model efficiency

I implicit knowledge to be constructed using the acquired knowledge
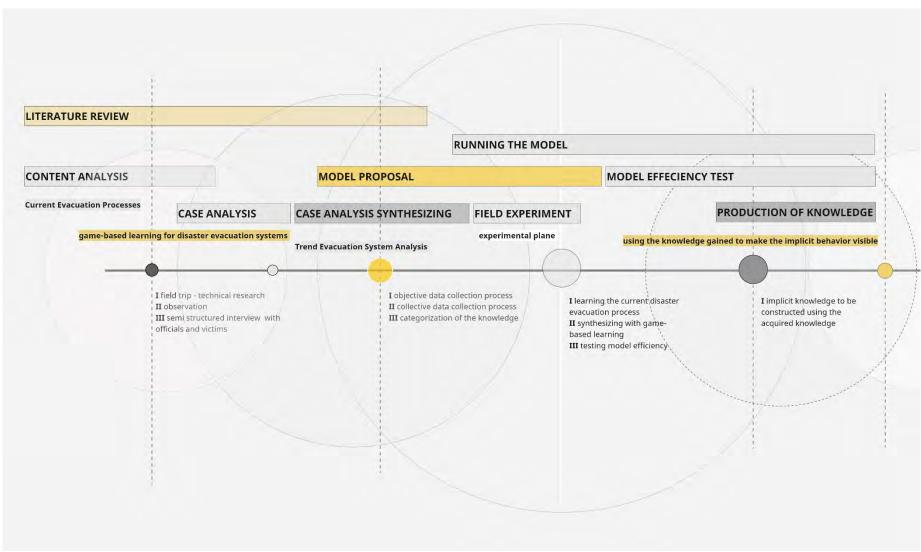
Figure 1: Research Proces

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Short Reflection

This design-driven doctoral research is in its early stages, and it propose to integrate architectural and technological platforms which have promoted a strategy to unifying this research with technology and societal inclusivity also this research contains interdisciplinary approaches like architecture, urban planning, game design, disaster management etc. This research proposes a game-based learning model of evacuation which can enable increasing the level of knowledge and learning the scenario of transition, and help anticipating unforeseen needs and requirements that may arise during earthquake cases by ensuring secure transition to safe area in case of panic. Methodologically, this study starts with a content analysis to understand existing evacuation process. Then, it progresses into a case analysis phase which contains trend evacuation system analysis in developed countries and the studies which have game-based learning system for evacuation process. Research process continues with analyzing the findings of field trip as technical research that involves both observations and semi-structural interviews conducted with officials and citizens. After all the data gathered model will run with experiments and model efficiency will be tested. It aims to achieve this by simulating and analyzing human behavior, panic responses and the effect/influences of stress during earthquake evacuation, covering the entire process comprehensively. This PhD research project is consistent with the conference theme because we aim to contribute to the achievement of broader architecture-oriented goals realized in between the research and broader communities by utilizing a technology-driven strategies which aimed to facilitate socially resilient community.

Matthew Crabbe

Matt is an idealist and thinks that group skills are underpriced in architecture school, often in favour of a competitive attitude to design, that has its endgame in an intractable and environmentally unfriendly building sector. At NBL he values the chance to collaborate with a huge variety of like-minded and inspirational people on projects which present a more hopeful vision for our shared built environment. His big wish is to inspire and empower NBL'ers to realise these visions in their own critical and collective spatial practice. Originally from the UK, Matt has been based in Berlin since 2011 and joined Natural Building Lab as a teaching and research associate in April 2018. He is part of the team responsible for teaching-related projects at NBL while working on his PhD dissertation.

POSTCARDS FROM PRACTICE

ABSTRACT

It has always been the case that the "freedom" of university learning exists in an ever-perceived tension with the "constraints" of mainstream practice. However, in the current climate of constant crisis, the absolute urgency of so many of the challenges facing the profession is causing this gap to widen at an alarming rate as progressive institutions try to compensate for some of the apparent deficits of mainstream practice by following a critical agenda in cooperations and formats that often run against mainstream trends and economic concerns. This urgency is also acutely experienced by individuals, and in our experience, our graduates expect their job to provide a path for them to progress these transformational agendas. Whether ecological, social or personal, these agendas increasingly reflect collective goals and values rather than individualistic ones. As a result of these tensions, many graduates initially require some convincing that the profession can make good on their demands for a job that can impact the most pressing issues of our time. Yet harnessing new practitioners' drive, potential and ability to drive transformation in the sector should be a priority for practice.

Forming a professional identity is a key part of university and early practice experiences. In an interesting study investigating teachers' career stories, Kelchtermans identifies five components that form a professional identity (PI): self-image, self-esteem, task perception, job motivation and future perspective. For the purposes of this proposal, I am particularly interested in the first two aspects: self-image is how we perceive ourselves as professionals and is influenced by how others perceive us, whiles self-esteem is how well we think we do our jobs and how confident we are at handling its associated pressures and stresses. These are clearly two aspects of professional development that are strongly affected by the "practice-gap" between university and practice, is the job what I expected and am I equipped with the tools to handle it?

My proposal is inspired by the paper "The Ground the Walk On" by Diane Ketelle, in which she combines snapshot photography with a narrative enquiry approach. In Ketelle's study interviewing headteachers, she takes a Polaroid portrait and asks them to write a description of who they see in the photograph on the back. The result of her study is a powerful account of the challenges facing headteachers. Using Ketelle's methodology as a basis, I am interested in using a practice-based method inspired by the established ethnographic approach, photo-elicitation. Usually, in photo elicitation, photographs are used to structure an interview with the participant - that is, the photographs are used to "elicit" responses related to the research themes. I plan to combine this method with an artistic research approach to portrait photography. In fine arts photography, the portrait is often used to explore the theme of identity. It represents a powerful exchange between photographer and sitter, where outcomes and reactions can vary immensely between subjects, thus making portraiture one of the oldest and most compelling forms of photographic practice. As part of a practice-based research approach, photography can be understood as a medium capable of transmitting a totally different non-verbal set of meanings

and emotions. It also provides the researcher or artist with a new set of "eyes" to look on the world, bringing with it a new and revealing perspective.

The first stage of my investigation will involve seeking consent from 10-15 master's graduates

from the last five years to be part of the project. Having provided the project abstract, we will look for a suitable date and context for a 30-minute photo session and conversation. The context for the portrait would ideally be a typical and everyday work situation; for instance, the office or building site, but it could equally be another context related to the background above, depending on the specific person and their circumstance. This could be discussed in a briefing session or via email before the session.

After the session, I will take a week or two to sort and edit the outcomes and choose the most suitable image for the project. This image will then be printed A6 postcard format and mailed to the participant at their workplace. Each participant should fill out the backside of the postcard with a short text. The portrait should serve as an impulse for this text; is your job what you expected, and how well did university equip you to do it? These completed postcards will be returned to me and compiled with the other responses, along with a short text relating to our conversation on the day of the sitting and a reflection on the ability of this methodology to produce new insights on the "practice-gap" between university and practice.

Keywords
Practice-gap, Architectural Education, Portraiture, Photo-elicitation, Professional Identity

DDR Statement
The proposal forms part of a practice-based dissertation focussing on new approaches for interrogating teaching practices. I am particularly interested in experimenting with media and methodology to produce new kinds of knowledge. Thinking in different mediums of expression can bring surprising, media-specific challenges and insights. In this sense, my approach to this project is a combination of practice-based and performative research, in which I reflexively experiment with new approaches and media. My aim is to find new ways of reflecting on and consequently critically reconstructing my practice as an architect, teacher and researcher that can make an original and situated contribution to institutional and disciplinary knowledge through approach and content.

<u>Nathan De Feyter</u>, <u>Johan De Walsche</u>

Nathan De Feyter is a teaching and research assistant at University of Antwerp. Notable publications include: "Design-driven participatory action research as anticipator for a mid-scale, peri-urban farmstead in Mariënburg, Suriname. Symposium Building Beyond Borders : Reflecting on the agency of architecture for regenerative and distributive solutions in the Global North and the Global South" and Action plan for Paramaribo.

Dr Johan De Walsche is engineer-architect and associate professor in Architecture at the Faculty of Design Sciences of the University of Antwerp. He has a strong research interest in architectural education, where he focuses on architectural design as a form of inquisitive practice, thus connecting the field of design studies with architectural research methodology and educational philosophy. He is a founding member of ARENA, an international network for architectural research.

Drawing the house where I live
Co-created architectural drawings as a tool for marginalised communities to navigate neighbourhood transitions.

1. <u>Introduction</u>

This paper discusses the diverse roles that architectural drawings can play in the framework of design-driven participatory action research in Ten Eekhovelei, a street in a post-war neighbourhood built in the 1930s in northeast Antwerp. Its interest thus is situated at two levels: insights about the method of co-created drawings (see 7) and insights about what drawings can reveal about the case (see 6).

2. <u>Case</u>

The locality is recognized for its uniform row residences, high population density, and wide-ranging cultural background. A place that has been rearranged and disturbed perhaps, but also a place that is understood to have been culturally enriched (Cairns, 2004).

Currently, the neighbourhood is mainly featured for its upcoming transition. The city council plans to create a large park on top of the busy Antwerp ring road, right behind the rowhouses (Ringpark het Schijn, 2022). Preparatory work has begun, and to minimize inconvenience for residents of Ten Eekhovelei, the city of Antwerp is offering homeowners the option to voluntarily sell their properties (AG Vespa, 2021). The city's offer is valid until 2024. So far, 54 homes have been sold, representing about 20% of the entire strip.

The act of purchasing property without considering other factors such as the displacement of individuals and the loss of unique spatial practices is purely economic. This can result in a decline in the distinctive ambience and customs of the area. It is important to acknowledge the rich and diverse mix of spatial practices that may be lost or displaced, which is often overlooked in current planning processes.

There are two distinct groups of individuals who have not yet relocated: those who lack the necessary resources and currently live in precarious or unstable conditions, and those who possess an emotional connection to their current residences and remain steadfast in their desire to remain in the neighbourhood.

Concerns have been raised about the proposed park, as it involves demolishing existing buildings and constructing new ones (AG Vespa, 2021), which may result in further displacement of residents from the area and (green) gentrification (García-Lamarca et al., 2022; Chen et al., 2021; Gould and Lewis, 2017).

3. Goal

From this perspective, this research aims to capture the changing neighbourhood in architectural drawings. It seeks to explore the often complex, atypical and unconventional modes of dwelling. By identifying patterns that testify to a richness of spatial practices, this research aims to anticipate the upcoming changes. By doing so, plans can be made that are more community-oriented and provide a diverse and functional urban fabric, incorporating inclusive spaces that accommodate and induce (trans-) local traditions and behaviours that are not seen yet. In line with the atlases of 'Subjective Editions' (2023), this research ought to encourage dialogue about the spatial practices of our superdiverse day-to-day realities and openly question the dominant ways of representing territories, opening up political scopes and contributing to a more pluralistic and sensitive territorial identification.

4. DD-PAR

To gain meaningful insights that cannot be obtained through passive observation or generic meetings, it's crucial to study the case from within and actively engage with the community. According to Leveratto et al. (2022), involving the community in urban planning and design processes by encouraging greater participation from planners and decision-makers in the neighbourhood is crucial.

Additionally, Mattila et al. (2022) suggest utilizing ethnographic approaches that combine participatory and knowledge-based planning to gain a more comprehensive understanding of city inhabitants' daily lives. This can include groups that are not usually involved in the planning process, resulting in more cohesive and sustainable urban development.

Despite the growing importance of participatory processes in architectural discourse for the sake of a more equitable society, as articulated by the New European Bauhaus (2023), policy actors seem to be failing to engage un(der)represented groups in the process of creating truly inclusive spaces, as already been predicted by Albrecht (1998).

For Ten Eekhovelei, the method of subjective mapping seems most appropriate. It has been extensively adopted in the form of subjective atlases by 'Subjective Editions' (2023). The purpose of such a subjective atlas is to understand the diversity of everyday life. It allows for the correlation of actors, networks, interviews, drawings, photographs, models, stories, and other things based on their spatial association, which provides a valuable layer of knowledge that reveals underlying patterns of behaviour. This atlas is also highly political, as it aims to find community-based solutions as an alternative to plans that might lead to social displacement and gentrification, taking into account that the very notion of "community" does not refer to homogeneity, but rather diversity.

This paper focuses on the role that architectural drawings, as one specific medium of the atlas, might play in achieving the previously defined goals of the research.

5. The drawing as a boundary object and interactional medium

The research began in early 2022 and included fieldwork such as site visits, photography, sketching, walking, and engaging in conversations. To gain a more profound understanding of the social, cultural, and economic systems, workshops and presentations were held to involve the community. Through a systematic process of identifying individuals, I was introduced to the SAAMO Dinamo neighbourhood community centre, where I organised two workshops. These interactions allowed me to get to know the residents and build their trust, ultimately leading to about ten home visits. During these visits, I had the opportunity to engage in conversations regarding preferred spots, home modifications, the connection with neighbours, and how individuals utilise and personalise their living spaces.

Throughout the preliminary phases of the inquiry, I faced certain unforeseen obstacles. Apart from the language barrier, it came to my attention that many people had difficulty opening up about their housing situation. This was largely because their day-to-day living conditions were often challenging to put into words. Some participants perceived their living

conditions as substandard and unexceptional, while others did not give much importance to their living environment. Consequently, other pressing concerns such as health issues, debts and conflicts with landlords or relatives often hindered them from giving serious thought to their living environment.

Effectively conveying spatial practices can prove challenging, particularly through photographs or verbal means. To overcome this obstacle, I have discovered that utilizing drawings is a beneficial solution. As an architect, I naturally relied on architectural drawings to record observations, however, I encountered difficulties in communicating my drawings when I returned after some time. The conventional drawings such as plan, section, and axonometry were often unclear and failed to capture the emotional experiences of the inhabitants. Consequently, the feedback from the residents was irrelevant as they could not relate to the drawing, which I considered a representation of their reality. For instance, during a participatory design session, a resident M.J. (45+) expressed confusion regarding the representation of her kitchen in the drawing and mentioned that it did not resemble her actual kitchen as it was not pink. In 1998, Albrecht already identified this communication difficulty as one of the major challenges in participatory design: the difference in knowledge, value systems, and opposing tastes among architects and residents. This discrepancy has been further noted as a potential contributor to the injustice of spatial transition by Gibson-Graham (2006). To address this issue, they suggest the development of a more inclusive language in architecture that can facilitate effective communication with diverse groups and challenge dominant communication methods.

Through the incorporation of the residents' self-made drawings and the integration of new insights that arose after discussing the drawings with them, I had the opportunity to explore alternative forms of visual architectural language, such as models and emotive drawings. By engaging in a collaborative process, we were able to develop a series of communicable drawings, which offered a mutual deeper understanding of the residents' way of life within the house. This allowed us to shift our focus from the house as a mere structure to viewing it as a biography, with greater depth and significance.

6. Preliminary findings about the case

Ongoing research is slowly revealing previously unseen patterns that testify to the richness of spatial practices and their spatial translations present in the Ten Eekhovelei. Mediated by the co-creation of drawings, three significant findings have emerged.

Firstly, through discussing the drawings, it has been discovered that despite the initial impression of closed-off backyards, numerous houses on the street are connected to the existing green buffer zone of the highway through their gardens. These connections consist of small doors and paths for easy bike access, farmlands for small-scale home-based agriculture, and tanks for rainwater collection. They are diverse in use, value and meaning, as well as in their relation to the outside world. Next to that, the gardens of the rowhouses are highly valued, providing ample space for outdoor activities such as cooking, playing, eating, gardening, and even keeping fish or growing crops.

Secondly, despite initial concerns about the compactness of the houses, they are designed with a remarkable central circulation system that allows for flexibility in the interior space. This often creates room for an extra hobby or study space, or for accommodating guests. Additionally, this aspect creates transitional areas in the homes, which increases the potential for diversity in usage (De Vos & Geldof, 2019). Because of the houses' uniformity, their floors and roofs are all at the same height, making it possible to join several homes together as a larger unit that can accommodate a variety of functions over time. Essentially, the whole street functions as a cohesive entity, similar to a giant Dom-Ino structure.

Finally, it has been discovered that traditional rental market choices have broadened and challenged in Ten Eekhove. Basements are being used as temporary homes for those who

can't find alternatives. Additionally, unique constellations of communal living across units have emerged, driven by factors such as high energy expenses or limited apartment sizes.

7. Preliminary findings on method

The research has indicated that integrating co-created architectural drawings with ethnographic methods can aid in comprehending the complexity of architectural spaces and reveal alternative ways of how they are used. This approach captures the perspectives, spatial practices, and emotions of the residents towards their commonly used spaces. In this way, the research is slowly revealing elements that are frequently overlooked or disregarded but are part of the implicit structures of people's lives.

Using only verbal communication during participatory processes for planning space improvements can reinforce existing power dynamics and amplify certain discourses and experiences while obscuring others (Mattila et al., 2022). To avoid this, incorporating visual aids, such as drawings, in ethnographic methods can provide a comfortable, less privacy-invasive space for participants to engage and offer different perspectives and knowledge. This approach is especially beneficial for groups who may not typically speak out on urban renewal issues or are considered inappropriate to do so.

In this way, the co-created drawings served as 'boundary objects' in various processes. Firstly, the drawings acted as interfaces between me, the residents, and other actors during the research process, successfully bridging different social worlds (Bergman et al., 2007). Next to that, the drawings motivated stakeholders to take action in anticipation of the neighbourhood's transition process. Lastly, the drawings aided in aligning, integrating, and transforming diverse knowledge in the process of empowering residents.

Drawings
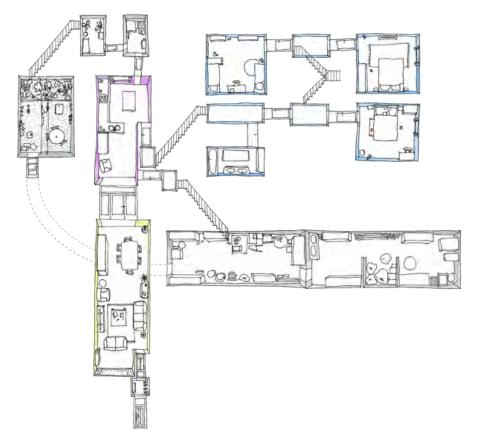
Figure 1 Co-created drawing of a house in Ten Eekhovelei

Figure 2 Basements as temporary homes

Figure 3 Communal living across units
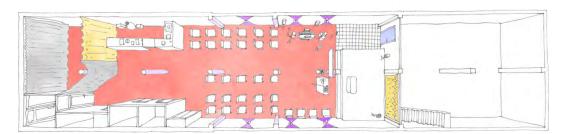
Figure 5 Merged houses can accommodate a variety of functions over time
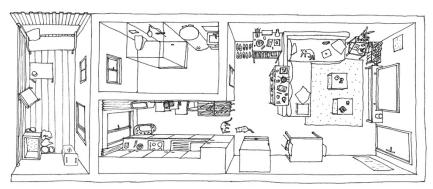
Figure 6 The house as a biography

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Reflection on Design-Driven Research

Our research approach is called design-driven participatory action research (DD-PAR). Our goal is to act as "agents of change" by finding resilient solutions to local challenges that are culturally and ecologically sensitive. We want to empower marginalized communities to collaborate with experts, companies, and the government to shift spatial renewal agency from the government to collaborations among citizens, experts, companies and the government. This goal requires the construction of concepts about a possible, desirable future. It is here that design comes in, both as a speculative and inquisitive practice. To achieve this, we focus on transforming fragile actor networks into stronger, more accountable networks that can improve living environments on a neighbourhood scale. We involve academics, community activists, and community participants in discussing designerly depictions of spatial chances, as well as financial, legal, and organizational solutions. We use diverse participation techniques such as informal talks, round tables, and actor workshops to activate and mobilize social groups. Through an iterative process of discussing and adjusting solutions, researchers and stakeholders evolve into operable civic projects. We also deploy urban tactics to involve residents who usually don't engage.

DD-PAR was launched to address processes that promote social injustice and inequality in territories in fast transition. The goal is to take action towards improving these processes. The best decisions on how to achieve this objective should come from the community itself or a group of individuals living within that community. DD-PAR is not just a learning process but also aims to produce knowledge and enhance practice within dedicated communities. Urban and architectural designs play a pivotal role in this approach, as they offer forward-thinking alternative solutions to the often ineffective top-down planning systems currently in place.

Julio Diarte Almada

Dr Julio Diarte is an Assistant Professor at UMA. He earned his bachelor's degree in architecture from Universidad Nacional de Asunción (2005), master's in architecture from The Polytechnic University of Catalunya in Barcelona (2009), and his Ph.D. in Architecture from Penn State University (2021). His research intersects the areas of design for climate change, craft, and digital fabrication, and building material processes. In his teaching, he focuses on engaging students in material-based projects combining analog and digital tools to design and prototype building components. Julio received the 2020 Engineering for Change (E4C) Research Fellowship in Habitat and 2022 E4C Expert Fellowship.

Waste pickers as fabricators: An exploratory study to upcycle waste cardboard as a building resource in Asuncion, Paraguay

Abstract

The work presented in this paper aimed at understanding the material and human cycles around waste cardboard collection and recycling in the Asuncion's Metro Area in Paraguay with the focus on the work of waste pickers. The main goal is to propose a model where pickers could not only collect but also produce low-cost building parts with waste cardboard—potentially increasing recovery rates and revenue. An exploratory study including key informant interviews and field observations were held as part of the investigation. Major findings include an identification of critical stakeholders, material cycle pointing out at the advantages of upcycling waste cardboard, and a recollection of waste pickers' major challenges to improve their working conditions. The work lays down the basis for a collaborative model where waste pickers work is revalued, and waste cardboard recycling rates increase.

Introduction (269)

The rapid growth of solid waste is currently a critical challenge in urban areas worldwide and specially in low- and middle-income countries where the total waste production is expected to double by 2050 (Silpa Kaza, Bhada-Tata, and Van Woerden 2018, 27). In Latin America, only 7% of urban solid waste is recycled (IADB 2015), nevertheless, this rate is increasing as grassroot informal waste picker groups transition from "scavengers" to "self-employed environmental entrepreneurs" (Martinez 2010, 200). Recent development studies have demonstrated that when these groups receive support and integrate formally to society, they not only help to increasing recycling rates but also contribute tackling other critical sustainable development targets (Gutberlet 2021). What remains unexplored, however, is whether waste pickers can also play a role in upcycling waste materials such as cardboard.

The work presented in this paper sought to understand the material and human cycles around waste cardboard recovery in the Metropolitan Area of Asuncion, Paraguay (AMA). The investigation put down special focus on the work of informal waste pickers and explored the possibility of them not only as pickers, but as potential producers of building components made with waste cardboard. Upcycling what they would otherwise recycle, down-cycle, or discard could add value to their work and increase revenue. This extended abstract presents the results of an exploratory study that included key informant interviews and field observations and it's part of a broader research that experiments with waste cardboard as a resource for low-cost building

materials. The results helped to identifying critical stakeholders, mapping material sequence from production to disposal, and to documenting some of the waste pickers at work.

Background Context (249)

Waste pickers' lack of infrastructure and access to tools still "prevent them from adding value and increased revenue" to waste management systems, affirmed Tello Espinoza et all. in a 2010 report about urban solid waste in Latin America (2010, 142). In this region, however, they have transitioned from "pickers" or "scavengers" to "self-employed environmental entrepreneurs" during the first decade of 2000 (Martinez 2010, 200). Waste pickers in Colombia, Brazil, and Argentina for example, have achieved a remarkable level of organization through cooperatives and associations and are today fully legitimized to participate in the formal waste management system. Today, Latin America is one of the most organized regions concerning urban waste scavenging with more than a thousand picker organizations (Medina 2015, 24). Recent development studies have demonstrated that when these groups receive support and integrate formally to society, they not only help to increasing recycling rates but also contribute tackling other critical sustainable development targets (Gutberlet 2021).

This movement has had an echo in Paraguay, where this study is situated and where the movement grew from one single association in 2005 (WIEGO 2005) to around twenty associations representing approximately 5,000 waste pickers in Paraguay in 2016 (The Latin American and Caribbean Network of Waste Pickers 2016). The most representative and inspiring outcome of this movement in Paraguay is probably the *Cateura's Landfill Harmonic*, an orchestra born in the country's largest landfill that utilizes trash-made musical instruments empowering local communities through music and add value to their collections (Lopez Inigo 2015).

Materials and Methods

The study sought to understand the material and human cycles and assess the potential of supporting waste collectors in upcycling waste cardboard for potential future uses as a construction material. An exploratory study consisting of semi-structured interviews and a field observational study was undertaken[i]. Exploratory studies are useful when there are not many earlier studies about the subject of interest, according to Labaree (2020)—in this case, studies about informal waste cardboard collection methods and its recycling in AMA. The first part consisted of semi-structured interviews with key informants where discussions focused on talking face-to-face to people who work in the production, collection, or recycling processes of waste cardboard in the area. With this instrument, the researcher tried to determine the critical aspects and identifying the key stakeholders of the cardboard production-collection-recycling process. The informants where selected based on their role in process and the technique adopted for the interview comprised an open-ended questionnaire organized by themes and audio recorded.

The second part consisted of a field-observational study to record and document the work of waste pickers *in situ*. Observation is one of the most critical methods in social sciences and as

Malgorzata and Dariusz affirmed, it has a "low level of control over the field of study" (2018, II:36), allowing the researcher to adapt to the situation without interfering the subjects activities. The topics observed were the physical setting from where the material was taken, interactions, basic demographics and educational characteristics of the subjects, type of material collected, transportation means used, and physical setting of the destination place of the harvested materials. The techniques adopted for this work included a partial participation of the observer without taking part of the waste collection activity itself, notetaking, video, and audio recording.

Results

Key informants were interviewed in-person during the data collection period (27/12/2018-03/01/2019)[ii]. The first key informant was the head of an NGO with extended experience working in the field of community development and more specifically with waste collectors placed in *Cateura*—Paraguay's major landfill. The interview helped define which are the companies that currently buy and recycle waste cardboard in AMA, as shown in Table 1. The second key informant was a CYSA manager—the country's largest packaging manufacturer. The informant affirmed the use of waste cardboard for fabricating new cardboard occupies only 30% of the total production and they did not expect to increase the percentage soon due to their clients high-quality and structural product requirements for which they only use virgin fiber pulp.

Table 1: Recyclable materials destination in AMA

Material	Material Recyclers/Buyers	Observation
Scrap metals (copper, bronze, aluminum, and steel)	*Brassur SA* *6A SACI* *Metalpar SA*	The first two companies export compressed or melted and formed scrap metals to Brazil.
Waste Cardboard	*Cartones Yaguarete SA* (CYSA)*, Corrugadora Paraguaya SA*, and *Don Marcial*	Although there are several buyers, most of the recovered cardboard ends at CYSA
Paper (white, color, and mixed)	*Corrugadora Paraguaya SA*, and *Don Marcial*	Abate affirmed that most of the recovered paper is exported to Brazil.
Glass (green, brown, and clear)	*Fabrica Paraguaya de Vidrios SA* (FPV)	
Plastics (mostly PET, HDPE, PVC, and PP)	*Compañía Recicladora SA* (CORESA)	

Following the key informant's advice, the field observations were held in highly commercial and residential area in Asuncion that produce large amounts of waste daily attracting many collectors. The first task was to identify the places were the collectors stop for materials and next, the subjects were approached for consent. Most of them were minors, consequently, it was possible to document and record the activities of only three adult subjects all of them working in the mentioned area (Figure 2).

Figure 1: Waste collectors in Asuncion

The subjects affirmed they collect all kind of recyclable materials including any kind of dry and uncontaminated waste cardboard—otherwise they cannot sell it. They use three-wheelers and take the unsorted materials to their homes where they segregate everything with their relative's help, including children. They sell everything to intermediaries who sometimes advance money to the collectors creating a complicated dependency situation. There were negative comments about the price fluctuation and dependency on intermediaries—recycling companies that could pay them better are faraway. One informant stated that although many people still portrayed them as marginal, the amount of people who support their work and help them was growing incrementally.

Figure 2 below illustrates the flow of municipal solid waste in AMA (including waste cardboard) and point out the three main actors: a) the municipal collection system; b) waste management companies, NGOs, and startups; and c) informal waste pickers. Municipal coverage is extensive though users do not segregate waste and trucks take absolutely everything to landfills where people living and working under the worst conditions, scavenge to save valuable materials (Abate 2009; Cunningham, Simpson, and Keifer 2012). NGOs and startups do business with private companies or institutions that have the interest or must send their waste to be recycling and some of them collaborate with waste pickers.
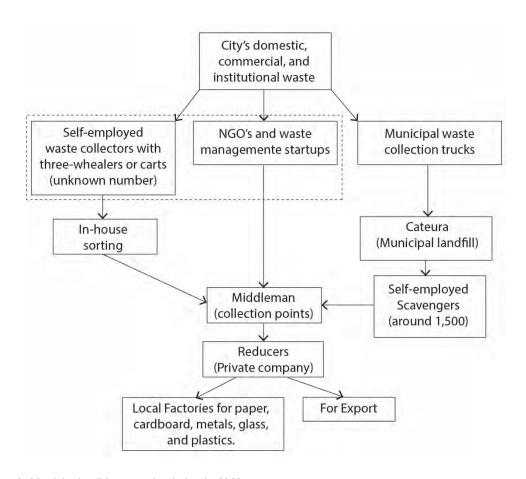
Figure 2: Municipal solid waste circulation in AMA

Conclusion

The aim of the present work was to understand the waste cardboard ecology in the Metropolitan Area of Asuncion, Paraguay. To do this, the researcher held an exploratory study interviewing key informants and observed the work of waste pickers in AMA. The findings suggest there is an interest in upcycling waste cardboard among stakeholders. Its low value among recyclable materials makes it highly accessible or almost free and does not prevent companies or pickers from using it as an alternative building material. Formally recognizing waste pickers remains a critical challenge, meanwhile, their work continues being discriminated against by public and public entities and intermediaries determine the money they receive. Notwithstanding the study limitations, the results provide an overview of waste cardboard recycling in AMA. Future work will focus on proposing a collaborative model to capitalizing on the material's affordability, availability, and the limited production of recycled cardboard products. In this model, stakeholders could effectively contribute to establishing a new value chain for waste cardboard, with pickers as fabricators of building components and beneficiaries simultaneously.

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[i] Institutional Review Board approval on December 4, 2018, by the Office of Research Protections at Penn State University (Study ID: STUDY00010849)

[ii] This time is characterized by high commercial activity related to local holidays, Christmas, and new year holidays, therefore, the presence of waste pickers in the selected area was very noticeable.

Personal reflection on the importance of design driven research.

The abstract submitted was part of a PhD research defended in 2020. The research started by asking how to upcycle waste cardboard as a building material for sustainable architecture. At first glance, the question seemed to be a material design problem; however, the investigation intersected two important aspects: material cycles (re: waste cardboard) and communities impacted by these materials (re: waste pickers). Understanding this intersection was critical to propose a meaningful solution to these issues. Consequently, the work presented in the abstract was important because it laid the foundations for a collaborative model where waste cardboard could be upcycled, and pickers work revalued. The experience taught me about the intricacies of material processes and the importance of participation of affected people as well as how research methods from social sciences can enrich design solutions.

Filip Dubrovski

Filip Dubrovski graduated at the Faculty of Architecture in Skopje in 2009 where he has been working as a Teaching Assistant until 2011. The same year he was awarded the Fulbright Scholarship for Masters in Science studies at the Illinois Institute of Technology (IIT) in Chicago with Specialization in Sustainable New Cities. During the studies he was working as a Teaching Assistant at the College of Architecture, IIT. Filip had the opportunity to have Prof. George Schipporeit, one of the last Mies Van Der Rohe students as his thesis mentor. He recieved special recognition award for completed appartment building at the 2013 Grand Architecture Annual Award in Macedonia. Filip is an excautive board member of the Association of Architects of Macedonia. Currently he is working on his PhD at the Faculty of Architecture in Zagreb.

Design research methodology applied in MSc urban planning city design research and PhD neighborhood social sustainability research
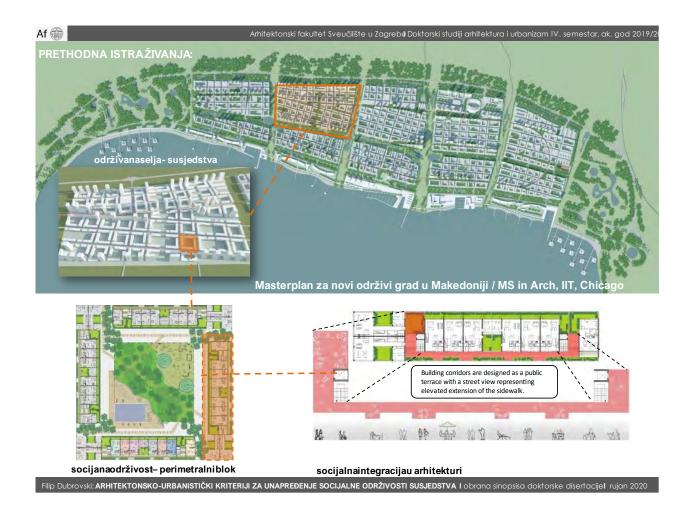
In this expose lays an attempt to deliver goas achieved from completed MSc research thesis and goals set up on an on-going PhD research thesis, both covering fields of urban design, architecture, and sustainability. In each research thesis a design-driven approach contributes significantly to the expected outcome. The PhD research is a focused continuation of the MSc research.

The MSc research was a design-driven research project originated in 2011 on the instituted Master of Science in architecture program for new sustainable city design at IIT, Chicago. The curriculum of the research program was to determine relevant criteria, studies and examples of models that imply sustainability (at all levels: social, economic, and environmental) in urban areas. The second task was to determine an appropriate location as a testing ground as well as to determine its advantages, challenges and problems while using both quantitative and qualitative analytical methods. Establishing that, the design-research methodology was third in action that was used in the testing of the set of criteria and principles that have already been fragmentary or partially proven on existing reference urban morphologies.

In the master research thesis I conducted, selected sustainable principles were comprehensively applied all together at a full city design level. The outcome was a Master of Science thesis project for a new sustainable city on a vacant location with city elements developed up to architecture level. Scientific contribution in this predominantly design-reached 2D-3D model of an urban structure is delivered in the achievements (or not) to combine extensive set of sustainability criteria at city level. The outcome of the program was to open discussion, criticism, and future referencing of the selected sustainability models for future projects and detailed sustainable urban development.

As of that point, ten years later at a different academic level and institution in Zagreb, at the Faculty of Architecture, this research continues more focused at a PhD level. Narrowed down to the also social rather than only spatial determination of the term 'Neighborhood', the PhD thesis titled `*Architectural and urban planning criteria for the improvement of social sustainability in neighborhoods*` continues to develop. Provoked by the sudden global pandemic conditions, during which at the same time all neighborhood types were put to intensive testing phase, at all levels and for several months, it was possible to witness up to what level are the living qualitative conditions met to which people are surrounded with. The aim of the research is to recognize the phenomenon of neighborhood as an

inseparable factor of sustainable development. By identifying spatial elements that contribute to the creation of urban sustainability, applying and evaluating architectural and urban planning criteria to the examples of Zagreb's neighborhoods, a sustainable model of urban regeneration could be defined.

PRETHODNA ISTRAŽIVANJA:

održivanaselja- susjedstva

Masterplan za novi održivi grad u Makedoniji / MS in Arch, IIT, Chicago

Building corridors are designed as a public terrace with a street view representing elevated extension of the sidewalk.

socijanaodrživost– perimetralniblok

socijalnaintegracijau arhitekturi

Filip Dubrovski: **ARHITEKTONSKO-URBANISTIČKI KRITERIJI ZA UNAPREĐENJE SOCIJALNE ODRŽIVOSTI SUSJEDSTVA I** obrana sinopsisa doktorske disertacijel rujan 2020

In this interdisciplinary research, direct collaboration with social sciences in the methodology appeared to be essential in a form of co-mentoring. With this help, the first part of the research is set to be quantitative analysis. An interview-based data collection will be conducted of numerus neighborhood users' experiences on various neighborhood spatial and social amenities. Then, the prepared questionary form will be upgraded with elements from the design research methodology. Combined with the research topic interview questions, this layout will contain a graphical part with pre-designed conditions and pictures of already existing neighborhood conditions (urban examples) relevant to the topic that are expected to be quantified by each participant.

Following the first, secondly planned approach is the qualitative *Grounded Theory*, founded on the bases of conversation data extraction from smaller number of pre-selected community members of various groups. This also will be supported with elements of the design research approach with the same graphical structure mentioned before. In this approach, however, the participants are additionally expected to deliver their own visions of favorable social and urban conditions by hand, if capable, or by afterwards delivery of selected examples from various visual sources. Both methods should deliver data on the level of connection between the social and spatial elements of their surroundings. At this point it is important to determine which spatial urban elements add up to the overall community cohesion, collaboration, and solidarity. In the process, referenced literature neighborhood models form theory and praxis will be combined with the extracted results. This combination should define the social and spatial criteria as an overall outcome.

The doctoral design research methodology is set up to be applied again at the finishing stage. It is proposed that the extruded social and spatial criteria are translated into graphical expression in simple ideogramic or/and preliminary urban design solutions. From there, they could be applied and tested on poor existing socio-morphological conditions in neighborhood parts in Zagreb as an upgrade design proposal that will provoke future discussion and criticism. With the objective, a sustainable model of urban regeneration should be defined.
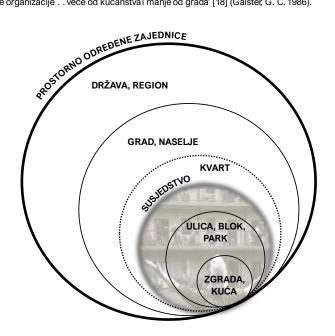
OBRAZLOŽENJE TEME, pojam SUSJEDSTVO i psihološke granice

1. Neighborhood is not a place; it's a state of mind (Sim, 2019) [6].

2. Susjedstvo je 'socijalna / prostorna jedinica društvene organizacije . . veće od kućanstva i manje od grada' [18] (Galster, G. C. 1986).

At the end, design-driven research is an inevitable research method in most design disciplines as are architecture, urban design, landscape design, biophilic design, industrial design, and others. This is coming from the nature of the fields themselves. Unlike other research methods, the ability to conduct design-driven research is dependent on a certain level of formal or non-formal education in the field of arts. Research participants carrying this capability can strongly benefit using this methodology as visual testing model which can prove or disapprove thesis effectively. However, research based exclusively on design-driven approach remains one dimensional unless combined with additional methods, preferably form gravitating fields close to the researched topic.

Ritsart Gobyn

Ritsart Gobyn is a Belgian artist. Their work is has been shown at De Warande in Turnhout, PLUS-ONE Gallery, Art Antwerp. Ritsart Gobyn is a researcher at LUCA, KU Leuven, research unit Image.

From Deception to Insight
The Trompe L'oeil as a Critical Visual Strategy

In a subtle interplay with architecture and sculpture, painting has long developed a technique that enables painters to make the painting's surface appear as if it is a three-dimensional space with real objects: trompe l'oeil. In it, we can distinguish different kinds of trompe l'oeil, varying from architectural trompe l'oeil painting – murals of illusory landscapes or architectural spaces – to the trompe l'oeil easel painting. Although it was regarded as one of the minor important painting genres, it is remarkable how the trompe l'oeil easel painting developed into a visual strategy of conceptual self-referentiality from the 17th century onwards (Veca, 2002, Stoichita, 1997).
On the one hand result-oriented virtuosity and striving toward an ever more exact copy of reality is no longer the goal in contemporary visual arts. As a result, the technique of the trompe l'oeil faded into the background in the 20th century. On the other hand, however, illusion is more present than ever in contemporary visual culture. We are constantly seduced by images which are increasingly more realistic. 3D and even 4D cinema provide us with immersive movie-experiences, VR, AI and the metaverse are only at the starting point of their possibilities, whereas fake news and deepfakes easily find their way into (social) media, often challenging the boundaries of what's legal. On top of that new media facilitate the enormous acceleration in which we consume images nowadays. (Rosa, 2013) With my practice-based research I wanted to explore a forgotten potential the trompe l'oeil has to question this contemporary tendency. I found out that the century-old and handcraft painterly strategy of trompe l'oeil, can still function as a critical strategy to question the visually overwhelming and highly technological times we live by, feeding on the tradition of visual self-awareness it had in the 17th century.

To begin my research, I explored the work of Cornelius Gijsbrechts, probably the most innovative trompe l'oeil painter of the 17th century. Gijsbrechts developed several radically new ways of dealing with this particular genre, culminating in his famous work *Reverse of a Framed Painting* (1670-72) which can be regarded as the ultimate meta-painting. (Stoïchita, 1997) Many aspects of this painting inspired me for my research and my own practice, but one aspect in particular set me on a path to further investigate in the light of the critical potential of the trompe l'oeil, namely the way it stages the creation process. In line with other meta-reflexive paintings (Carracci, Vermeer, Velazquez…) Gijsbrechts referred in many of his paintings to the act of painting by depicting painting tools such as brushes, a painting palette, a maulstick. But what was left underexposed is that in *Reverse of a Framed Painting* Gijsbrechts also visualized the act of painting by depicting black brushstrokes (assumably made by the frame maker) at the edges of the painterly frame.
Gijsbrechts' work opened a wide range of possibilities for me to investigate the potential of using the trompe l'oeil as a method to create self-reflective paintings by pointing the viewer to the painterly process itself.

I gradually developed a specific sort of paintings in which I combine (true) traces of a creation process in the form of drops and sweeps of paint with trompe l'oeil shreds of paper, pieces of tape, post-it notes and even fragments of paintings by old masters. I sought for ways to evoke a feeling of temporality with the purpose of creating the illusion of an unfinished painting. Additionally I investigated other, even more direct possibilities in the way to address the viewer with these trompe l'oeil collage elements by using for example QR-codes on painted stickers or by directly addressing the viewer through a little post-it note attached to the canvas.

But it felt as if the boundaries of the picture plain limited the illusory possibilities. So, inspired by the Gijsbrechts' way of presenting a painting as an object rather than an image with his chantourné works, I took my research beyond the rectangle of the flat canvas. First, I started to experiment with ways of presenting the paintings, not only on the wall as an image, but also on the floor which

increased the objecthood of the paintings. Later I started to see the presentation as a mise-en-scene, a way of staging an exhibition, which led to making trompe l'oeil murals and even objects, combining them in subtle trompe l'oeil installations.

This method of regarding these installations as mise-en-scenes proved to be a very valuable step in this painterly research. It revealed me, new possibilities which are closely linked to theater. Because the 'décor' I create in which my paintings are presented along with their 'attributes' seem to be able to enhance the painterly illusion and with that also the impact it has on how it is perceived by the spectator.

In my presentation on the Ca2re Conference Zagreb I would like to share my findings on the potential of trompe l'oeil as a critical voice. I believe that the meta-pictorial language of the trompe l'oeil can trigger on the one hand critical reflection and a self-awareness in the viewer and on the other slow down the spectators' gaze. Two aspects which can be most valuable in these disrupting times of image acceleration and deep fake visuals.

A short reflection on the importance and role of Design Driven research approach, methodologies, techniques and tools employed in the research project

This research is fundamentally grounded in the art practice of trompe l'oeil painting itself. At the start of the research, I began with painterly copying two trompe l'oeil masterpieces in order to try to fully understand every aspect of them and to approach the position of the original artist as close as possible.
Next to that I started investigating possibilities of trompe l'oeil painting within my own practice as a contemporary painter. Sometimes I bumped into boundaries which could turn the trompe l'oeil into nothing more than on the one hand a way of displaying technical skill, or on the other hand turning it into a visual joke. But sometimes I discovered new visual possibilities which I could use in the next painting. This led to succeeding cycles of painting, reading, analyzing, reflecting, and painting again.
In a later phase of the research, when staging the act of painting became an important research focus, the format of design driven research proved to be most crucial, because only through the act of painting you can fully understand a painterly process, which is necessary for staging it. By reflecting on my own creation process, while being in the midst of it, I gained insights in how this process could be visualized in the pictorial language of my own paintings.

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Charlott Greub

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Formless Intersection – The concept of silence in music and architecture exemplified by John Cage's 4'33" and the Resor House project by Mies van der Rohe

The intersections between art, architecture and music have been a long-running theme in the history of western civilization. This nexus reaches deep into antiquity and continues until contemporary times. Indeed, the linkages between music and architecture have long been the object of architectural research.[1] Notable examples of these transdisciplinary connections can be found in the theoretical works of Vitruvius; Alberti; Schelling; Schoenberg; Xenakis; and Cage. The overlap between art, architecture and music also finds expression in the works of architects like Mies van der Rohe or Daniel Libeskind as well as composers like Iannis Xenakis and John Cage.

As cultural-production platforms, music and architecture have been essentially connected to ideas of unity, harmony, and structure. Nevertheless, a series of radical twentieth-century compositional experiments have questioned the fundamental assumptions behind these ideas. These experiments have challenged these ideas through creative explorations into the concept of 'silence' in music and architecture. In discussing the concept of silence as a process of translating from one discipline (music) to another (architecture), we could enlist the facilitation of John Cage's 4'33', 1952, (In Proportional Notation)" ink on paper and Mies van der Rohe's Resor House (1937-41) project drawings.

The disciplines of architecture and music both conventionally communicate their ideas through notational systems made up of temporal and spatial symbols. These symbols are extensions of their authors' ideas or instructions, generally manifested through drawing or score, which are visual modes of defining arrangements of activity waiting to be interpreted by the performer or builder.

John Cage saw harmony as an outdated and abstract ordering principle which served to regulate the otherwise continuous field of sound, and he sought in his own work to substitute for harmony different structures, based solely on the lengths of time. For this reason, Cage's structure for a musical piece/performance was intended to function without regulating the existing sound-space within and around it.

It is not surprising that this first reference of Cage related to the concept of 'silence' in music, art and architecture appeared in 1952 for that year marks the composition of Cage's most known work, 4'33": the manifesto presentation of his definition of 'silence' as the presence of ambient and unintentional noise rather than the complete absence of sound.

This presentation will discuss one key exemplary piece of modernism in music (John Cage's 4'33") and another in architecture (Mies van der Rohe's Resor House) to show how the concept of silence could be integrated not just in music but also in architecture through the deployment of its structural equivalent. There is a similarity between the structural nexus between music and sound as a compositional material on the one hand and between architecture and glass as a building material.

In addition, this presentation comparatively explores the spatial intersection that could be experienced through sound material in 4'33' on the one hand and the mutual spatial intersection that occurs between the Resor House and its enveloping Grand Teton Mountains environment. This presentation also suggests that the relationship between architectural design work or experimental music and its compositional material or environment could be construed as an interconnected spatial relationship or interpenetration (intersection). In this case, the compositional material or environment, whether the 'silence' and sound surroundings or glass material or landscape, comes to be seen and experienced as integral parts of the building

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[1] Capanna, Alexandra, "*Music and Architecture: A Cross between Inspiration and Method*", Nexus Network Journal 11(2009)257-272.

design or the musical composition. This offers a perspective that posits that the relationship between architectural design work or experimental music and its environment could be construed as an interconnected spatial relationship or intersection in which the environment (landscape/ sound surroundings) comes to be seen as an integral part of the building design and/or the musical composition.
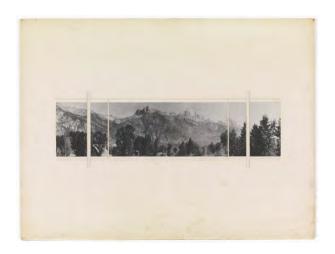
Fig. 1 Mies van der Rohe, Resor House project drawings, Jackson Hole, WY, 1937-1941
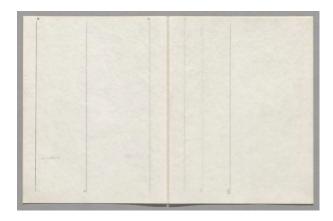
Fig. 2 John Cage, 4"33", 1951, (In Proportional Notation)" ink on paper

Rossella Gugliotta

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Operative Diagram. Transforming Analysis into Design

How can a tool initially used for analysis be reshaped for use in the design process? This is the central question that led to transforming a common tool like a map into an operative diagram. That is a case of Design Driven Research where there is no project leading the research; moreover, the main topic of this ongoing research developed into a PhD program is to shape a specific tool addressing the issue and problems of design. How can it be transformed into a method that helps not only to read and understand the city but also to design, looking at the future of it?

As we delve deeper into the research field of urban morphology and urban studies, we can discern that the mapping system has been the primary tool used to study a city's specific configuration over time. The method that gained prominence in Italy during the 1960s involved taking the maps traditionally used to study cities such as Venice, Rome, Como, Palermo, Naples and several other cities in Italy and Europe as precise representations of the city's state. Various projects were developed based on the same principles that shaped these cities. Although seemingly devoid of meaning, the map was employed to define a specific configuration deemed correct simply because it adhered to the historical development of that particular city.

The main problem with this approach was its assumption that the city would perpetually adhere to the same principles over time, believing that a system that had worked for years would continue to do so indefinitely. This stemmed from the fundamental analysis of the 1960s conducted by scholars such as Muratori, Caniggia, Mafferi, and Cavallari-Murat in Italy and Conzen in England, which revolved around identifying which parts of the city remained unchanged over time.

By shifting the focus of the mapping system from fixed elements to dynamic ones, mapping in the design process became operational. To make the transformations visible required another instrument to illustrate and represent the city's evolution over time, providing a fresh perspective on the changeable aspects of the urban environment. Since it is impossible to see and read the city simultaneously, the transition processes within it require tools that allow for continuous changes in scale, timing, and points of view. Each of these changes generates variations essential to understanding how the city changes. Transforming maps into diagrams is one of the initial steps in accessing this dynamic knowledge about the city.

To achieve the goal mentioned above, the three main methods of the Italian morphological school were examined, broken down and studied from the primary texts through which they were postulated. Starting from the books and maps by Saverio Muratori contained in "Studi per una storia operante di Venezia," Caniggia's work in "Studi di una città: Como," and Cavallar-Murat's volume "Forma urbana ed architettura nella Torino barocca: dalle premesse classiche alle conclusioni neoclassiche," operational map functions were extrapolated to allow for the reading of transformations.

The manipulation of maps and methods, which in this case represent specific contingencies, and the emphasis on their diagrammatic character led to constructing a matrix capable of bringing together the various components of the morphological analysis of transition.

The matrix's space is articulated by defining the transition of form as a multiscale event in which time is both diachronic, representing historical transformations, and synchronic, identifying typological variations. This time property is divided into historical and instantaneous, and the need to understand the process of morpho-typological variation leads to constructing the matrix beyond the canonical Cartesian space of the axes of abscissas and ordinates, introducing the synchronic variation of time of the city.

Once the matrix is established as a system for reading, the transformation into a helpful tool for the project becomes a more pressing question. What is the role of the matrix in the project, and how can the project shape the tool used to understand the city? The answer is still vague since this research is still in

development. However, it is important to highlight the relationship to shape the diagram as an operative tool. Due to its shape, the urban analysis tool, here the matrix is questioned several times in a continuous exchange between project and analysis. The aim is to escape from every taxonomic character of urban analysis to take refuge in a universe of project possibilities in which typology and topology dialogue. In fact, urban analysis is already a reality that does not exist because it is built from surveys but, above all, from conjectures and analogies. Furthermore, it also does not exist because it is almost invariably subjected to a process of abstraction. Therefore, transforming the analysis into a project does not mean predicting the future of a city but providing a way to have possible visions that help the architect realise the project, which always remains the authorial work of multiple parties and actors.

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1. Title
Strategies for flexibility in housing design through prefabrication

2. Extended Abstract

The present research proposal aims to address flexibility strategies of the contemporary domestic space by incorporating prefabrication elements in the architectural design.

The concepts of flexibility and adaptability are essential characteristics to allow architecture to serve its inhabitants for a longer time, by adjusting to their needs and aspirations but also giving importance to the appropriation of personal character. (Fig.1)

As such, there are two possible fields of research: one inherent to (the concept of) adaptability, mostly subordinated to different social uses of space, and another one closer to (the concept of) flexibility, regarding the possibility of different spatial arrangements. Steven Groák (1944-1998) proposed a distinction between the two concepts, as cited by Tatjana Schneider and Jeremy Till in ther book "Flexible Housing" (2007). According to the Groák's definition, flexibility is achieved by modifying the physical form of the building; by joining, splitting, extending, and merging spaces. (Fig. 2)

However it seems that both concepts above reflect the uncertainty of future occupancy and housing demand and here we question why and how?

In fact, as Cristiana Cellucci and Michele Di Sivo refer in their book "Habitat Contemporaneo: flessibilità tecnologica e spaziale" (2016), nowadays housing systems are challenged by an uncertain context, dominated by the rapid establishment of functional and technological obsolescence because they were not designed to optimise the longevity of the sub-systems at play. The current use of materials and components may be bound to fail after a short period due to inadequacy of design integration and the rigid spatial models that derive from them, since they are incapable of adapting to changes in the household's needs over time and meet the user's necessities.

As such, the methodology to obtain flexibility in housing can be by using certain design strategies or through the implementation of technology. Though in order to understand the possible flexibility strategies, this study will focus on the technology implementation path and not on the project's specificities. Here, technology encompasses both construction techniques and materials, as well as structural solutions, or a combination of these approaches.

If flexibility, as Steven Goárk (1992) refers, is the ability of a system to be easily modified and to respond to changes in the environment in a timely and conveniente manner, then we may question if it can be considered a strategy and characteristic of a system to guarantee adequacy over time. In nowadays, there seems to be a transition shift from the concept of the home, not as a finished product, but as an ongoing process. So may this validate the integration of technology as a way to extend the life of the building and of the dwelling, and reinforce the commitment of the project on the theme of contemporary living?

Thus, in the thesis, it is intended the analysis of a multiplicity of forms, systems and prefabricated combinations while addressing the contemporary needs of living space, through a matrix of flexibility criteria, as a way of activating "new" ways of living.

However in this abstract, the research focus in contrasting a concept of flexibility with a at least one case study, namely Loblolly House (2006) by Kieran Timberlake, set at the Bahia of Chesapeake, USA, in order to identify a set of strategies. (Fig.3)

It is expected that analysing the case study will raise some criteria that have already been intuited and researching the implementation of flexibility both in the design's form but mainly in the technological system that commands its structure.

In fact, the use of prefabrication as a whole, parts or components, for flexibility, raises several criteria topics such as: the increase /decrease of the surface area by the addition/subtraction of specific prefabricated infrastruture living units; the structural uniformity which allows adaptable building enclosures (façades, floors, ceilings, p.ex.); the dimensioning, form and location of the engineering systems (as bathroom and kitchen units), among others. (Fig.4)

In sum, this research will focus on prefabricated solutions and their integration in the rethinking of the domains of the house's design. From an operational point of view, this research uses analysis methodology based on the procedure of disciplinary instruments and tools (design driven

as schemes and designed analyses) which help to comprisse the user's domain, the functional domain and the physical domain. (Fig.2, 3)

The research intends to respond to the user's needs and even anticipate the problems of domestic experience and emerging ways of life understood through design requirements materialized through technological integration and implementation.

An important subsequent angle of this approach will enlight the link to the changes in use, the need to customize the dwelling and the timeframe involved in a building's life-cycle, allowing a deeper knowledge on prefabrication construction systems and materials, and the collaborative procedures between the intersetions of the design sphere (architecture) and the production field (industry).

3. Keywords
Prefabrication, industrialization, flexibility, building systems, domestic space.

4. Images

≠ domestic space needs
≠ contemporary lifestyles
≠ building systems and technologies

component/ module/ repetition & variation/ flexibility

Figure 1 - Author´s schemes, main objetives
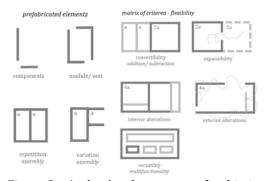
Figure 2 – Author´s schemes, specific objetives

Figure 3 – Kieran Timberlake Associates, Loblolly house photos
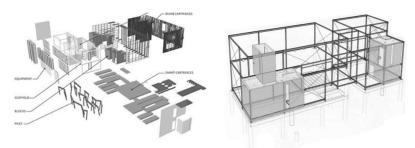
Figure 4 – Kieran Timberlake Associates, Loblolly house renderings

This research intends to establish the general concepts and processes associated with the implementation of prefabricated building systems, as a way of highlighting the methodologies and processes of action in the market, narrowing the bridges between architecture and the industry. Although these intersections links, the research will always be address as an architectural design approach perspective, through it questioning and expected results for the architectural field.

To this end, a comparative table will be established between the case studies that will allow demonstrating the intersection between flexibility and prefabrication and how the various systems solve the demand for variability and personalization, through the potentialities of technology. The case studies will derive from field visits to diferent companies operating in the national context (those with more expression in the market and a vast set of solutions). Their analysis will be done through design driven research methodologies with the use of disciplinary tools, as schemes, surveys drawing, sketches and photos beside others. This selections and on-site surveys expet to emphasize good practices and establish reference lines in the integration and application of prefabricated elements as operative devices in response to new contemporary ways of living.

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1.Title

The Roças (farmsteads) of São Tomé and Príncipe: Strategies for rehabilitation and architectural safeguarding.

2. Extended Abstract

This study inquires possible strategies for safeguarding the architecture of the Roças in the islands of São Tomé and Príncipe, a former Portuguese colony in African territory, by understanding the current way of inhabitant it. The Roças, settlements of the agrícolo-industrial type were structuring elements in the characterization of the landscape and in the cultural construction of the communities.

Taking as a case-study the Roça Água Izé we will analyze its architectural materialization, its infrastructures, geography, and architectural complexes, original and current state of conservation and socioeconomic state. This analysis will allows us to discover the compatibility of the original Roça constructions with the contemporary way of life, the correctness or not of its actual use and its differences concerning the initial purposes of inhabiting. We will question, where and why are there differences between the initial design of the housing structures and actual constructions mutations. In fact there are currently conditions of living unworthy in an overcrowding of the Roças with precarious and unqualified built additions. So, it is sought also to understand possible failures in the fulfillment of the rights to housing, their causes and possible resolution strategies.

The current housing sector of an agro-industrial estate of this colonial building construction is analyzed in its original and contemporary significance, understanding both, its role, as well as, the population that inhabits it. This way, the aim is to clarify the fundamental role of architecture in the requalification of the Roças' living spaces, investigated practical and accessible architectural strategies that intend to enable decent contemporary living conditions for all its inhabitants.

The Roças in São Tomé and Príncipe are considered heritage of all Lusophony by several authors (Francisco Tenreiro, Hugo Silva, Rodrigo Andrade, among others) that observe the significantly value of these islands for the Gulf of Guinea. The genuine esteem

that many authors claim to feel for it, whether researchers, architects, sociologists, anthropologists, is interpreted here as a sign that the past, when the result of a patrimonial activation, can give more meaning to the present. However, the Roça of Água Izé and the others have not yet been officially recognized as heritage sites. It is also a fact that the Roças remain increasingly degraded in the result of an institutional "abandonment".

These settlements are organized around the original yards, streets and the big house containing house for servants, sanzalas, hospitals, warehouses, chapel and school but now in rapidly and confusedly growth and transformation. These ensembles value that we seek to inquire seems to lay above all in the authenticity, integrity and constructive language of the urban fabric, and of colonial origin.

In this sense this study has two objectives, the first to question if in fact this colonial architectural ensemble can be considered heritage or not, how and why? Secondly how to keep this heritage alive, maintaining its identity and at the same time satisfying the needs of contemporary dwellings and their current inhabitants. For that we analyze the architectural forms of Água Izé Roça, to understand its constructions, social, cultural and environmental transformations that have occurred over time aiming to contribute to a deeper understanding of this rural built context in constant evolution.

The Roça deserves a peculiar look at its architectural form, because most of them were planned and built from scratch and have undergone transformations in their domestic space and the contemporary way of life that today imply in nearly all their original constructions. Since the beginning of the Roças there have been changes, in its form, space and organization. They were once a symbol of power but today the symbol of power remains only in its architectural image and link to tourism.

In this sense, some questions arise, how to redesign or expand the Roça settlement without mischaracterizing the value and identity of the architectural complex? How to "redesign" each set, forms, uses, referenced population, territory, geography? What are the strategies of the rehabilitation possible for a Roça?
What is the current impact of the lack of adequate housing in the Roças?

When addressing the problem of housing strategies for the Roças, it is necessary to consider some specific challenges faced in the preservation of its historic dwellings. It is necessary to identify the architectural typologies, to understand the characteristics and

evolution of housing forms, its building materials, housing layouts and space use practices both originally and over time. This can include issues related to structural degradation, lack of financial resources, lack of technical knowledge for restoration, and legal issues involved in heritage preservation. This may mean considering the role of local materials, traditional construction practices, energy efficiency and waste management to evaluate how these strategies can contribute to the environmental and socioeconomic sustainability of communities.

However it is also fundamental to explore the participation of local communities in the definition of housing strategies and in the safeguarding of Roças. Analyses in order to stablish strategies of sustainable housing in the Roça.

In fact some social issues also will be addresses, since they lead us to consider the challenges related to housing, such as socioeconomic inequalities, lack of access to basic services and lack of security of the propriety to help to address appropriate housing strategies and public policies. This also means an interdisciplinary approach, involving knowledge of architecture, history, anthropology, sociology and other relevant areas to allow a more comprehensive analysis of the Roça buildings and dwellings and finding viable strategies for the conservation and safeguarding of this architectural heritage.

In the end this study evaluates how specific strategies may contribute to the environmental and socio-economic actual sustainability of the Roças communities.

3. Keywords

Roça; colonial heritage; dwell; community; safeguard; architectural strategies.

4. Images

Figure 1 Roça of Água Izé, google image aerial view 2022

Figure 2 Roça of Água Izé, google image aerial view

1.PRINCIPAL HOUSE
2. HOUSE OF SERVICES AT Casa Grande
3.CHAPEL
4.SCHOOL
5.FEITOR HOUSE
6. ADMINISTRATION / OFFICES
7.8.9.10,11,12 SANZALAS
13.WAREHOUSE / DISPOSAL
14. CARPENTRY WORSHOPS
15. ELETRIC CENTRAL/ FOUNDRY /
METALWORK /LATHE MACHINE
16.DRYER / BOILER AND FACTORY OF
PALM OIL
17. STABLE
18. NEW HOSPITAL
19. OLD HOSPITAL
20. CLINICAL BODY HOUSE

Figure 3 schematic plan of the Roça Água Izé – Colonial plant
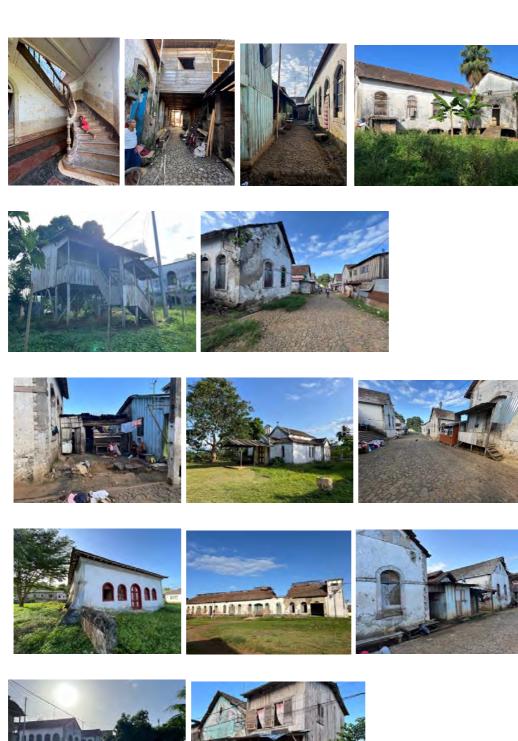
Figure 4 Photographic survey of Roça Água Izé 2023

5. Reflection on the on the importance and role of Design Driven Research

The analyze of the historic dwellings in the Roças, researching the architectural typologies, its building materials, housing layouts, space use and its possible architectural strategies to implement will be conducted through the use of design driven tool and methodologies. In a second phase taking similar architectural example -study references, not referred yet in this abstract. In the first phase the use of design tools and methodologies are as referred in the above abstract essential for the research process. In fact the analyze of the case studies of the Roça Água Izé will stem from field visits, using disciplinary tools such as schematics, sketches and photos among others as survey drawings and with the use of design-oriented research methodology, as interviews and architectural notes to promote communitie involvement in decision-making processes, housing maintenance and heritage promotion.

Sayyedeh Kimia Mojtabavi

Kimia Mojtabavi a landscape architect & architect with a penchant for design and a strong interest in design-based research. She is a doctoral student at Technische Universitat Berlin. She gained her master in landscape architecture at the University of Tehran.

"Crossing the Water"

Exploring the design possibilities on the water for contemporary landscape architecture

When we talk about crossing the water, our thoughts typically gravitate towards the various means of crossing, such as a bridge. Such a component steers our mind into something more of a structural element functionating as a connector over the water. However, there is much more to the concept of "Crossing the water" rather than just the functional, engineering aims. This study argues that the phenomena of water is not yet sufficiently addressed and explores the additional potentials of "Crossing the Water" through landscape architectural design.

The relevance of knowledge on "Crossing the Water" in landscape design

"Crossing the Water" has been a subject of ongoing discussion, both in contemporary times and throughout our ancestral history, as it represents a cultural practice that endures to this day and holds potential for the future. Consequently, the knowledge on crossing the water and its potential to enhance experiences within landscape architectural discourse is deeply rooted in ancient traditions and techniques, and remains an ever-present necessity, highlighting its enduring importance.

In spite of that, today, when we consider water crossing, we often just think of conventional, limited means, merely connecting one point to another. Our every day's way to treat the water is somehow limited which might be due to various reasons such as constructability, security, maintenance, etc. However, it is crucial to recognize that "Crossing the Water" extends far beyond these prevailing, limited methods. In truth, the concept of "Crossing the Water" encompasses a vast spectrum of design possibilities, offering an abundant source of inspiration that leads to holistic bodily experiences and multisensory perceptions. So, one of the main goals of this study is to explore and develop the design possibilities on the water.

Study's underlying perspective

The subject of "crossing the water" has long been an intersection of various, dynamic, yet overlapping, and interdisciplinary domains. However, when it comes to designing and building on the water, there are mainly two types of attitudes and aspects concerned.

The first aspect concentrates on the functional, engineering sides, associated with structures, technical issues, planning or ecological considerations. The second aspect, which is the focus of our study, revolves around design potentials, spatial qualities, and the perceptual experiences while crossing the water.

These distinct perspectives stem from the complex relationship between humans and water. Water can serve as a life-giving force, providing energy, soothing qualities, inspiring reflections, which align primarily with the second aspect. On the other hand, water can also pose potential hazards, causing severe droughts and floods, necessitating consideration from the first

engineering-based aspect (Lohrer, 2008). Both perspectives are crucial in understanding our connection with water and our experiences on it.

The issue lies in the uneven distribution of resources, and practical studies concerning the second, design-oriented aspect, the one that delves into the experiential aspects of crossing the water from a phenomenological perspective and deals with the relationship between the aesthetic aim of landscape architecture and spatial composition. This study aims to address the current lack of design-based studies exploring the concept of crossing the water, and also endeavors to stimulate scientific debate on this matter.

The underlying perspective of the research centers on the contemporary human needs for authenticity, depth, and consideration of their perception and feelings. As landscape architects, the study aims to explore their potential contributions to the 21st-century human experience. To address this question, a phenomenological point of view is adopted, highlighting the importance of human perception of a place, the atmosphere created, and holistic bodily experiences in the concept of "Crossing the Water."

What is this study's main question?

How can design possibilities in landscape architecture contribute to providing rich, delightful, holistic bodily experiences on the water?

To address this question, a comprehensive approach will be adopted, starting with a broader, general exploration of "Crossing the Water." This phase will remain open to diverse possibilities and qualities associated with water, moving away from mere functionality and measurability, in order to unlock new perceptual and experiential dimensions related to the topic. The study will not limit itself to specific crossing objects or means, nor confine its investigation to certain landscape resources. Instead, it will encompass various initiative inspiring aesthetic sources that play a striking role on influencing the research; sources as poems and novels from west to east, paintings, personal sketches and drawings, field trips, in person experiences and observations, local practices and ideas, landscape cases, etc. along with guiding literature reviews creating the basis of the exploration and the attitude being taken.

The reason for integrating these aesthetic sources, alongside landscape architectural theories, lies in the study's emphasis on human perception and emotions. Adopting a phenomenological viewpoint, the study accentuates the creation of an appropriate atmosphere through design and prioritizes individual experiences. This shared attitude between landscape architecture and other aesthetic realms offers an opportunity to draw from a broader range of inspiring sources, which might reveal previously overlooked possibilities related to the potentials of the water. Traditional sources, limited to explicit theoretical or professional material, may not suffice to explore the full potential of "Crossing the Water."

This attempt ultimately aims to create a catalog of water-related phenomena by the end of this phase. The catalog seeks to discover unexpected or less explored, hidden ways of engaging with water, surpassing the everyday and sometimes spiritless routines of water interactions. It endeavors to establish a genuine dialogue with water on the water itself.

Consequently, the overall methodology of this study will be a combination of traditional research, involving investigation through existing theories and literature review, and design-based research, which constitutes the practical and central aspect of the study, leading to the formulation of design principles and final results.

What expectations lie ahead?

After compiling a catalog of water-related phenomena, the study aims to formulate and categorize specific reflections on water, which will subsequently be translated into top-down design principles applicable to water environments.

Final design principles can be exploited in various means. The primary impact of these design principles is to enhance the current, limited ways of experiencing and engaging with water, particularly during water crossings. This perspective goes beyond functional aspects, adopting a distinct design-based, phenomenological point of view.

However, the study leaves room for potential expansion or offering suggestions for future research. For instance, it could explore the link between the identified design principles and contemporary challenges in water crossings, given the impending impact of climate change on habitual practices, and changing environmental conditions. Additionally, the study suggests alternative approaches to replace conventional perspectives that have diminished the potentials of "Crossing the Water," thereby enriching water experiences. However, due to the study's inherent limitations, any decisions regarding the mentioned possibilities would require further evaluation and consideration.

Keywords
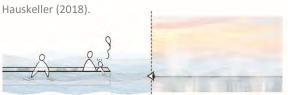
Water Experience

- Natural and environmental conditions of open space: weather, sun and shade, load of crowd, etc.
- Perceiver's mental background: memories, expectations, self-interpretation, etc.
- Bodily disposition in realtion to water.
- The qualities of water itself.
- Medium of connecting to the water: its spatial arrangements, light, color, material, relations to context, etc.

Inspired by concepts from Böhme (2018), Weidinger (2018), Hauskeller (2018).

Embrace the notion of fluidity

Experiencing the water's fords and shallows

stepping through shallow water

Feeling the water flux and dynamics
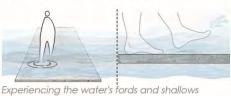
Based on the qualities of the medium

type of passage embracing water experience
Stepping stone, Floated on the water, Directly through shallow water on the water platform, Above the water level, Nearby the water, Below the water level
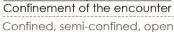
Confinement of the encounter
Confined, semi-confined, open

Qualitative spatial dimensions
Private place, public place or plaza on the water, Dynamic or static

Material & color
Penetrable, immersing, or solid, Natural and local, or unnatural, Transparent or opaque, Low density and floated, or built and established

❝The caravan crossed a shallow river.
Dawn poured upon the ripples.
A face is laghing at death in the silvery water.❞
Sepehri, S. (2021). Shasusa. In Shababi. P, & Keshavmurthy. P, *The Eight Books, A Complete english Translation* (Pp. 137). BRILL. (Original work published 1976)
Photo credit: Prashant Keshavmurthy

Cast nets in the water, catch freshness from water (Sepehri, 2021)

Plaza on the water

Private zone

A-A'

Khaju bridge, Credit: Pascal Xavier Coste (18th-c.), modified by author

❝Life is successive soaking,
life is swimming in the pond of "Now".
Let us take off our clothes:
water is a step away
…
Let us go to the shore,
Let us cast nets in the water
and catch freshness from the water.❞
Photo credit: Prashant Keshavm
Sepehri, S. (2021). The water's footfall. In Shababi. P, & Keshavmurthy. P, *The Eight Books, A Complete english Translation* (Pp. 239-241). BRILL. (Original work published 1976)
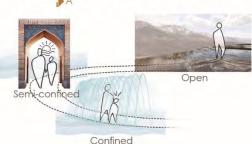
Bodily disposition in realtion to water.

Carried by the water,
Running or walking upon the water,
Cast oneself in the water,
Exposed to falling water,
Into the water (Partially, thoroughly)
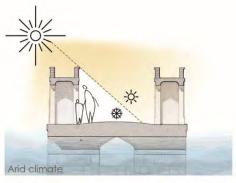
Khaju bridge, Credit: Jean Chardin (17th-c.), modified by author

Semi-confined

Open

Confined

Natural and environmental conditions

Microclimates, thermal comfort, Sun & shade, wind corridors, etc.

Humid climate

Water qualities

"An old silent pond...
A frog jumps into the pond,
splash! Silence again."

Basho, M. (2003). *The Old Pond*. In H. Behn (Trans.),
The Old Pond (pp. xx-xx). Retrieved from:
www.poemhunter.com/poem/the-old-pond/
(Original work published 1686)

"Stopped awhile
inside a waterfall
summer retreat begins"

Basho, M. (1991). *Narrow road to the interior*. In Hamill. S,
(Pp. 100). Shambhala Publications, Inc. (Original work
published 1689)

A piece of sky fell into my path
I walked on the clouds
my little moments were seeing silvery dreams

embody the bluness

"The sky, bluer,
the water, bluer.
I am on the porch, Ra'na by the pond."

Sepehri, S. (2021). Plain-coloured. In Shababi. P, &
Keshavmurthy. P, *The Eight Books, A Complete english
Translation* (Pp. 287). BRILL. (Original work published 1976)
Photo credit: Prashant Keshavmurthy

Water's surface visual effects
Based on rippling water or
still-standing water:
Water's luster and glimmer,
tremling, mirror effect

Water's sound effects
Water's flowing, falling, flow
breaking, roaring

Water's forms
Gas, liquid, solid (ice)

Water's color and transparency
Depending on Water's
sediment, depth, floor material,
reflection of surrounding,
temperature, cleanliness

Tactile stimuli in water
Flora and funa,
flooring material

Water's boarders
With/without boarders

Depth of water
Shallow, deep

Scent of water

Gas   Liquid   Solid

Water Mirror © Michel Corajoud (2009), modified by author

Misuse inspires innovation
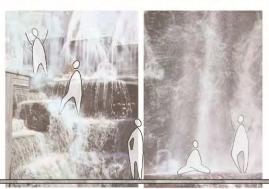
Photo credits from left to right: Maryam Karimi, Sooshians

Left pic.: Freewaypark, Lawrence Halprin,© 2001-2023
The Cultural Landscape Foundation, modified by author
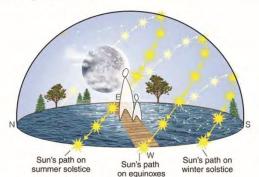
"Was it for this
That one, the fairest of all Rivers, loved
To blend his murmurs with my Nurse's song,
And from his alder shades and rocky falls,
And from his fords and shallows, sent a voice
That flow'd along my dreams?"

Wordsworth, W. (2004). The Prelude. Random House.
Photo credit: Lebrecht Music and Arts Photo Library /
Alamy Stock Photo

N   E   S
W
Sun's path on   Sun's path   Sun's path on
summer solstice   on equinoxes   winter solstice

"I can smell the salt, all right.
At our feet, the weed-moustachioed
sea exhibits its glaucous silks,
Bowing and truckling like an old-school oriental.
You're no happier than I about it.
A policeman points out a vacant cliff."

Plath, S. (1980). Crossing the Water. Harper Perennial. Pp. 60
Photo credit: Bettmann © Getty Images

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DDr Statement

This study aims to go beyond the limitations of conventional resources and approaches in order to explore design possibilities concerning "Crossing the Water." To achieve this aim, the adoption of innovative, non-traditional, and comprehensive approaches, such as design-driven methods, becomes imperative. This departure from purely theoretical approaches is crucial to avoid repetition of existing outcomes and to stay aligned with the study's purpose.

Seeking a qualitative and dialectical interplay between action and reflection, this research endeavors to synthesize experiences derived from specific design practices and diverse aesthetic resources. Moreover, in enhancing the holistic bodily experience tied to water crossing, the comprehensive nature of design-driven research proves essential. This approach is capable of covering diverse aspects of this subject.

Although some experts may approach water crossing issues from a functional and technical perspectives, this field also provides plenty of room for investigation from a design standpoint. A design-driven approach allows us to delve into the realm of water-related design possibilities, with a heightened focus on human perception. This approach makes an attempt to reveal previously undiscovered insights, particularly in relation to holistic bodily experiences. The DDR methodology in this study aims to integrate existing knowledge with fresh insights, which ultimately reflect as design principles, and as an interdisciplinary endeavor, the study holds the potential to make a contribution to the discourse surrounding "Crossing the Water."

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Mar Muñoz Aparici is a practising architect developing design-driven research on public space from urban and architectural perspectives. She is currently a PhD candidate at Delft University of Technology. Her research focuses on cultural building design to strengthen public life and is embedded in the European CA2RE+ network.

At lamardebe, she develops design, research and curatorship projects between the Netherlands and Spain. She has worked in multiple offices on international projects, from interior design to masterplan, housing or public buildings. She holds a Masters from TU Delft, where she studied the socio-political development of planning for tourism in Spain during Franchoism and graduated with a public building design based on civic engagement as a tool for urban regeneration.

Exploring Co-Creation Tools for Public Space Activation: Integrating Situated Collective Intelligence in Architectural Design Approaches

#adaptivereuse #cocreation #publicspace #architecturaldesign #situatedness

In recent years, the adaptive reuse of existing buildings has gained significant attention in architectural design. Numerous examples of cultural building adaptive reuse have demonstrated the potential of transforming the built environment through interventions in existing buildings. Moreover, an increasing portion of design work in developed economies pertains to adaptive reuse. Intervening in existing buildings and communities poses a specific challenge for designers to understand and translate situated knowledge into spatial proposals. However, traditional architectural design education and practice rarely use tools to incorporate user input in design. Architects typically embark on the design process with formal and functional requisites in mind, while intervening in existing realities necessitates alternative design approaches.

This research delves into potential co-creation tools for spatial designers—urbanists, architects, or interior designers—to contribute to the activation of public spaces in and around cultural buildings. Integrating situated collective intelligence into architectural design processes through stakeholder involvement could ensure that the proposed design solutions align with values and aspirations, thereby generating a positive urban impact. Civic involvement methods like participation, co-creation, and co-design are common in urbanism and housing design (Devisch et al., 2018). In architectural design, and more specifically, public building design, co-creation tools and processes are not as common. There is great potential in exploring co-creation tools for social engagement in the design process (Karim, 2018). Common architectural design processes usually start with a functional program of requirements, overlooking the values that the spatial intervention seeks to achieve. If stakeholders are engaged during the design process, it typically revolves around reactive engagement regarding functional aspects and not the public values it embodies. For instance, stakeholders might be asked to choose from existing design proposals or provide their minimum requirements for a space. This approach neglects the considerable potential for creating collective imaginaries that catalyze spatial transformation.

Viewing public spaces as unified entities regardless of climatic conditions—indoors or outdoors— is pivotal for the successful activation of existing buildings. An example of activation process

would be to turn an old office building into an art space. Co-creation tools have proven to be excellent tools for public space design; therefore they also hold potential for supporting interior public space activation. This research supports the idea that expanding design approaches currently used for the adaptive reuse of cultural spaces by integrating co-creation tools can amplify the impact of these interventions on urban life. Specifically, the research highlights ways to implement co-creation tools that use *situated collective intelligence* (Di Siena, 2014) to drive the activation of public spaces by aligning with community values with design decisions.

fThis article presents a potential adaptive reuse design approach that originates from community values instead of functional requirements. Through real-life design cases of my own practice, I will showcase the co-creation tools and steps employed in these design processes and discuss the noted effects of these tools to identify their potential and limitations (See figures). To explore how co-creation methods can facilitate public space activation in cultural spaces, I will first delve into theoretical concepts surrounding co-creation: *civic design* (Di Siena, 2014), *commons* (Stavrides, 2015), *situated knowledge* (Doucet & Frichot, 2018) and *collective worldmaking* (Doucet, 2022). Subsequently, I will reflect on the co-creation tools employed in my recent professional design processes for public space activation. Although each approach was tailored to the specific design process at hand, some commonalities on the co-creation tools used emerged. Analyzing the outcomes and limitations of co-creation tools will determine their effectiveness as catalyzers of community and spatial activation. Last, I will compile a set of recommendations for possible design approaches that will fuel future iterations of my research.

The hypothesis is that a systematic yet situated approach to public space design processes within existing buildings and communities can enhance the impact of cultural buildings on urban life. The case studies examined clearly demonstrate the benefits of employing co-creation tools in public space activation design processes. The proposed interventions gained widespread acceptance, were more easily implemented, and ultimately better served their functions and communities because of the community engagement. While co-creation's positive effect on public space activation is evident, incorporating co-creation tools alone is insufficient to drive significant changes. To enhance the outcomes of public space activation processes, design approaches need to be transdisciplinary and challenge traditional design roles. Integrating co-creation tools accounting for situated collective intelligence with traditional architectural design tools could amplify the impact of public space activation strategies in cultural buildings. To do so, incorporating the expertise of the social sciences to architectural design is key (Manuela Mendes et al., 2017). Other important domains such as interior design, graphic design, o marketing could further enrich architectural and urban design tools in activating public space.

A key insight from this research underscores the importance of collective intelligence, particularly when tacit, during co-creation for activation processes (Schrijver, 2021). Beyond conventional architectural tools, intervening in existing communities and spaces demands the ability to analyze and comprehend immaterial networks, values, and aspirations. Co-creation methods should aim to extract this collective intelligence as input for design proposals. Incorporating collective intelligence might challenge the traditional architectural notions of authorship and aesthetics. Consequently, these new design approaches could change the role of architects and shift the focus from the architectural object to the design process.

Design Driven research reflection

The situatedness of Design-Driven Research necessitates an ongoing definition of its tools, techniques, and methods and approaches. This becomes particularly significant when performing "pure" design-driven research, in other words, when performing actual design processes aiming to produce research results. Within actual design processes, their situatedness demands unique solutions, relationships, limitations, and structures that lie at the intersection of different professional expertise and must be recognized to facilitate learning from them. While not every design process embodies design-driven research, any design process can contribute to knowledge creation when its objectives, approaches, and reflections align with theoretical gaps.

My research sits at the intersections between theory and practice and between architecture and urbanism. In my doctoral research project, I seek out architectural design projects suitable as case studies to validate the theoretical hypotheses I formulate. Consequently, my design-driven research is inherently situated and thereby bounded by its specificity. I navigate the *collective art of worldmaking* – as Isabelle Doucet calls it– as a young Spanish female architect working in the Netherlands, a researcher and designer, and a citizen embedded in various realities. My approach emanates from the intersection of these realities. Embracing this intricate embedding and making it explicit empowers my design processes and helps elucidate my personal design approach and how it could be extrapolated to others.

Figures

All Figures are made by the author.

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CO-CREATION
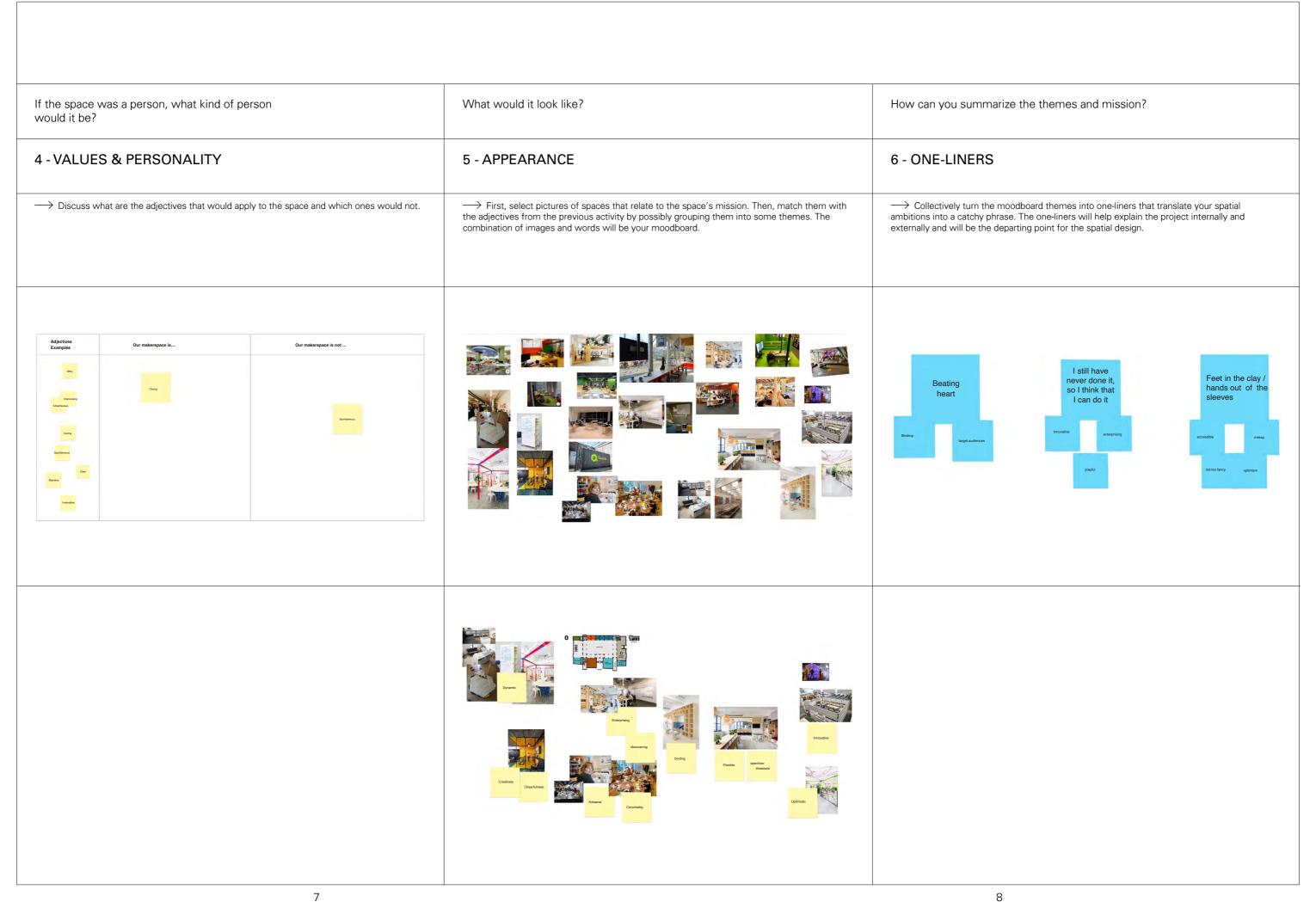
Turning the collective knowledge into collective creation by distilling the public values driving the spatial transformation

Who are we and who are our (possible) actors?	What is the current state of the space?	What is the identity of this community and how can we turn our mission into a specific appearance?
1 - NETWORK MAPPING	**2 - SPATIAL ANALYSIS**	**3 - IDENTITY & MISSION**
⟶ Write the current and potential actors who are already involved or could be interested in the new program. Think big! Then try to map their interconnections. Finally place them in the chart according to their power and interest in the project. This will help you create new synergies and identify your community.	⟶ Discuss and analyze the different aspects defining the current state of the space that will be used to introduce the new program.	⟶ Using the example provided, fill in the different layers of the "identity onion". Involve the stakeholders and community.

Businesses

Education (schools)

Others organizations (e.g. NGO)

Library

Public institutions (e.g. municipality)

Others Biebs/ locations

POSITIVE — e.g. large windows

DESIRABLE — eg open and transparent

TO IMPROVE — e.g. dark

Appearance
Smoked sausage, tompoes — less = more
colorful products — for daily use

Personality
just act normal
accessible — happy

Values
design — good quality/value
innovation — simplicity

Mission
Special simplicity

HEMA

POWER / INTEREST

Partners keep satisfied
e.g. Municipality

Key figures actively involve
e.g. active partners

Community monitor
e.g. users

Network to inform
e.g. manufacturing sites

other libraries

High School

Appearance
Design + Furnishing

Personality
Tone and Style

Values
Manifesto

Mission
The reason for existence. The essence.

MAKERLAB

If the space was a person, what kind of person would it be?	What would it look like?	How can you summarize the themes and mission?
4 - VALUES & PERSONALITY	**5 - APPEARANCE**	**6 - ONE-LINERS**
⟶ Discuss what are the adjectives that would apply to the space and which ones would not.	⟶ First, select pictures of spaces that relate to the space's mission. Then, match them with the adjectives from the previous activity by possibly grouping them into some themes. The combination of images and words will be your moodboard.	⟶ Collectively turn the moodboard themes into one-liners that translate your spatial ambitions into a catchy phrase. The one-liners will help explain the project internally and externally and will be the departing point for the spatial design.

Adjectives Examples	Our makerspace is....	Our makerspace is not ...
Witty	Caring	
Improvising		Spontaneous
Adventurous		
Caring		
Spontaneous		
Attentive	Clear	
Innovative		

Beating heart

Binding · target audiences

I still have never done it, so I think that I can do it

Innovative · enterprising · playful

Feet in the clay / hands out of the sleeves

accessible · messy · not too fancy · optimism

Dynamic · Enterprising · discovering · binding · Flexible · open/low-threshold · Innovative · Creativity · Cheerfulness · Artisanal · Conviviality · Optimistic

Miljana Niković

Miljana Nikovic is an architect and researcher experimenting with audiovisual forms and words combining multiple languages. She currently works on her art-driven doctoral thesis and archival video project about filmed urban spaces and their perceptions through collective memories and sociopolitical transformations. Her most recently published texts deal with found-footage techniques and re-appropriation of film archives in the context of Yugonostalgia. Her experimental video-poems have been screened at various international film festivals and cultural events. In 2020 she was finalist at the Fotogenia Festival in Mexico with her video-poem The Viral Shore. In 2021, she received the "Significant Achievements" Award at the Alternative Film/Video Festival in Belgrade for her video-poem A Line Is Not A Line.

TITLE OF THE CONTRIBUTION

CITIES ON SCREENS OR SCREENS OF CITIES

REFLECTION ON DESIGN DRIVEN RESEARCH APPROACH

Throughout my journey as a PhD candidate using design-driven methods, I have noticed a range of concerns towards the understanding of my artistic practices while being a trained architect. Parallel to my doctoral research, as a video-artist, I have been experimenting with various topics that are seemingly distant from my thesis. But while building my videography around questions primarily related to emotions, technologies, ecologies, or languages, I was indirectly (thus, unconsciously) exploring the very core of my thesis: discontinuity — in all its forms. Among them, I recognize various types of discontinuity leading to multiple levels of interpretation with techniques employed in the footage that I edit. Progressively preoccupied by discontinuity, it took me some time to comprehend the actual "intersections" between my academic and artistic research. Now being perfectly aware of the indivisible connections between these two "types" of research, it is obsolete to keep wondering whether design is influenced by theory or vice versa.

(Un)surprinsigly, one common remark that I get about my videos after revealing my architectural background is: "oh, of course, this explains a lot!" — which implies assumptions based on popular ideas of how architects tend to create and "construct" their designs. Perhaps I fall in some patterns because of my inclinations for particular principles from both disciplines. However, it is difficult to situate my design within so many influences and aspirations — some of which I adopt or maintain tacitly. This "non-intentionality" brings further ambiguity in the "scientific" conditions of design-driven methods.

EXTENDED ABSTRACT ABOUT CERTAIN ARTEFACT(S)

"We are surrounded today, everywhere, all the time, by arrays of multiple, simultaneous images. In the streets, airports, shopping centers, and gyms, but also on our computers and television sets. (…) Rather than wandering cinematically through the city, we now look in one direction and see many juxtaposed moving images, more than we can possibly synthesize or reduce to a single impression."[1]

FOREWORD

After having participated in three CA²RE conferences, I needed to take some distance to better focus on the research essence and digest the cumulated feedback. Now I am exactly at a crossroads of my exploration process. Thus, the proposed theme at the upcoming meeting in Zagreb perfectly describes my current status as architect, researcher, and video-artist — *intersections* of: career choices, endorsed disciplines, used media, objectives, and introspections. Being at the intersection means being obliged to gather previous experiences and integrate them in outlined agendas. However, as my audiovisual conceptions evolve primarily through film editing and montage techniques, *intersections* litteraly involve the *cuts between*.[2] Indeed, although I have a determined structure and concept before starting a project, it is only while I play with selected elements, that new ideas and results take shape. Similarly to laboratories, where chemists mix two or more substances and obtain un/expected "solutions" — architects and filmmakers obtain un/predictable answers when they "test" their intentions with sketches, sections, sequences, overlays, models, etc.

For example, Charles Eames defines models as tools to "communicate about a structure" of interest, and distinguishes them in two categories: "models before the fact" such as architect's proposal before construction; and "models after the fact" such as molecules made by scientists.[3] Indeed, the Eameses consider themselves as "model-makers" trying to "convey [*their*] *own* understanding."[4] Even their acclaimed *Powers of Ten* (9min, 1977) is a "sketch film," just as their other films are only "attempts to get across an idea" applied "as a tool someone else has developed."[5] In that sense, models can also be at the intersection of "before" and "after" the fact, which is exactly how I view my experiments.

---

[1] Colomina, Beatriz. 'Enclosed by Images: The Eameses' Multimedia Architecture'. *Grey Room* 2 (2001): 6-29. Grey Room, Inc. and Massachusetts Institute of Technology

[2] Etymologically, the word "intersection" comes from "inter" (between) and "secare" from its root "sek" (to cut).

[3] Eames, Charles. "On Reducing Discontinuity" in: *Bulletin of the American Academy of Arts and Sciences,* Mar., 1977, Vol. 30, No. 6, pp. 24-34. American Academy of Arts & Sciences

[4] ibid.

[5] Schrader, Paul. "Poetry of Ideas: The Films of Charles Eames" in *Film Quarterly,* Vol. 23, No. 3, Spring 1970, pp. 2-19

CONFIGURATION
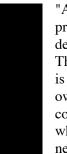
As I plan to be physically present in Zagreb, the theme *intersections* is for me a stimulating opportunity to probe a hybrid way of mixing design driven questions. Therefore, I propose a presentation format different from that of my past interventions, with an experimental lecture-performance. This time, I want to step outside of conventional academic "one-screen-one-voice" setups, by embracing the spatial context and enveloping the audience in an immersive atmosphere. Of course, I will expose some of my latest outcomes in the frame of my doctoral research, but by integrating the actual "instrument" of my subject — a multichannel video installation, based on my latest audiovisual experiment. For this, I need one microphone and at least three types of screens:

- a regular projection surface linked to a projector (placed in the central part of the room), connected to a sound system and my laptop
- a plasma display or equivalent (e.g. TV), optionally set on a movable structure
- a computer monitor, positioned on a desk, connected to internet

If any additional screens are available (regardless of size or type), I will be happy to use them to test unique spatial outcomes according to the room where the event will take place. The exhibition area(s) should be as dark as possible to allow the best perceptibility of the projected images. Ideally, the audience will have the option to walk around the screens.

ARTEFACT(S)

In my research, I question audiovisual representations and perceptions of my hometown (Belgrade) through one filmed location (Terazije Square) and the concept of discontinuity. In the first part of my presentation, I will shortly introduce this topic while simultaneously projecting selected segments of my past and ongoing audiovisual experiments. Then, I will mention some inspiring video installations or expanded cinema references connected to architecture or engaging with urban elements, especially focusing on pioneering multi-media presentations produced by Charles and Ray Eames — who "treated architecture as a multichannel information machine. And, equally, multimedia installations as a kind of architecture."[6]

"All of the Eameses' designs can be understood as multiscreen performances: they provide a framework in which objects can be placed and replaced. (…) Spaces are defined as arrays of information collected and constantly changed by the users. (…) The space of a newspaper or an illustrated magazine is a grid in which information is arranged and rearranged as it comes in: a space the reader navigates in his or her own way, at a glance, or by fully entering a particular story. The reader, viewer, consumer, constructs the space, participating actively in the design. It is a space where continuities are made through 'cutting.' The same is true of the space of newsreels and television."[7]

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[6] Colomina (2001)

[7] ibid.

The second part of my lecture-performance will be complemented by my most recent 3-channel video installation *Almost White City On Barely Black Screens* (15min, 2023). This new experiment exploits and subjectifies the making-of process of my doctoral research. Furthermore, it implicitly thematizes the problems occuring during the research in three parts, through: conceptual, material-archival-administrative, and technological challenges. Echoing the Eameses' method of "information-overload"[8] before even being aware of these means, my "sketch" offers more data than what one can process. Moreover, this is only one of the results noticed *after* I have finished the montage, and the method was happening *while* I was testing several techniques — thus at the intersection of "before" and "after" the fact, moments disclosed earlier.

(NON-)EXPLICATIONS

"Eames's innovation (…) is a hypothesis about audience perception (…). The viewer must rapidly sort out and prune the superabundant data if he is to follow the swift progression of thought. This process of elimination continues until the viewer has pruned away everything but the disembodied Idea. By giving the viewer more information than he can assimilate, information-overload short-circuits the normal conduits of inductive reasoning. The classic movie staple is the chase, and Eames's films present a new kind of chase, a chase through a set of information in search of an Idea."[9]

When discussing design-driven research methodologies, it is often debated whether we are expected to explain and describe our experiments.[10] Mostly, it is argued in favor of the results that *complete* the research by forming a whole entity rather than an additional *artifice*.
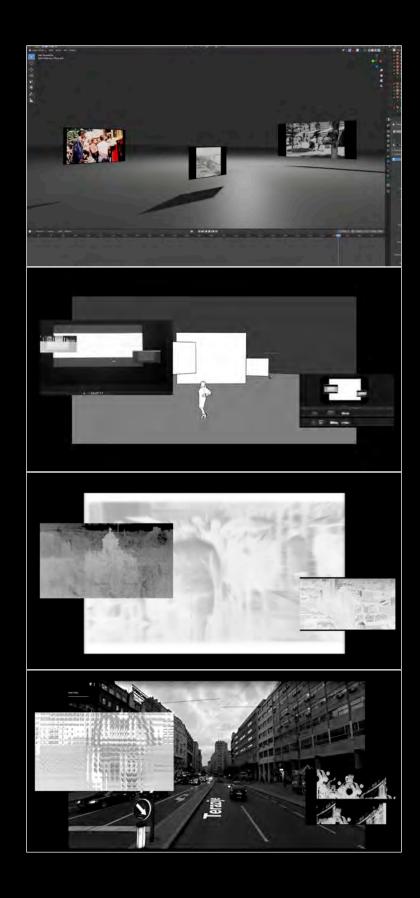
This polarity is partially a tempting reason to "intersect" such dualistic methods by mixing softwares, narratives, genres, easthetics, structures, forms, theories, etc. Contrariwise, assuming that it is not relevant to provide a detailed analysis of the experiments (as they should be self-evident), what if precisely the exercise of clarification makes us notice a second or third reading layer of interpretation? Besides, the fact that my experiment is "only" a document supposed to reveal a "behind-the-scenes" moment of *fabrication*, it can be understood as a method or tool of further investigation in the design process. Finally, as the piece is purposely left unfinished, its "undone" form invites us to appreciate the chaotic or confusing character of *intersecting* ideas, references, methods, sounds, and images. Suddenly, incompleteness becomes its signature, acknowledged in the synopsis.

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[8] Schrader (1970)

[9] ibid.

[10] For instance in the written part of the thesis or a public presentation.

Screenshots before, during
and after the editing of the
3-channel video installation
*Almost White City On Barely
Black Screens* (15', 2023)

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Kapil Paharia

Kapil Paharia is a multidisciplinary performance art and theatre practitioner based in Faridabad, Haryana, India. He gained his master at the Ambedkar University in Delhi.

Title: Body and Language design performing in puppet

Topic:

"Backstage visitors at a puppet show are notorious pinchers and feelers. They rap on heads to test construction materials: they squeeze bodies to find out what is inside: and they lift skirts to see how the legs are attached to the marionette's body"(Latshaw, 1978) by this I think George Latshaw means that after the performance, the puppet always treated as an object. And, the puppeteer's gender is always included with the object in performance. Also, this made me look at the gender in puppet, and sex too because both the terms are interrelated to each other.

The research will be dealing with the question of body and language in puppetry. It will try to discuss the various functions of the body of a puppet made of different kinds of material. How the material helps in also representing the sex and gender of a puppet, which also comes not from the material which the puppet is made, but the puppet artist. How is the puppet body responding to these norms and terms, and how language works in puppets? Do puppets have their own language?

Key question - How do we analyse the different ways in which the body and language perform in the practice and design of puppet?

This research will look to study how puppets develop social relations with the manipulator and the spectator. I will look at how caste, sex and gender play a role in analyzing the puppets as objects. The manipulator's or puppet artist's caste, class and gender also transfer to the puppets and create a new kind of political aura through these norms. Manipulators actions come from these categories through which the manipulator manipulates these puppets and transfer their experiences to the puppets or express through the gestures of these categories by repeating those actions by puppet and develops the language. The language of the puppet works through the sound, dialogue and the scripts, and the body language works through gesture, posture and movement.

I will look at the importance of puppet maker, puppet manipulator, and the voice behind the puppet and puppeteer in these separate categories and the togetherness of these questionable categories.

Puppet has a very unique existence in the world. The existence interplays between being a living and a non-living entity. Puppets do not live or exist until it is animated. In a puppet, the existence cannot be recognized, without

the body. This can be assumed because it is in collaboration between the two bodies; one of a puppet and the other of a puppeteer. Both bodies work with a series of manipulation that translates between each other so that they can create a language. This language is often created by the audience. The bodies of the puppets are constantly interplaying with the presence of the bodies of the human. Puppets exist because somebody creates them. They interact with the object. The objects look like they have a life. They are figures or bodies mostly consisting of the humanly looking limbs. When anyone makes puppets, they make the parts of the puppets in different pieces, and every piece represents a different part of the body. That part is a projection which resembles a human limb and used for locomotion in puppet. Limbs of puppet or puppet itself have to look like humans, because they are created for humans by humans, for telling or showing their histories.

Keeping all these concerns of the puppet and its practice, which is in constant negotiation between the puppeteer, puppet and the audience. These ideas do not have a fixed function within these practices. There are multiple bodies involved. Gender performs very differently and the language is always evolving. It is these functions of puppetry that makes it very interesting. This research will try to elucidate a few ideas that can help in unravelling the different problems that exist and also open a different understanding to look at the practice of puppetry.

Methodology:

The methodology I am going to use in the study of my research comes mainly from my lived experiences, practically evolved and self-reflective methods. It is an attempt at practice-based research, based on prior knowledge of the experiences. I have to adapt my research according to the material which I have found in the period of research.

I am going to look at puppet objects through the lens of my experiences as a practitioner of puppetry. I will be looking at the definitions created by the word and the meaning. I am going to use readings in this research to relate to the theory of these forms and also other theories which can relate and affect the practitioner.

I will also look at other practitioner work from the respective field. I will also talk to the artists from the puppet field at an international level, do interviews and use their experiences from their practice in this research. I would use puppet films and use of puppets in popular mediums and the representation of sex and gender and its language in animation with research on stage and street puppetry.

I want to read puppets as I understand them and relate to them as a practitioner, as an audience and as a researcher.

Pedram Pourghasem Omandani

Pedram Poughasem Omandani is a researcher specializing in the field of architecture and soundscapes, with a Master's degree from Estonia and Wageningen University. Previous research focused on "Soundscape in Landscape Architecture," inspired by a musical background. Currently he is enrolled at the doctoral program at the Czech Technical University (ČVUT) to investigate sound masking in urban design and architecture, with a goal to improve urban environments.

Investigating Soundscape Preferences, Evaluation, and their Relationship with Urban Design, Architecture, and Sound Masking

Soundscape perception and evaluation are crucial considerations in urban design and architecture. However, an additional aspect that can significantly impact the quality of urban environments is sound masking. Sound masking refers to the intentional addition of background sound to reduce the intelligibility and impact of unwanted sounds, thus enhancing acoustic comfort and privacy. In the philosophy of architecture, some philosophers and philosophical concepts are connected to the study of soundscape preferences, evaluation, and their relationship with urban design, architecture, and sound masking.

By considering the auditory experience alongside the visual and physical aspects, urban designers can contribute to the overall well-being and quality of life in cities, fostering a more holistic and immersive urban design approach. On the other hand By incorporating soundscape design principles, urban designers can address noise pollution and create harmonious soundscape design spaces that support various activities and functions. For example, in public spaces, such as parks or plazas, urban designers can consider the placement of sound absorbing materials, introduce natural sounds like water features or vegetation, or strategically design the layout to minimise noise intrusion from surrounding traffic.

Research Questions:

1. How does the contextual variability in different urban environments affect the effectiveness of sound masking techniques?

2. How can researchers capture and analyse the subjective experiences and individual variability in preferences and evaluations of sound masking effectiveness?

3. What are the challenges involved in integrating sound masking techniques into the urban design and architectural processes, and how can they be overcome

Methodology:

The methodology employed in this research involves several steps. Firstly, urban sounds are archived and categorised based on their different sound levels and distances from sound sources, providing a comprehensive database of diverse environmental sounds found in urban settings. Next, a virtual reality (VR) simulation is created, focusing on a specific area in the centre of Prague, chosen for its vibrant urban environment. The simulation

encompasses various activities and scenarios that represent real-life urban contexts, such as bustling streets, parks, cafes, and public squares.

Using VR technology, the simulation incorporates soundscapes by adding different sound profiles to each scenario. These sound profiles are carefully designed and tailored to simulate the effects of sound masking techniques and variations in urban design. The sound profiles may include the intentional addition of background sounds, altering sound levels, and manipulating the spatial distribution of sound sources. The VR simulation is designed with multiple variations, incorporating different combinations of sound and visual elements. These variations allow for the analysis of different reactions and perceptions of participants when exposed to various sound masking strategies and design suggestions.

Participants experience the VR simulation and provide feedback through subjective evaluations, surveys, and interviews, capturing their perceptions of acoustic comfort, privacy, and overall experiences in the simulated urban environment. The collected data, both qualitative and quantitative, are then analysed to identify patterns, preferences, and correlations between sound masking strategies, design suggestions, and participants' responses. The analysis aims to provide insights into the effectiveness and acceptance of sound masking techniques in enhancing acoustic comfort and privacy in urban environments.

Overall, this mixed-method approach, combining the use of VR technology, sound manipulation, and participant feedback, allows for a comprehensive exploration and evaluation of the relationship between sound masking, urban design, and individual experiences in an immersive and controlled environment.

Outcomes:

1. **Enhanced Acoustic Comfort and Privacy in Urban Environments:** Provide valuable insights and strategies for improving acoustic comfort and privacy in urban design and architectural projects through the effective integration of sound masking techniques.

2. **Optimal Sound Masking Strategies for Urban Settings:** Identify and recommend sound masking strategies that are best suited for different urban contexts, considering factors such as noise sources, building types, and cultural preferences.

3. **Quantifiable Assessment of Sound Masking Benefits:** Establish measurement tools and evaluation frameworks to assess the impact of sound masking on individuals' experiences, well-being, and performance in urban settings. Provide evidence-based data to support the implementation of sound masking in urban design and architectural decision-making processes

Akshatha Ravi Kumar

Akshatha Ravi Kumar is an architect - designer at LOXIA architects. She gained her master in architecture from the Czech Technical University (ČVUT) where she is conducting her PhD as well.

Mining-Induced Displacement and Resettlement:
A Retrospective of the City of Most

Short Reflection.

The City of Most in the Czech Republic is a testament to transformative urban design, particularly in the zone of mining-induced displacement and resettlement (MIDR). This research delves deep into the architectural vision that shaped the city, juxtaposing it with the lived experiences of its inhabitants over two generations.
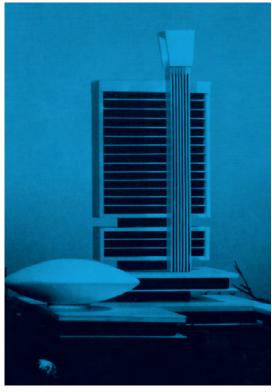
Through a meticulous analysis of the city's plans and designs, this study unravels architects' intent to reinvent a new city, drawing inspiration from the old while infusing modernist principles. Integral to this exploration, graphic representations vividly capture the evolution of spatial patterns and offer insights into architects' aspirations and the realities of urban transformation.

However, as cities evolve, so do their inhabitants. The City of Most 50 years post-resettlement presents a compelling narrative of space reappropriation. Inhabitants manifested spaces and functions differently than originally envisioned, highlighting the dynamic interplay between design and lived experience. Through a design lens, this research seeks to understand these shifts, reflecting on architects' design choices and the subsequent spatial narratives crafted by the inhabitants.

In conclusion, this study underscores the significance of analysing architectural design in urban studies. This prompts a reflection on how, as architects, the cities we envision and design are continually reshaped by those who inhabit them, emphasising the evolving nature of urban spaces and the importance of adaptability in design.

Illustrations.

Extended Abstract.

Mining-Induced Displacement and Resettlement (MIDR) is a major transformation that alters landscapes, communities, and lives. It has positive and negative effects, such as economic growth, tapping into resources, and displacement. Yet, it requires immense sacrifices, especially from the vulnerable. Relocating populations is not just a logistical issue but a major social upheaval. The City of Most in the Czech Republic exemplifies this change. Cities with their own history and identity often transform due to MIDR, becoming a laboratory where architecture meets human experience.

The MIDR paradox lies at its core: activities that promise progress, such as mineral extraction or infrastructure development, also cause disruption and displacement. Communities with long histories and traditions are uprooted, destroying their social structure. Displacement caused many consequences. Social connections were broken, and local economies were uncertain. Displacement can cause psychological distress, such as loss, identity crises, and difficulty adjusting. Quickly built settlements may lack infrastructure, creating further socioeconomic issues. This haste can compromise long-term sustainability for short-term solutions. Displaced people confront the loss of their homes and integrate into unprepared new environments.

Urban Design is future-oriented, aiming to create environments that meet human needs, goals, and well-being. However, MIDR lacks Urban Design engagement; sociologists, economists, and environmentalists have studied MIDR, but Urban Design remains absent. This was a major oversight. The layout of new settlements, public spaces, amenities, and spatial organisation all influence the quality of life for the resettled. MIDR projects may be short-sighted without urban design, prioritising immediate needs over long-term sustainability and inhabitant well-being. Not understanding this can lead to repeating past errors, creating places that satisfy immediate needs but do not promote flourishing and resilient communities. In MIDR, urban design is not just about making spaces but also about forming futures.

The 1975 "Image of Most" research by Jan and Ivana Benda was a pioneering endeavour, shedding light on the immediate sentiments and perceptions of those who witnessed the transition from the Old Most to the New Most. This study provides invaluable insights into the immediate aftermath of resettlement, capturing the raw emotions, challenges, and adaptations of a community grappling with profound changes. However, similar to many pioneering studies, this study has some limitations. One of the most significant factors is the temporal scope. While it offers a snapshot of a community in transition, it does not account for the evolution of these sentiments over extended periods.

Fast forward to the present, the City of Most has undergone further transformations. The initial inhabitants of New Most have aged, and a new generation with no personal memories of the Old Most has come of age. This generation's perceptions, experiences, and relationships with their urban environment will likely be markedly different from those of their predecessors. They have inherited a city shaped by the MIDR, but their understanding and relationship with it are mediated not by personal experience of displacement but by the stories, histories, and the physical environment in which they have grown up.

This presents a unique opportunity for future research. By juxtaposing the immediate post-resettlement perceptions captured in the 1975 study with the current sentiments of a

generation born and raised in New Most, we can gain a deeper understanding of the long-term impacts of MIDR on urban communities. This longitudinal perspective is crucial for several reasons. It allows for a more comprehensive understanding of the socio-spatial dynamics of resettled communities, offers insights into the evolving challenges and opportunities these communities face, and provides valuable lessons for future MIDR projects, ensuring that they are not only logistically sound but also sensitive to the multi-generational impacts of displacement and resettlement.

In essence, while the 1975 "Image of Most" research provided a foundational understanding of the immediate impacts of MIDR, the current study seeks to build upon this foundation, offering a more nuanced, multi-generational perspective on the City of Most and its inhabitants.

Building on the foundational understanding of the City of Most's transformation, the methodology adopted for this research is both comprehensive and multifaceted. At its core, this study seeks to juxtapose the theoretical underpinnings of urban design with the tangible realities of lived experiences.

Examining the city's archival plans and designs is essential. These documents, with annotations, sketches, and notes, show architects' technical and philosophical/aesthetic choices. They reveal the urban design and the motivations behind it. This research seeks to understand architects' vision for the New Most by examining their plans. It considers their ideas for public space, community hubs, green spaces, and transportation networks. How did they combine Old Most elements while creating a new future? How did modernism's focus on functionality, simplicity, and progress shape their designs?

This archival analysis was complemented by graphic representations. Maps, interviews, and other visuals documented a city's spatial evolution, showing changes in layout, land use, and architecture. They also illustrated architects' goals versus actual outcomes. This visual approach is useful for identifying where design intent and lived experience match and where they differ.

However, cities have more than just bricks, mortars, and design principles. They are living, breathing entities shaped as much by their inhabitants as by their designers. To capture this aspect, this research employs qualitative methodologies, delving into the lived experiences of the inhabitants. Through interviews, surveys, and observational studies, this study seeks to understand how spaces have been reappropriated, modified, and personalised by the inhabitants once designed with specific intents. This exploration sheds light on the dynamic interplay between design intent and lived reality, thereby revealing urban communities' adaptability, resilience, and creativity.

Drawing from the intricate tapestry of the City of Most's transformation, several pivotal insights emerge that hold profound implications for design-driven research in urban studies. With its layered history of displacement, resettlement, and evolution, the city serves as a microcosm for the broader challenges and opportunities inherent in urban design and planning. One of the primary takeaways is the fluidity of the urban spaces. While architects and urban planners lay down a city's foundational blueprint, inhabitants breathe life into it, often in ways unforeseen during the design phase. This organic evolution of urban spaces, driven by residents' needs, aspirations, and innovations, underscores the importance of design flexibility. Rigid prescriptive designs can often lead to friction between the intended use of spaces and the actual needs of their inhabitants. Hence, adaptability has emerged as a desirable trait and is necessary for urban design.

The City of Most's story exemplifies the link between design intent and life experience. Design-based research offers tools to imagine urban futures, while inhabitants' experiences test these visions. This interaction is evident in high-stake, challenging contexts like MIDR.

Finally, this research underscores the importance of a multidisciplinary approach. Urban challenges, especially those that are as complex as the MIDR, cannot be addressed in silos. Collaborative and cross-disciplinary efforts that bring architects, sociologists, environmentalists, and other stakeholders are crucial. Such collaborations ensure that urban solutions are holistic, sustainable, and attuned to the diverse needs of their inhabitants.

In essence, the City of Most's narrative serves as a poignant reminder of the complexities and dynamism of the urban environment. It champions the cause of design-driven research, emphasising its role in envisioning urban futures and ensuring that these visions are grounded, adaptable, and inclusive.

Illustrations.

Kostel Nanebevzetí Panny Marie po
přesunu, bezprostředně po ukončení
stabilizace zdiva a demontáži
ocelových konstrukcí.

Městské divadlo a morový sloup
se sochou sv. Anny Samotřetí,
I. náměstí, 2014.

Diana Salahieh

Diana Salahieh is an urban landscape researcher and landscape architect and planner. Currently, a PhD student at the Faculty of Architecture at the Czech Technical University in Prague, specializing in concepts of walkable cities and the experience of walking in the city. In parallel, she conducts research on the post-conflict recovery of Aleppo with a particular interest in cultural heritage, storytelling, memories, and socio-urban values of heritage.

Cities as Walkscapes: Tracing (Long-distance) Urban Wallking Paths

Short Reflection

This PhD research critically explores the concept of the Walkable City and the capacity for urban design and planning strategies to embrace the experiential dimensions of urban walking. In contrast to conventional approaches that view walking primarily as short-distance transportation, this thesis employs narrative and Design Driven research methodologies for examining urban settings in relation to their local walking experiences and atmospheric possibilities.

Taking Prague as its primary case study, the thesis begins with a historical reading of the city as walkscapes. In tandem, it traces the evolution of pedestrian infrastructures, their conceptualization and impact on urban walking practices. Central to the thesis is its positioning at the intersection of how the city, urban design, and planning are conceived, imagined, and experienced.

Drawing inspiration from the historical value of trails in storytelling and landscape appreciation, this research takes an exploratory approach to tracing urban walking trails and harnesses the potency of imagination to envision walkable urban spaces.

This research aims to yield insights into integrating (long-distance) urban walking within metropolitan contexts, applying narrative tools in urban design and planning strategies, and enabling architects and urban planners to address the challenges of contemporary fast-paced and digitally dominated urban lifestyles.

Extended Abstract

Background

"The act of walking is to the urban system what the speech act is to language."[1]

The notion of "Walkable Cities" has arisen as an aspiration for promoting healthy urban lifestyles and aligning with Sustainable Development Goals in Europe. Initiatives such as Vienna on Foot (*Wien zu Fuß*), Paris's 15-minute City, and the International Charter for Walking prioritize pedestrian mobility projects to retrofit urban spaces and encourage walking as climate-friendly transport. This aspiration has roots in Jane Jacobs' criticism of modernist planning and Jan Gehl's influential work "Cities for People", which have inspired contemporary urban studies to focus on the analysis and planning of people-centric, walkable urban spaces.

Within the plethora of recent research studies, terms such as walkability, active mobility, and pedestrian accessibility were developed to quantify and score walkable characteristics of urban spaces and cities. In particular, the notion of 'walkability' consolidated factors that constitute rating systems (i.e., Walk Score), thus acting as a link between research and policy formulation[2]. Today, the interpretation of 'walkability' continues to evolve in response to shifting perceptions of mobility, primarily driven by the pursuit of sustainability, well-being, and economic advantages for pedestrian-friendly urban spaces [3].

However, reducing walking to a means of transportation and short distance pedestrian accessibility overlooks its profound psychosomatic dimension as a social, contemplative, and aesthetical practice. Furthermore, the walking metrics are generally detached from "the differentiated nature of our spatio-temporal, embodied, and social experiences on foot"[4]. The simplified assumptions of what constitutes walkable urban space in planning and transportation policies undermine "the relationship between walking and the ways in which cities are imagined and experienced"[5]. Urban walking practices are diverse in purpose, nature, and duration. Therefore, universal solutions towards pedestrianizing urban areas through mere diversity and connectivity criteria shy away from the multi-scalar essence of walking experiences[6].

Walking frees the mind from the burdens of contemporary fast-paced digitally dominated urban lifestyles[7]. Walking stimulates emotions and contributes to developing a sense of awe and belonging to one's environment. Walking stands as a guard against the erosion of the mind, the body, the landscape, and the city[8]. Therefore, planning and designing cities should accommodate for diverse and meaningful walking experiences that surpass meeting only climate and sustainable development goals.

Driven by the poetic and therapeutic capacity of walking, and its meaning-generating force, this Thesis raises the important question: how can urban planners develop functional and walkable

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[1] de Certeau, *The Practice of Everyday Life.* p.97

[2] Shields et al., "Walkability."

[3] Shields et al.

[4] Middleton, *The Walkable City*. p.17

[5] Middleton.

[6] Mezoued et al., "THE WALKABILITY OF THE METROPOLITAN CITY CENTRE AS LEVER FOR BRUSSELS'S MOBILITY TRANSITION."

[7] Gros, *A Philosophy of Walking*.

[8] Solnit, *Wanderlust*.

urban environments that embrace the sensory essence of walking and provide meaning to the urban walking experience?

Theoretical and Methodological Approach

The Thesis kick-starts with a phenomenological approach to understanding walking[9]. Viewing walking as a mode of experience accentuates the rhythmical and experiential characteristics, as a means and an end to urban spaces, in turn promoting and enhancing the sense of place[10]. A phenomenological lens allows to shed light on concepts of *atmosphere* and *affordance* and their interplay in the study of urban walking experiences. Recognizing the atmosphere of urban spaces and architecture was historically an integral part in processes of city-making[11]. Furthermore, using narratives and poetics in the architectural design analysis helps to understand the ability of the urban environment to create specific atmospheres, emotions, and thereby guide everyday decisions[12].

Methodologically, the Thesis is interested in both theoretical and Design Driven Research approaches to developing and building narrative tools for its explorative research process[13]. Urban walking is influenced by the mesh of paths meandering through and intertwining in an urban environment. In that sense, paths and the sequences of movement are like stories that unfold over time and 'cannot be perceived as a whole all at once'[14]. Therefore, narrative means will be cultivated to offer alternative readings of urban space as walking environments (walkscapes), illustrate their capacity for walking experience and envision walking possibilities.

Case Studies

The Thesis will incorporate two case studies: Prague (Czechia) and Aleppo (Syria). Historically, Prague was recognized for its picturesque strolling experiences and its rich mosaic of architecture and urban spaces. However, Prague today is a fast-growing metropolitan capital whose urban fabrics are fragmented and ruptured by modern infrastructures. Unlike its neighboring capitals, Prague lacks an urban walking design strategy. This presents a unique opportunity to explore creative possibilities that will embrace Prague's poetic urban landscape, frame it within its contemporary socio-cultural context, and reflect on its diversity of walking imaginaries.

Aleppo city similarly holds a historically multi-layered urban morphology and architecture but is currently suffering the latent state of a post-conflict recovery. Applying a Walkable City analysis holds potential for improving revitalization and utilization of the diverse urban spaces and walking experiences it can provide. Using Aleppo as a case study will allow exploring the narrative methods and discuss their potential for adaptation of urban design strategies in different cultural contexts. Thus, the Thesis research questions can be further elaborated as:

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[9] Matos Wunderlich, "Walking and Rhythmicity."

[10] Matos Wunderlich.

[11] Perez-Gomez, *Attunement: Architectural Meaning after the Crisis of Modern Science*.

[12] Perez-Gomez.

[13] Havik, *Urban Literacy*; Gantois, "A Rambling Field Role for the Heritage Practitioner"; Moura and Bernal Miliàn, *Repository. 49 Methods and Assignments for Writing Urban Places*.

[14] Solnit, *Wanderlust*.p.201

How can the intersection of narrative methods, phenomenological approaches and walking experiences guide the development of urban design strategies for enhancing walkability in the city of Prague?

How can intersections of such methods and approaches contribute to the revitalization and recovery of post-conflict cities (i.e., Aleppo)?

Dimensions and Objectives

The Thesis delves into three dimensions of investigation that will pour and interweave different forms of knowledge and exploration. The objectives are designed to overlay urban settings with local walking experiences, and plan possibilities of walking scenarios and trails.

1   Investigating (and reading) WALKSCAPES

The Thesis begins with a historical reading of cities as walkscapes to illustrate how walking was imagined, designed for, and experienced in the past. The first objective will be to trace the evolution of pedestrian infrastructure in relation to urban walking practices. The purpose of this interplay is to uncover the role, impact and meaning of old and new pedestrian infrastructures within the stories they once held, still hold, and can potentially carry on.

Observational walks will be utilized to illustrate a descriptive understanding of the function and atmosphere of these urban spaces using multi-media mapping and visualization. The aim is to read the city as a web of paths that mold the urban walking motion.

2   Narrating WALKING EXPERIENCES
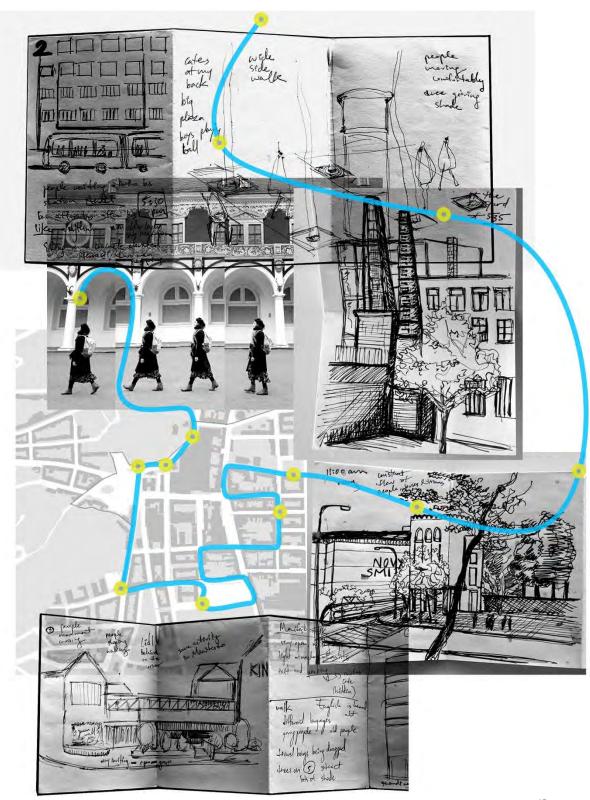
This dimension will gain insight into the embodied experiences of both locals and visitors from their walking encounters with the urban environment. The goal is to explore how people walk the city and how their walks are facilitated and obstructed, both physically and emotionally. Furthermore, the aim will be to identify the urban environment's properties/characteristics that contribute/create these various feelings/perceptions. Walking interviews will be one potential tool utilized for this objective.

In general, the goal is to create a palette of experiential walking dimensions in urban spaces in relation to the walking experiences from the observational walks (1st dimension) and walking stories.

3   Tracing WALKING TRAILS

This dimension, and the Thesis in general, underscores the intrinsic value and potential of paths as a framework for shaping walking experiences. Trails and paths form a foundational backbone of cites, having shaped cultural practices, settlement and movement patterns, and the urban design in cities throughout history. The Thesis will explore how walking trails are currently marked and incorporated within the urban environments.

Finally, the dimensions are interweaved to illustrate how walking experiences are influenced by the web of paths in the city. Walking experiences and walkscapes will be combined to explore imaginative and playful site-driven urban design and planning strategies.

Exploring the walking experience through the narrative methodology of *Interactive Walking*[15] in Smichov neighborhood, Prague; 2023.

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[15] Gantois, "Built Heritage as Imagines Agentes."

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Karlo Seitz

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Atmospheric research of historical architecture
- drawing feelings in space and time

Research of atmospheres is a growing filed within academic philosophy. Authors like Peter Sloterdijk, Gernot Böhme or Tonino Griffiero have all taken part in the debate which, among others, questions whether emotion one experiences is something exclusive to the individual or is perhaps a different kind of substance which permeates or is (co)generated by the space. The possibility of latter makes research of atmospheres of crucial importance for architecture, as the profession which shapes and organises space. In the last few decades this was indeed recognised by theoreticians such as Alberto Pérez-Gómez as well as prominent practitioners such as Peter Zumthor, Juhani Pallasmaa and Philippe Rahm, all of whom emphasised the importance of bodily experience of space. Some of their theoretical concepts are now scientifically supported by the advancements in neuroscience which increasingly changes the way we understand the interaction of our minds and bodies with the surrounding environment. This has, in return, prompted an interdisciplinary approach in the recent scientific work by young scholars/architects such as Elisabetta Canepa who have therefore positioned the research of atmospheres at the core of the contemporary architectural theory.
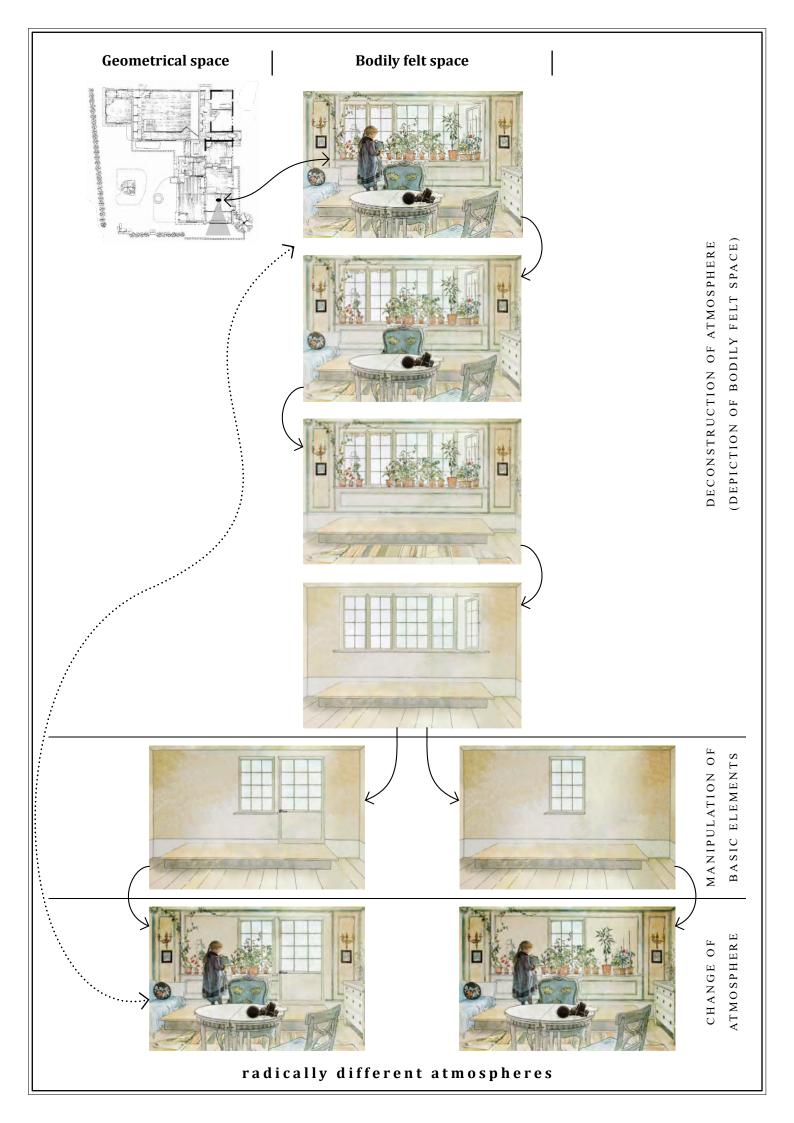
Aspiration of my doctoral research is to expand on this knowledge by applying it to the field of history of architecture. Research focuses on one specific building type in a local context - late nineteenth-century historicistic villas in Zagreb, whose architecture did not only incorporate a certain function, but also strived to embodied cultural identity, concept of morality and idea of modernity in a moment of profound economic, social, and cultural change. Working hypothesis suggests that houses were designed and built not (just) to meet the pressing problem of lack of housing but also to create a specific atmospheric frame, fit for the citizens of a new, industrial society. Experimentation with shape, size, ornamentation, relation to the environment were all conducted in order for built environment to arouse certain emotional reactions for the inhabitants and by-passers alike. If we then confront the architecture of historic buildings with the bodily experience of light, colour, smell, heat, sound, or texture

we slowly understand that their architecture intentionally or coincidentally stimulates radically different emotional effects within the same building. This in return, exerted a profound impact on everyday bodily experience of their users and, to use the definition of philosopher Gernot Böhme, defined "*person's being-in-the-world as a whole*". For the inhabitants, this was of crucial importance, perhaps more than the ornamentation or even spatial organisation itself, and yet is not extensively researched in historic architecture.
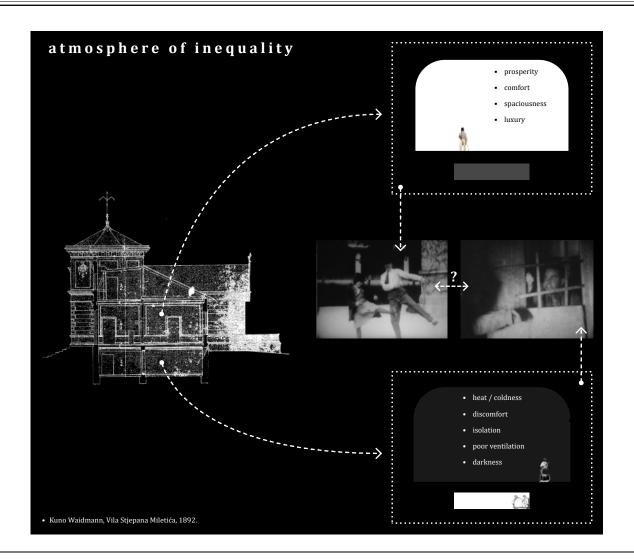
The core challenge of atmospheric research lays in the clarification of the cause-and-effect relationship between the geometrical space in which architecture is conceived, designed and often visualised and the consequential emotional atmosphere we experience in built environment. This, in return, closely intertwines with the question of research method within the specific field of architecture, as profession which consists of both artistic and technical aspects. The underlying question is: How architecture, conceived and designed in geometrical space, contributes and participates in the creation of this felt atmosphere? In search of a new method of understanding and identifying atmospheres, preliminary research draws on the recent knowledge acquired by neuroscience on *(Gibsonian and non-Gibsonian) affordances, mirror neurons* and *motor knowledge* which explain how brains recognise the overall meaning by correlating the observed environment to our bodily experience. As neuroscientist Vittorio Gallese explains: "*...what we see is not the simple visual recording in our brain of what stands in front of our eyes but the result of a complex construction whose outcome is the result of the fundamental contribution of our body with its motor potentialities, our senses and emotions, our imagination and our memories.*" In essence, the particular atmosphere, but also the visual representation of particular atmosphere is felt as such, because of our mind's interaction with the numerous objects, their colours and textures and our perceived ability to interact with them (regardless of their two-dimensional representation).
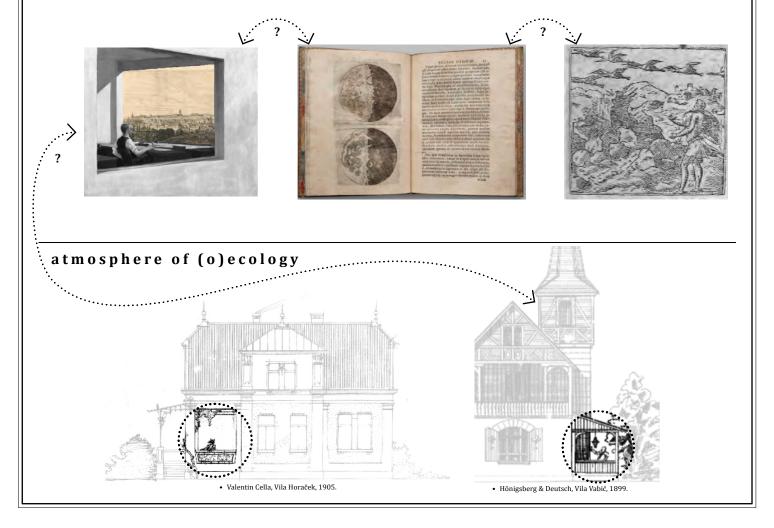
This cognition gives incredible potential to the medium of architectural drawing / collage which has the power not only to visually represent, but can also synaesthetically arouse numerous senses. In my presentation I explore how architectural

drawings / collages can be used as a fitting scientific tool for reaching cognitions in the specific field of architecture. I aim to demonstrate how visual manipulation, elevated to the system of thought, can deconstruct the felt atmosphere in regard to the role of basic architectural elements which build it. This new method could furthermore illustrate how manipulation of such elements deeply changes our overall perception and feeling of a space. Moreover, I would like to examine how drawing or collaging can be used as a thought process to identify atmospheres within historic buildings and appropriately emphasise their effects on our body and our mind, thus revealing hidden atmospheric aspects which must have been clearly felt not only by its inhabitants, but also, as closer inspection of archival drawings suggests, by architects alike.

Lastly I hope to demonstrate how production of allegorical, in essence inaccurate drawings and collages which nonetheless clearly illustrate various concepts is a practice deeply rooted in western intellectual culture. The heritage of early baroque emblematas can therefore be recognised in some of Europe's first scientific papers where images did not covey mathematically correct relations, but more importantly - the overall feeling or the abstraction of certain concepts. Such visual way of thinking is of crucial importance for the profession of architecture and perhaps vital for proper understanding of atmospheres for which purpose it is carefully explored by this preliminary research.

DECONSTRUCTION OF ATMOSPHERE
(DEPICTION OF BODILY FELT SPACE)

MANIPULATION OF BASIC ELEMENTS

CHANGE OF ATMOSPHERE

radically different atmospheres

atmosphere of inequality

- prosperity
- comfort
- spaciousness
- luxury

?

- heat / coldness
- discomfort
- isolation
- poor ventilation
- darkness

• Kuno Waidmann, Vila Stjepana Miletića, 1892.

?   ?

?

atmosphere of (o)ecology

• Valentin Cella, Vila Horaček, 1905.

• Hönigsberg & Deutsch, Vila Vabić, 1899.

<u>Urška Kristina Škerl</u>

Urska Kristina Skerl studied Landscape Architecture in Ljubljana and Architecture and Urbanism in London. She takes particular interest in informal and participatory ways of working and new ways of living at a slow pace in a fast changing society. Urska is investigating politics and architecture of ruins and common space, where she wishes to find a crack to open up the in-between space. She runs the Uberarchitecture platform.

ARTEFACTS: Uberarchitecture
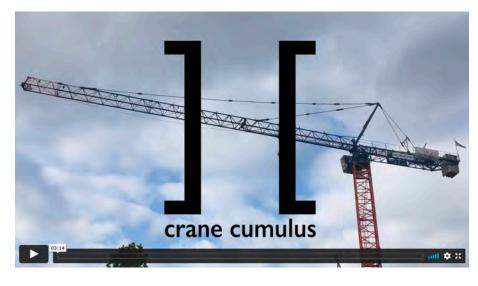
The below-written manifesto was initiated as an artistic exploration of possibilities connected to a vision of an era when architecture was recognised as obsolete. In a prescribed scenario cranes themselves become architecture, the construction giants that hold cities up to the sky, leaving soil unobstructed for the use of other dependent ground-dwellers.

While this is an irrational idea, it contains a strong charge towards developing a new kind of paradigm where ubearchitecture becomes a term describing its ambition.
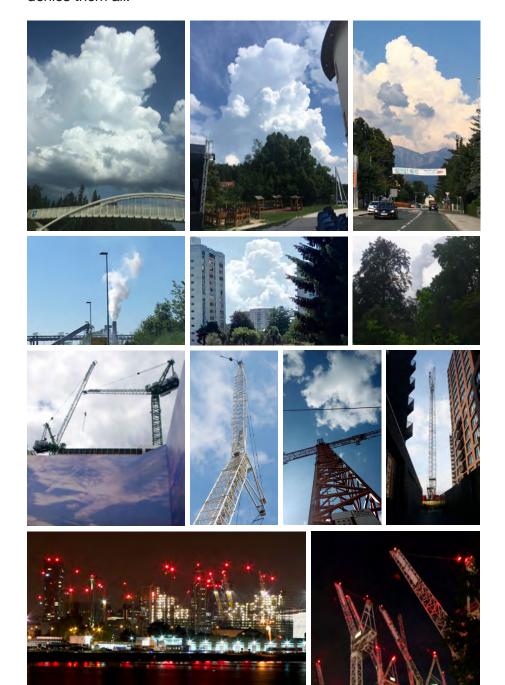
Uberarchitecture poses a question for research, What kind of (post)architecture do we have in mind (is it architecture at all?), Could it be connected to Nietzschean notions, Are we talking about the digital/virtual cloud data, Is it the top coat of an architecture object, the point where skin translates to the environment, is it a naturally formed cloud, is it a satellite image from Space, the institutional top-down imposed overlay?

ARTEFACTS: Uberarchitecture

crane cumulus

It is necessary to limit and ground ubearchitecture in a way that it becomes a term to work with. Difficult to grasp, it is all of the above and none in particular. Perhaps uberarchitecture is just construction cranes. It pierces all the layers of society that make architecture possible - from material extraction and their taking shape, power dynamics involved, economy, and personal stories - and radically denies them all.

Besides artistic, uberarchitecture is a philosophical exploration, dynamic and constantly evolving, self-overreaching if we are to transpose overhuman's qualities described by Nietzsche onto it. In a flood of catastrophes induced by humans, geopolitical tensions, and insensitive material extraction, humanity could benefit from grace embodied in dancing cranes, in uberarchitecture.

uberarchitect

Manifesto: Crane as Uberarchitecture

Architecture is only a ruin, a shell, an infrastructure point, a vortex in the web, the envelope of one's body. A house is not a home, it is an economy, a token of privately owned space. Dwelling in cloud architecture, screening our brains out, immaterial as it seems is only but. Architecture giants are denying their existence with reflective facades, trying to mimic immateriality but at the same time their veil is mirroring the clouds. Heads up in the digital sky, let us explore. The fringe is nonexistent, we have all been sucked and integrated into a city machine.

Imagine hanging suspended from a crane, hovering above ground in a swarm of boxes of living cells. Cranes are connected into a fleet - and organise themselves according to the wind and the sun, to catch as much energy as possible. They are erected on top of a recycled city where the asphalt has been crushed and ground and put back to hollowed-out mountains and precious metals are poured back into the veins in the soil. We live in a crane forest as if we never left the garden, or fell off the tree as our ancestor Lucy did. The ground starts to replenish and pioneer species start to inhabit it. The ground is growing towards us, as we live among treetops, sharing the birds' perspective.
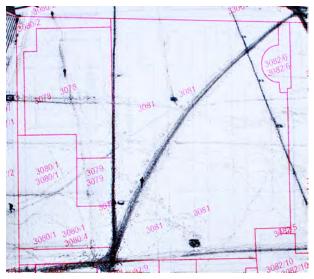
Living boxes are computable and so living spaces are arranged into numerous patterns created by the need for reorganisation. We also manoeuvre crane movements with a joystick, making cranes perform the most beautiful dance and draw new light constellations. As constructivist matter extruded to 4-dimensional space. A post city is an animist city, programmed to be natural not smart - having roots, photosynthesising, organising in a swarm or a flock.
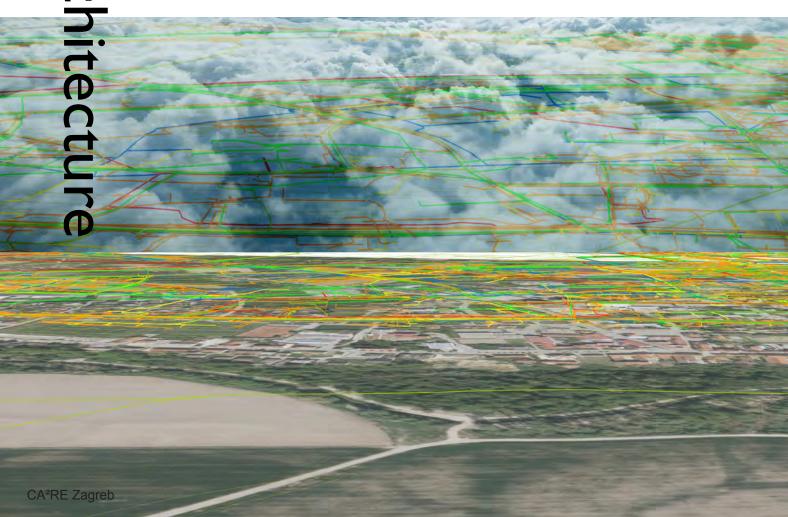
ARTEFACTS: Uberarchitecture

The individual interface to the city is your chair. You are inhibited in the crane as you are lifted from the ground into the sky, dwelling among the ethereal. The chair is interactive with your body feeding information back into the fleet. What you can always do is stand up.

A crane is also a metaphor for a construction worker. Crane is uberarchitecture, the construction element that is always one floor above the unfinished concrete shell below, progressing day by day higher into the sky until one day dismantled and displaced somewhere else, to an ever-new construction site. Soon the image of this structure becomes the stack. While former industrial aesthetics are appreciated and lego blocks creative, the repulsiveness of poor living conditions selling out as cool or desired is not acceptable. living in a contained, self-contained, containered society I'd rather live in the city of Earth, no nomos, nowhere, where the edges smudged and the lines blurred.

[architecture is dead]. Long live the crane.

Ana Skobe

Ana Skobe is a photographer with an architectural background who lives and works between Ljubljana and Zürich. She graduated in 2019 from the Faculty of Architecture, University of Ljubljana, with a master's thesis on architectural photography, and is now continuing her theoretical endeavors in doctoral studies. Ana works both on personal research and commissioned projects. Her photographs have been exhibited and awarded, as well as published in domestic and foreign architectural and design magazines. In them, she conveys her experience of space, not only describing the architecture but combining the idea materialized in the object and its relationship to the space with her own idea of the same object. She is interested in how it can be perceived - what is the potential of its specific spatial solutions - and calls that (re)constructing the architecture.

CONTEMPORARY (ARCHITECTURAL) PHOTOGRAPHY AND MODERN ARCHITECTURE

"To think about modern architecture must be to pass back and forth between the question of space and the question of representation. " (Colomina, 1996: 13)

Throughout their collective history, photography and architecture share an ever-evolving relationship that began in the 19th century with the invention of photography. When Nicéphore Niépce discovered heliography, or 'sun drawing' in 1822, after 8 hours of exposure, the first light-resistant photographic image was created, which we know today as *View from the window*. Due to the long exposure, the procedures at the time were suitable for photographing static objects, so it is not unusual that the first photographers chose the built environment as their subjects. The ever-changing and multifaceted dynamic between architecture and photography further and extremely rapidly developed during the modernist era. At that time, it lastingly changed the conditions of architecture (Colomina, 1996). The first close collaborations between architects and photographers were established, buildings became valued objects of photographic images, and photography became an indispensable part of architectural production. In the 20th century, architecture became deeply, perhaps irrevocably, connected to its photographic image. In his book *A Concrete Atlantis*, architectural critic Reyner Banham pointed out that the modern movement was "… the first architectural movement in the history of art based on photographic evidence rather than on the ancient and previously unavoidable techniques of personal inspection and measured drawings" (Banham, 1989: 18). The work of many architects has become (worldwide) known and recognized precisely through photographs and printed media. Being a modern architect meant that your work was photographed and published. But the photographic image also needed an effective means of transmission - the mass media - in order to reach a wide audience. As architectural historian and theorist Beatriz Colomina noted, "Modern architecture becomes 'modern' not simply by using glass, steel, or reinforced concrete, as it is usually understood, but precisely by engaging with the mass media: publications, competitions, exhibitions." (Colomina, 1996: 73). With the advent of mass media - and later the World Wide Web - there was a veritable expansion and hyperproduction of images. The problematic consequence of this is that the emphasis in the reception of the built environment began to shift from the built architectural object to its photographic image. According to Colomina, the processes of production and reproduction of architecture overlap within the continuous cycle: architecture is no longer produced only at the construction site, but more and more displaced into the rather immaterial sites of architectural publications, exhibitions, journals. (Colomina, 1996: 14) Photography was therefore one of the important modern conditions of architecture, so it is justified to claim that the understanding and designing of modern architecture is closely related to the understanding and practice of architectural photography. The close connection between architecture and architectural photography is still relevant today. This connection or more precisely - its specific dimension - is also the subject of this research. In the presentation, therefore, I will not focus on the relationship between modern architecture and modern architectural photography, nor will I emphatically explore the relationship between contemporary architecture and contemporary photography. I will focus on the discussion of modern architecture through the medium of architectural photography. I will be interested in the question of how we think modern architecture in contemporariness through the medium of contemporary architectural photography. In other words, **I will be interested in contemporary photography of modern architecture: its reconstruction of the space and materiality of modern architecture.**

Purpose and objectives

In the last decade, there is a resurgence of interest in the evaluation of the legacy of architectural modernism, its aesthetics and ideology. This manifests itself in various ways, such as a nostalgic preoccupation with the so-called 'remnants of the future'. Mass media, architectural exhibitions and social networks through which images spread with the speed of light and anchor in the popular culture
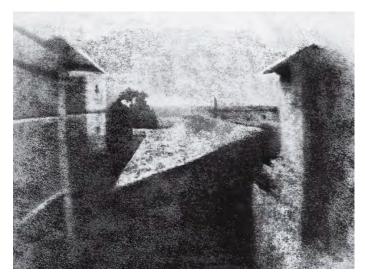
of today, contribute to this to a large extent. **My view is that architectural photography as a mechanism of depicting/viewing the world plays a key role in this. It arouses fascination with modern architecture all over the world again and again, so I will be interested in a specific way of returning to modern architecture, or the specific relationship of contemporary architectural photography to modern architecture. I will be interested in those works or those photographers who return to the idea of modernism or to a set of ideas that have been materialized to some extent in buildings and urban complexes, in such a way as to reveal those of their potentials that are worth pursuing. So, I am not interested in a sentimental return to the past, but in opening up architectural themes and questions relevant for contemporariness. Modern photography allows us to see modern architecture in a new way, in its power, its spatial and social potential.** Furthermore, the relationship between the two – contemporary photography and modern architecture - is not one-sided, but mutual and constantly complementary: architectural photography can develop its (photographic) potential precisely by engaging with modern architecture, while architecture is revealed through the medium of photography in its relevance for contemporariness. My purpose is therefore to define and explain the outlined specifics of the connection between modern architecture and contemporary photography. In doing so, I will originate from relevant literature in the fields of theory, history of architecture, philosophy, and architectural photography. I will define and explain three key concepts - **ABSTRACTION, HETEROTOPIA, MATERIALITY** - which act as a kind of intersection between the two practices - the practice of architecture and the practice of photography. My goal is to present these concepts and show how they are re-actualized through contemporary photography of modern architecture.

Banham, R., 1989. A *concrete Atlantis: U.S. industrial building and European modern architecture, 1900-1925*. Cambridge (Mass.); London: The MIT Press.
Colomina, B., 1996. *Privacy and publicity: Modern architecture as mass media.* London: MIT Press.

Design driven research

I understand design driven research as a possibility to develop the field of architecture further with new knowledge and collaborations. I am interested in the question of architectural photography as a specific viewing mechanism that not only represents but also actually co-creates an architectural object. I will try to show that today architectural photography can help not only to understand, but also to see as a starting point for further thinking, architectural ideas, and considerations of architecture from the period of modernism, which still inspire our contemporary visions of architecture and its role in society. This is the power of photographic (re)presentation - that it opens up questions and thoughts about architecture. The expected result is the consideration of the connection between modern architecture and (architectural) photography through selected concepts, which are re-actualized through contemporary photography of modern architecture. This will also be a kind of answer to the question of what photography brought to architecture and how the two creative thinking practices are connected.

1 Niépce: *View from the window,* 1826

2 Beate Gütschow: *S#14,* 2005; an example of returning to the ideas of modernism

Danica Sretenović

Danica Sretenović works as an architect with localized utopias – places, concepts and practices – currently dedicated to the production of creative workplaces, cultural programs and education formats within the feral construction site Krater. Operating from the diverse background crossing architecture and design, education, critical theory, curating, film making, public relations she is equipped to conceptualize unexpected tactics, strategies and interventions. In an attempt to redraw the territory of the public she engages with archives, ruins, cartographies, stories, urban urgencies. She currently leads the School of Feral Grounds with Gaja Mežnarić Osole. Her work was featured at several international film festivals and exhibitions venues and is awarded the highest national recognition in architecture – Plečnik's prize.

Resituated cartographies: critique of temporary use in city planning

With the shift in the socio-political context from socialism to an open market economy that took place after the separation of Yugoslavia, it became common practice that state/commonly-owned land was either transformed into privately-owned real estate or left abandoned for an indefinite period of time. [1] As a result, some prominent city scapes that had previously accommodated public infrastructure, industry or military applications were repurposed, and following the 2008 crisis, kept in a state of never finished construction sites. [2] Two of such examples are situated at the intersection of Dunajska and Topniška streets in Ljubljana, where normatively uncontrollable places intersect – architects Plečnik Bežigrad Stadium to the north and the area of self-sustained urban ecology of Krater to the south. What both of these places have in common is that they exist in a state of incompleteness, representing a specific typology of space that is not defined by spatial regulations. The contribution intend to challenge the practice in spatial planning which addresses incompleteness as a status to be resolved, an anomaly that needs to be eliminated through the injection of predefined programs and regulations of ownership structures. This state of spatial incompleteness is essentially perceived as abandonment, neglect and lack of hygiene. Furthermore, over the past decades media often portrayed both of above examples as problematic, posing a threat to an otherwise well-managed city and burden to its residents.[3]

Common to unregulated (incomplete) urban situations, is their distinct physical presence which surpasses their primary function death. However visible physical decay materializes operations that normally stay hidden, namely political and financial forces which direct occupation and creation of space. In that sense, such places are anomalies which resist being categorized as luxurious assets in the spatial trade - their visible imperfect state functions to obstruct "the order of things". Even without an assigned patron, without an architect who could repair anomaly and without public approval/glorification, counter-spaces are actors in space. This particular function indeed lacked terminology. The term "ruins" implies the state of the object, while such territories act more like a subject – with their imperfect presence they repetitively interrupt the context in which they are placed, regardless from what their prescribed function should be.

To shift the paradigm of urban development which downfalls in social and environmental inequalities - pollution, extraction, devastation of biodiversity, etc we will oppose idea of unlimited growth with feral tactics, creating the condition for the new urban (ecologies). The paper analyses alternatives to unlimited urban growth, starting from often invisible though instrumental operations fueling urban inequalities - physical manifestations of neoliberal governance models and policies, protocols of land trade and the lack of legislation to acknowledge multispecies spatial rights. How to treat such knowledge as the object of spatial politics? To exercise viable alternative to the neoliberal city production we will track recent histories of transformations of few exemplary typologies of wastelands to reexamine categories of ownership, user, land use, programme, heritage (and the possibilities to subvert existing categories within cultural programming and from the multispecies point of view).
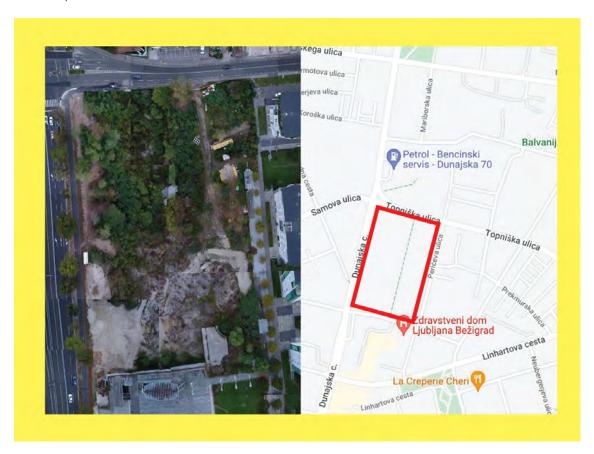
For each respectable location, we will compare predominant public image (present in media, people's opinions, development plans) with the actual - situated social, ecological and spatial potency of the site. The eco-social value is often excluded from a public debate on city planning. To form a valid argument from the position of city planners and cultural producers, we will try to construct the site's eco-cultural histories to claim its futures while working with accessible archive photographs and plans, satellite images of the vegetation growth over the years, soil analysis, heritage and protection protocols, personal narratives, etc. It is an attempt to support future urban ecologies driving from the transitional histories of the sites, which are left out of sight of the planning strategies and wider public. [4] The variety of cases should provide starting argumentation for what could be a new city typology.

1 Čukić, Iva, and Jovana Timotijević, eds. *Spaces of Commoning: Urban Commons in the Ex-Yu region.* Belgrade: Ministry of Space / Institute for Urban Politics, 2020.

2. Mežnarić Osole, Gaja and Sretenović, Danica. *The Feral Palace: Introducing multispecies city typologies.* Lecture at Climate Collectivness conference, Pratt University, School of Architecture. November 2022.

3 Darja Valenčič, "Bežigrajski Krater – od države in ljudi pozabljena gradbena jama," Accessed Dnevnik, July 11, 2017, shorturl.at/evQ02; Sovdat Petra, Krivec, Vasilij "State is nesting at least 3.5 millions in the construction site at Bežigrad" Finance, 2019. Accessed March 2022, etc

4. Sretenović, Danica and Mežnarić Osole, Gaja. *The School of Feral Grounds*. Curriculim for FutureDivercities

Design driven research

I understand design driven research as a possibility to rupture inertia of architectural profession with (uninvited) actions, (unexpected) formats, and multidisciplinary collaborations. Working at feral construction site with colleagues coming from various professions, at the intersection of knowledges, formats and communicational practices we run unique practice which ranges from object production to the conceptualization of educational curriculums, public programmes and art interventions that would not emerge from a homogeneous environment. This intersection of design driven practices coming from humanities, science and art backgrounds is a showcase of resilient working environments from the future.
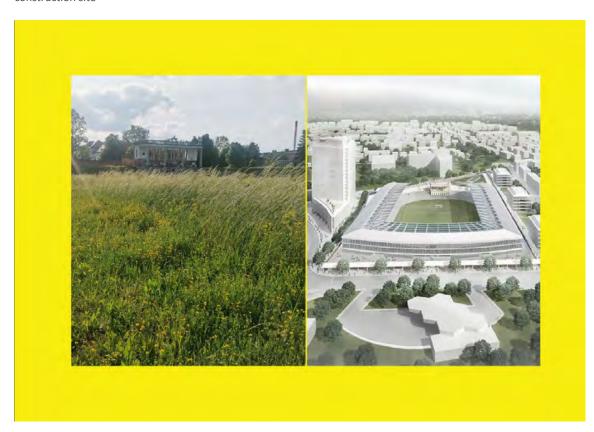
Picture 1: The temporary self-sustained urban ecology is not registered as green space in Google maps. It contains 212 different species.
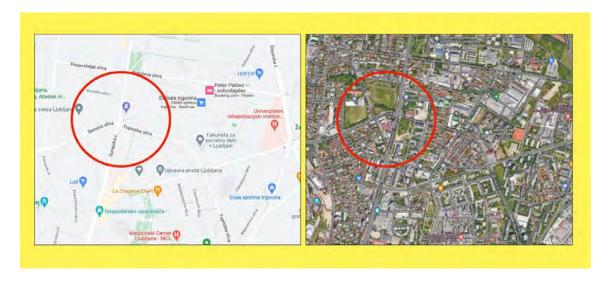
Picture 2: The planned development versus temporary ecology of the site: case of Krater pending construction site

Picture 3: The temporary ecology of the site versus Bežigrad's sports park development: case of Plečnik's stadium pending construction site

Picture 4: Area of Krater and Bežigrad's stadium

Taufan Ter Weel

Taufan ter Weel is an architect, artist, and researcher with an interdisciplinary approach at the intersections of sonic practice, architecture, and socio-spatial research. Since 2015 he has been working as a guest teacher at the Architecture Philosophy and Theory chair of TU Delft's Faculty of Architecture and the Built Environment, where he also received his master degree in architecture in 2009. Currently, he is a PhD candidate at the faculty's Theory and Territories section, and is part of the Villard d'Honnecourt international doctorate and CA2RE+ programme. Furthermore, he works as an educational developer and lecturer (2018-present) and core team member (since 2019) at Hogeschool NTI and has worked as instructor and guest teacher (2009-2014) at The Hague University of Applied Sciences, where he earlier received his bachelor degree in 2006. He has carried out various artistic projects, performs live electronic music since 2001, and finished the Institute of Sonology's one-year course program (2011-2012) at the Royal Conservatoire The Hague.
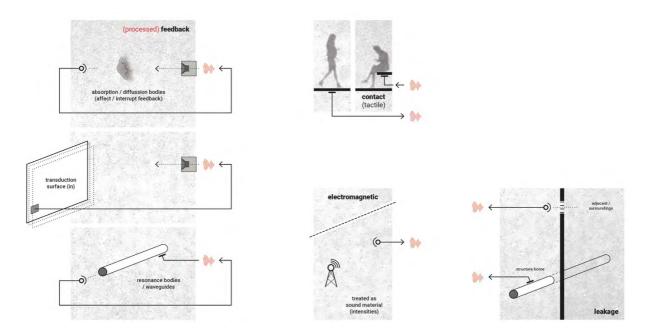
Abstract Machine

Anonymised document

Artefact

The proposed artefact is a site-specific sound installation which seeks to explore the relations between bodies, media technologies, and lived environment. It is a machine, a technical system of transducers and processing units, which is installed in the exhibition space. This machine is plugged into material structures, circuits, and infrastructure present on site, modifying the existing sound space. The system can adapt to different environments resulting in a series of situated installations.

The installation consists of a set of *transduction circuits* (microphones, loudspeakers, and tactile transducers – the inputs and outputs of the system and their positions in space) and *processing patches* (routed channels, modulation links, functions) which are determined through an acoustic exploration and analysis of the given site, which includes identifying signals and sound sources by means of listening through various types of microphones.

Transduction circuits which are used in the site-specific installations of the author. For the input signals, various kinds of uni-, bi-, and omni-directional, as well as contact, surface, and electromagnetic field microphones are used to pick up acoustic, structure-borne, and electromagnetic waves. Microphones have their own characteristics, polar patterns, and distortions (they are not neutral). They are employed to pick up specific sounds and exclude others. Output signals are spatially distributed to loudspeakers and tactile transducers attached to surfaces and objects functioning as resonators. (Image by author).
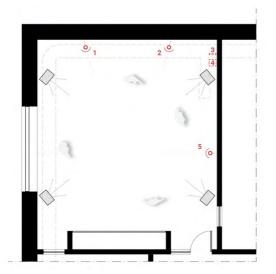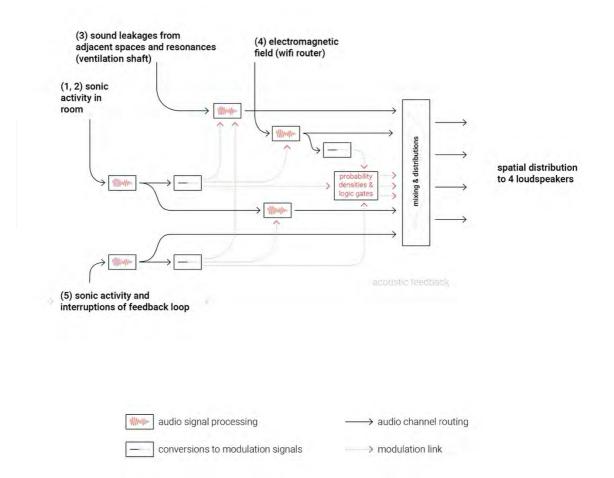
Image and plan of previously realised sound installation, 2023a. (Images by author.)

(3) sound leakages from
adjacent spaces and resonances
(ventilation shaft)

(4) electromagnetic
field (wifi router)

(1, 2) sonic
activity in
room

probability
densities &
logic gates

mixing & distributions

spatial distribution
to 4 loudspeakers

acoustic feedback

(5) sonic activity and
interruptions of feedback loop

	audio signal processing		audio channel routing
	conversions to modulation signals		modulation link

Simplified scheme of the processing patch in previously realised sound installation (2023a). The patches are made by combining a DSP modular system (Nord G2 Engine); a visual programming environment (Max for Live / MaxMSP) and the physical routing of channels (audio mixing console, A/D conversion). (Image by author.)

Image of another previously realised sound installation, 2023b. (Name of photographer omitted.)

Transduction circuits and processing patches

This site-specific installation only processes concrete sounds present on site in real time: it does not use fixed media (such as pre-recorded material). Input signals are processed and audio channels and modulation links are routed by means of processing patches. The combination of transduction circuits and processing patches allows for the emergence and exploration of new sonic and spatio-temporal relationships. Various input signals are treated as sound material and/or converted into modulation signals in order to draw different dynamic relationships.

Modulation signals are produced through detecting variations (in amplitude, phase, harmonic relations) of the input signals. Combined with the spatial position of the transduction circuits and the activity and movement of bodies, dynamic relationships become audible. Listeners can engage in this process.

Logic gates and functions trigger more instantaneous responses or spatio-temporal changes. For instance, when an input signal passes a certain threshold level or when multiple sound events occur at the same time, another process or spatial distribution is triggered. Or when an impulse is detected (at a regular or irregular time interval) from one input, a value from another input is sampled and hold until the next detected impulse occurs. Probable values and time intervals are mainly extracted from the input signals.

The installation aims to actively engage the listeners (audience) in the process of modulation beyond automated subservience and control – in modifying the existing sound environment, exploring the possibilities for another space, other machine-body relations – and makes audible some of the given site's sonic complexity.

Amplified realities

The broader research explores the shifting relations between bodies, media technologies, and lived environment – the concrete entanglement between abstract space-time and social realities – through a spatial and diagrammatic approach based on sound and signal processing. It takes a transdisciplinary path – across architecture, philosophy, sound studies, and sonic practice – and combines a theoretical and design-driven approach.

The starting point is the notion that the human use of electromagnetic energy as carrier of information – which is basis of signal processing (from early electric telecommunication and radio to ubiquitous computing) – radically transforms and complicates the relationships between bodies, media technologies, and lived environment. Transmission with the speed of light modifies proximities, allowing for seemingly unconfined communication and remote control, changing habits and perception. Coupled with the increasing precision of clock time, signal transmission enabled radio-navigation and complex sensing and automation systems. The increasing dependency on media technologies to carry out or automate activities (to sense, build, and change our environment) and the interdependencies between them, coupled with the decreasing clarity of their inner workings, which is in part inherent in their expanding complexity, creates the condition for unprecedented forms of *automated subservience* and *ubiquitous control*.

Ubiquitous computing and algorithmic processing change the modes of governance. This process cannot be understood solely in terms of signification, representation, or the discursive. It is needed to also recognise the material, ontological, or machinic dimensions – the asignifying semiotic apparatuses, the signals and algorithms.

Practical notes
- Ideally, the specific place where the system can be installed and technical requirements and aspects are coordinated in advance with the conference organisers.
- The installation can run throughout the entire duration of the conference (if desired).

Design Driven research approach

An experimental approach to sound and signal processing in artistic practice (in particular, spatial practice) allows for exploring the intensive and machinic dimensions in the production of sense and subjectivity. This attentiveness to vibrational energy resonates with the turn to affect and ontology in critical theory and philosophy.
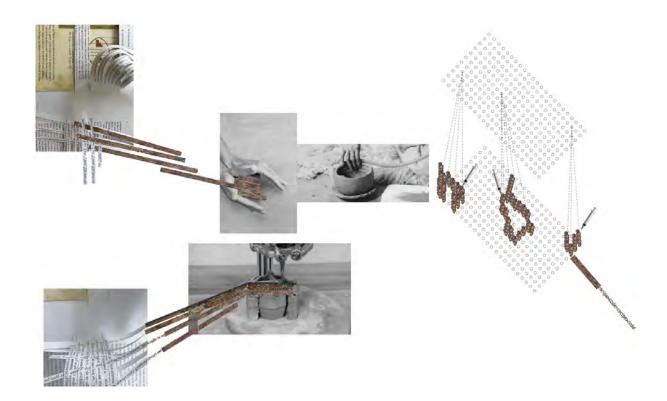
In my work, theoretical and design-driven research are tightly connected rather than isolated from one another. Philosophical and theoretical concepts (in the realm of cybernetics and new materialism, among others – e.g., control, modulation, transduction, algorithmic governmentality, the machinic unconscious, and abstract machine) are explicated in part through practical experimentation.

The design-driven research component does not directly address the broader problematics (automated subservience and ubiquitous control) but allows for the exploration of the machinic or asignifying dimensions ion the production of sense and subjectivity (modulation beyond the paradigm of control).

The applied transduction and processing techniques are in themselves not new but draw on a long tradition in sound art and experimental electronic music composition. The original or experimental quality lies in combining a spatial, sonic, and diagrammatic approach which derives from a focus on signal processing.

Derya Uzal

Derya Uzal received her interior architecture degree in 2011 and architecture degree in 2013 from Istanbul Technical University. Currently she is a PhD candidate at the Architectural Design Program in Istanbul Technical University. While studying, she researched and worked on documenting and exhibiting of Turkish Architecture in the Early Republic period at SALT. At 2014, she took part at various exhibitions and architectural projects in EMBT | Enric Miralles - Benedetta Tagliabue | ARQUITECTES Associats-Barcelona office and foundation. She is working at MEF University; Faculty of Art, Design and Architecture Faculty as a research assistant since 2015.

BUILDING A LAB: CONSTRUCTING REALITIES

"Architecture needs a new research-production relationship in the age of information technologies. Nowadays, architecture is actively produced by the devices of robotics, neurobiology and biochemistry. This is a new field where not only technological tools are used, but new contracts between species are emerging. The investigation of the new technological tools opens traces of thoughts that nourish the imaginary ones."

lab, theory and practice

Laboratories, architectural-material closed spaces, have clear boundaries. On the other hand, the knowledge produced in it is universal and re-applicable. Structurally and technically limited laboratories represent an epistemologically limitless—even expansionist—space. The laboratory represents an inventive entity dedicated to deciphering the code of life and, subsequently, disseminating this code as an extension of its scientific

discourse. It defines an **experimental domain**; however, experimentalism and the formation of scientific knowledge do not inherently coincide. Experimentalism engenders distinctions, thereby constituting the producer of scientific knowledge. Nevertheless, what imbues scientific knowledge with value is its capacity for reproducibility and consistency under various conditions. The convergence of scientific rigor and creative realms occurs at this intersection. Disciplines such as art and architecture assume an "experimental" character when they challenge the material and political stances of systems reinforced through repetition.

Particularly from the 20th century onwards, experimentalism has endeavored to decipher the relationship between objects and subjects. In the 21st century, criticism of experimentation and the laboratory is directed towards the complex relationship between the experimenter and the object. The scientific practice associated with the laboratory not only decrypts how things operate cosmologically but also constructs a complex relationship between the experimenter and the material (Stiegler). Despite rendering the laboratory a contentious space due to its intricate research process, it gives rise to a unique practice-space in terms of the intensity of the relationship between things and humans, a practice-space recently embraced by creative domains. The linkage of scientific practice with creative domains assumes critical significance in the formation of scientific knowledge. The relationships established between subject and object, in conjunction with registered, reproducible, or overlooked capacities, culminate in the creation of scientific knowledge. Personalized relationships between matter and the experimenter harbor the potential to produce certain "pre-objects". These pre-objects, emerging in the process, establish a fruitful genealogy for creative practice. Stiegler's "hyper-objects," Schwab's proto-objects, and Rheinberger's "epistemic-things" all constitute intermediate products of this experimental process.

The "lab" occupies a critical position between practice and theory, promising an experimental space that will re-engage with the cosmos and facilitate the establishment of new protocols between subject and object. Within this framework, this research challenges the (architectural) laboratory as a (new) practice opportunity, upon Karen Barad's "cutting" and Rachel Armstrong's "reorganizing of uncertainty" to dissect relationships. I will explore the emergence of the lab culture in architecture and the ways in which experimentation in architecture responds to post-human and new materialism concepts through "lab" practices.

architectural lab's and DDR

Architectural laboratories play an important role at revealing the knowledge of *making architecture* epistemologically and transferring it as a skill to another mediator. This is what Frederick Kiesler tried to accomplish in his "Biotechnology and Correlation Laboratory'': To reveal or decode the ability of the mortal-body via "Vision Machine". According to Kiesler, creativity is not something that is innate, on the contrary, it is based on the experiences gained during a person's life, and these experiences and skills are lost when the body dies. Kiesler carries out a series of studies to uncover and document this contradictory situation by using devices and experiments. Although these studies remained as written-records in Kiesler's laboratory, they became important *bricks* for Negroponte's MIT Media Lab in 1985. Practices of architectural labs from Frederick Kiesler to Francois Roche (R&Sie (n)) push forward architectural knowledge in the *episte-ontological* ways focusing on digital data and AI and give an account of the field by projection and uncertainties via models

and apparatuses. Laboratories have taken on a great burden. But, there is a need for new translations so that the system can make a difference, not repeat itself (entropy/negentropy). Architectural laboratories come to the fore as deciphering areas in the near future to *translate* the creative one and transfer it to another mechanism.

***My lab is, in this respect, a space where recipe and digital code practically emerge at the same time. My research is based on a series of hands-on studies: on coding and re-reading the recipes -the way they reach the end product-. Different media and apparatuses will be developed manually and digitally. Practice as a lab, constantly bridging the gap between code and recipe.
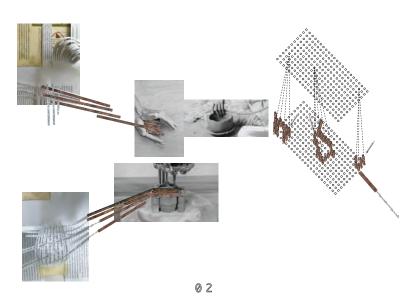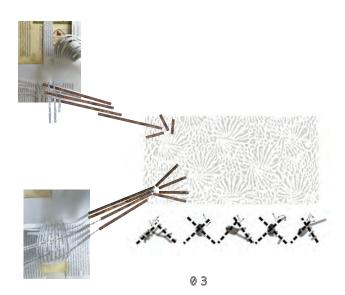
Keywords: *architectural laboratories, epistemic-things, practice, pre-objects*

lab over lab

0 4

Carlo Vannini

Carlo Vannini is an architect (**OAR – Architects' Order of Rome**) with a Postgraduate Master's Degree in Digital Architecture (IUAV – University of Venice). He is currently a PhD Candidate in Architecture and Construction (**DRACo – DiAP**) at the Faculty of Architecture, Sapienza – University of Rome.

Carlo's research includes activities mainly in the field of Technological Design for the improvement of public housing, urban quality, pavements and public spaces, with a specific focus on the innovative design tools and processes of production.

His research proposal aims to devise methodologies and approaches that respond to the proposed challenges of the increasingly necessary digital evolution of processes in the construction field.

Integrated approach for a new design culture between architecture and industry

A selection of cade studies on the first public housing plan stock in Rome (1964).

Historically, 'social' housing has been a central element in the evolution of European cities: its affirmation, since the end of the 19th century, in parallel with the improvement of the housing conditions of the working classes, coincided with the affirmation of high levels of architectural and urban quality, contributing decisively to the development of national and transnational architectural currents and movements. This project is intended to be a study on the possibilities of renovating the modern building stock, which represents a major challenge for the future of the building industry, in line with the objectives of the European New Green Deal for revitalising the economy and sustainable development.

After the second post-war period, social housing became a key instrument for urban development in the outer areas, providing the general infrastructure of the territory. The Italian experience fits into these dynamics and, the example of Rome is of particular importance. Its public buildings production, composed of numerically large and qualitatively important interventions, represents 12% of the total urbanised area. The research suggests a reading of the built environment to explore its characteristics regarding the predisposition to undergo improvement interventions. The intention is to define strategies for the redevelopment of Rome's public housing stock, built between the 1970s and 1980s with a logic of maximum savings and which today shows various elements of fragility in building consistency, architectural image, and types.

The peculiarity of this building heritage is in the constructional, morphological and typological characteristics that are reiterated according to the principle of industrial prefabrication, lending themselves to the approach of rationalisation. With this in mind, there is growing interest in the concept of digitalisation within building systems, as all areas of design can benefit from the potential offered by digital technologies for greater efficiency and sustainability, generating positive spin-offs for the entire economy.

Today, digitalisation in the construction sector is synonymous with design and process management through the widest possible sharing of information in an electronic and organised form: integration and collaboration are therefore opposed to the fragmented and competitive nature of traditional business methods. For the purpose of this project, the focus has been on the European examples, because of legislation, construction techniques and lifestyle.

To date, there are many residential complexes built in the 1960s and 1970s in Europe that have recently been redeveloped, showing the growing awareness of an approach that enhances public housing as a lasting asset. These projects promote a reinterpretation of the building heritage in function of new ways of living and experiencing the city: they do not limit themselves to technical-normative and typological-functional adaptations, but also think about urban, social and economic implications. Consistent with European regeneration strategies, they have the capacity to increase integration and social inclusion, going beyond an exclusively environmental interpretation of the interventions' sustainability. The cases referred to, do not concern demolition, but the replacement and integration of new volumes, favouring light and dry construction technologies to optimise intervention times and exploit the full potential of an industrialised approach to execution. These interventions are carried out economically and rapidly, reducing social

discomfort and guaranteeing a high level of quality; sustainable materials and passive technological systems are favoured. Particular attention is paid to the theme of contemporary living, reinterpreting the existing typologies with a view to a mix that satisfies an increasingly heterogeneous housing demand; the new project spaces envisage flexible functional areas with multiple uses that can easily adapt over time to the different lifestyles of the inhabitants.

The research proposes to transfer this approach to the scale of residential buildings, investigating solutions that act on the architectural envelope, both in terms of controlling energy consumption and prolonging the useful life of these artefacts.
The operational methodology is organised in three sequential activities:

- The first consists of the historical, design and urban analysis of buildings, belonging to the Social Housing Public Agency of Rome through a research in the archives of the Agency and of the Architects involved in the design process. In parallel, a study and systematisation of the most significant best-practices of architectural and environmental retrofit interventions is carried out to identify the parts, systems and building components involved.
- The second activity is to create digital models of the buildings by digitising the material found, using parametric software. Then it will carry out a diagnostic-cognitive assessment of the artefacts, in particular of the elements that are most affected by obsolescence and that could affect performance levels. This highlights the challenges in relation to changing housing needs.
- The third phase consists of the elaboration of a set of specific components of industrial production and the making of an abacus of parametric type solutions, constituting a digital library of experimental building components with tables of renovation costs.

The main elements of interest concerning the buildings of this season are:
- the numerical consistencies and locations of the neighbourhoods, which make Rome a unique case for the number of housing units built, and for the contribution made to the urbanisation of today's suburbs;
- the morphological and typological characteristics;
- the construction characteristics, with prefabricated elements or tools aimed at industrialising construction procedures;

The aim of the study is to make clearly differentiated interventions coexist in order to restore a liveable space with minimal financial resources, paying great attention to the duration of the building site and thus to the movement of inhabitants made possible by having a single manager such as Social Housing Public Agency or the Municipality of Rome. Thanks to the study of the 'soft' parts of the building, a digital catalogue of solutions is defined and applied to the renovation of the existing building stock. The answer lies in an integrated approach to the building process, involving all parties, with a view to extend control over all the life stages of buildings, optimise energy resources and limit the environmental impact.
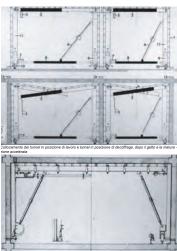
Requalifying, adding, enriching rather than demolishing, can lead to a higher quality of space, to support an architecture that meets the needs of the users. A message of responsibility and coherence with the requirements of a precarious economy that is trying to recover from the crisis, favouring the redevelopment of suburbs in a manner that is not quantitative but qualitative; it is a contemporary approach, conscious and closely related to the conditions of current design.

To conclude, the project starts by overcoming preconceptions about "repetitiveness", recognising an intrinsic value to the original construction considered in its entirety and developing a new modality of intervention that will only be completed with the direct participation of the new inhabitants. Architecture can and must restore dignity to the original construction of these artefacts. The strong potential of this project is in the effects on the perceived quality of urban space following these regeneration interventions, as well as in the theme of a memory that is maintained by regenerating instead of demolishing.

Seeking high construction and transformation qualities means not only recognising the value of an architectural solution, but also understanding its economic value and assessing its real impact on social dynamics. The environmental issue, which requires serious foresight regarding what happens beyond the useful life, concerns for example the fate and impact of demolition rubble, but also the invisible ecological footprint of a new construction. In the future, the integration of these arguments into ordinary urban regeneration processes will depend to a large extent on the strength of planners to incorporate them into their approach to overbuilding the existing.

credits: C. Vannini, 2022

ta interna di un tunnel pronto all'impiego
nnel idraulici di grande luce (non impiegati nell'intervento). Veduta e sezione tipo.

Collocamento dei tunnel in posizione di lavoro e tunnel in posizione di decoffrage, dopo il getto e la matura-
tione accelerata

credits: C. Vannini, 2022

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A short reflection on the importance and role of Design Driven research approach, methodologies, techniques and tools employed in the research project (max 250 words), referring as well to the conference's main topic.

Forms of technology in process.
Digital models for the restitution of the architectural form.

Mies considered form as a synthesis of principles, history, and technical components: this frames the relationship between form and technique within an ever changing cultural concept, especially when related to architectural design. The integration of design processes shows virtuous cross-fertilization between art and science in the area of industrial production: this seems to be embryonic for the transformation of the built environment, still circumscribed to analyze phenomena and is rather hamstrung in design processes, with slow dynamics and conflictual dialectics among players, claiming of primacy between the creative and the executive spheres. Strictly constructive themes come into play in this comparison, as well as the social effects that some choices bring for their cultural and economic significance, and for their effects on users. Given these issues, the figure of the architect as Total Designer[1] and guarantor of the project in its Vitruvian connotations can acquire a new controlling role in the integration of the various disciplines, besides the pure design activity, for the entire duration of the building process. In fact, these tools require an open and humanistic approach to counter a fideistic subjection to technology regaining the etymological role of critical discourse on the evolution of techniques by placing humans at the center of a system of concentric circles once again. To this end a dialogue should be opened with the humanistic sphere to reinvent the future and not to be subjected to it.

NOTES
[1] «In the digital turn, process is no longer just a mediator between idea and form; it takes on a constitutive character. [...] Process is not just the representation of a mental mechanism, it is a project in itself that conditions ways of thinking» (Ortega, 2017).

Aditi Vashisht and **Pallavi Jain**

Aditi Vashisht is an Assistant Professor at Anant National University and previously graduated at the School of Interior Design, CEPT University in Ahmedabad. Pallavi Jain is a Faculty Member at Anant National University and freelance architect at PAAGH.

Of Identity and Innovation: Developing a pedagogy for new age crafts

Craft is a complex, multifaceted entity that eludes a singular definition. Owing to the integral aspect of making, it is often compared with art and design both as a discipline of study as well as a field of practice. The discussion on craft has ranged from seeing craft, art and design as a unified concept (Vyas 91-94) on the one hand, to considering craft as a distinct field that overlaps with the other two fields (Niedderer and Townsend). Any enterprise associated with craft, whether research, practice or learning, therefore becomes a complex pursuit demanding interdisciplinary approaches.

This study investigates the development of craft pedagogy in and for the current times. Designing/developing a pedagogy first requires dissecting the layers of the subject to understand its construct and interrelationship of its components. In dissecting the entity called craft, the layer of identity appeared as the crucial outermost layer that holds all the other layers together. This study focuses on developing a pedagogy that fosters innovation and identity building through an artisan oriented approach. It aims at developing methods to channelise the artisan's individual tacit knowledge and address the context they inhabit. This research is embedded in a live project - ANUSHILP, that is aimed at understanding, upskilling and upgrading the craft practices of Rajpipla, a tribal belt in the state of Gujarat, India.

India is well known for its crafts that are representative of its culture and traditions. Craft is also the second largest source of employment in the country after agriculture. (Crafts Council of India) For a country with a large population, that seems promising for the sector. Despite this fact, the status and perception of craft in the current times, is in a confused state. Craft traditions have been intertwined with the living patterns of the people in India. A loss of these traditions is not only a loss of livelihood but also a loss of flavor and character from the daily lives. The status quo of India's thriving craft practices was first marred by the colonial rule that suppressed them on account of being rooted in the past to establish their domination based on the 'progressive' idea of industrialisation. Since then the struggle has been on to revive the crafts from a condition of depletion and marginalisation.Through government policies and schemes, through craft bazaars and fairs across the world, through brands that have repackaged craft products and brought them under their umbrella of patronage, through institutions that impart training in craft skills; these multifarious efforts have needed to address the perception crafts (Tyabji 103-116) in order to create a demand for their products and thereby cause their economic upliftment. Despite these persistent efforts since the time of independence, craft is at a loss, owing to loss in quality caused by high demand of craft objects as souvenirs (Das and Hasija 11-16) and the disenchantment felt by the younger generation of artisan families towards craft as a career option. The craft person is well respected but is still perceived as a village dweller who is distant from the modern education and sophisticated ways

of the progressive world. As a result they have been patronized and are not perceived as drivers of change and progress.

Amid this landscape of craft in India, this research (through the conduit of the ANUSHILP project) addresses a unique and localized scenario. Nestled in the valleys of the Narmada river, the Rajpipla district of Gujarat, India, is a region abundant in nature and natural resources that are protected by the government. Due to the limitation of setting heavy industries in the region and perishing of indigenous vocations caused by displacement of the local community, small scale industries, specifically craft, have been seen as a potential source of improved livelihood for the local people. The existing craft practices either cater to the specific needs of the regional lifestyle or have been newly adopted from the other regions and craft traditions of the country. While sufficiently fulfilling the local needs, a lack of an extroverted expression of regional identity limited the widespread relevance and demand of these crafts and therefore their potential of being economically lucrative.

Traditional and established Indian craft practices have well defined methods, techniques and vocabulary that have evolved within dedicated communities over generations of practice. The craft practice is itself the vocation as well as the learning medium. This opportunity of consolidating a craft practice as an organized enterprise presented by this project, opened up the fundamental questions within the realm of craft research. The initial craft and skill mapping exercise revealed that the artisans were skilled at their craft but lacked an anchor that aligned their skills to a common motivation. Although the artisans possessed the skill of designing objects to serve function, this lack of alignment also impeded innovation suited for progressing times. The primary question was that beyond serving functional needs what is the impetus that drives craft practice. Also, for a new craft practice that is not built on tradition, how can its training and propagation be sustained within a community?

In reflection to these questions, the project established the unique methods of a craft along with the cultural expressions rooted in the context of the artisan as the constituent elements of identity, that holds a craft practice together. It is also the aspect of identity that drives innovation as it governs what can be changed and what needs to be held constant when appropriating the craft practice for changing times. The need for artisan oriented pedagogical intervention was identified, that would help the community to build and sustain an identity while having the spirit to innovate. This approach necessitated the adoption of means and methods of working on different aspects of the making process. This is where we turn towards Design pedagogy. Design pedagogy uses abstraction as a means of isolating different aspects of a design entity to study them in depth. This is counterintuitive to traditional means of transmission of crafts knowledge which is why these methods needed to be altered to allow for the artisans sensibilities and world views to play an active part. This paper discusses the adaptation of exercises of abstraction, color interaction, narrative development and pattern making, that are commonly used in design pedagogy, into a hybrid teaching method that acknowledges the intuitive and subjective responses of the apprentice artisan that emerge from their socio-cultural and physical context.

The project is currently in the initial stages of testing this pedagogical approach with the artisans of Rajpipla through a residency program organized at the Anant National University campus situated in Ahmedabad, Gujarat. The paper aims to discuss the artisans' response to this teaching method and identifies the crucial points of change. The ANUSHILP model aims that the artisans trained under the residency program further train people from their community and establish a continuum that makes their craft practice thrive and take root in their context while being independent of institutional affiliation. In the further stages this research will not only study how these methods are adapted by the artisans, but will also involve them as scholars of craft.

Keywords:

Craft pedagogy, craft research, Identity, tacit knowledge

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DDR Statement
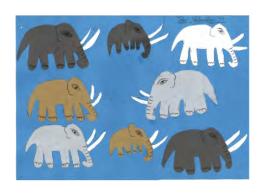
Craft Research is gaining legitimacy as a discipline the world over. Moving ahead from historical and ethnographic research that emerges from the documentation of existing craft practices, newer dimensions of research can be added to the gamut in the form of practice based approaches. The need of the hour is also to include the craftsperson/artisan as an active contributor to the formal processes of knowledge production and dissemination in the field of crafts. Acknowledging the fact that craftspeople of today are locally rooted but globally aware, the purview of craft pedagogy needs to expand in its purview.
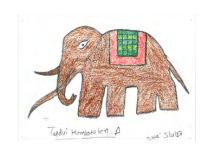
The project presented in this study has been designed to initiate this change that can be taken forward by craftspeople themselves. The initial testing of a hybrid pedagogy was undertaken as a part of an artisans' residency program organized at Anant National University, Ahmedabad, India. The program involved an informal process of doing things together as opposed to one-way communication from the trainer to the trainee. Design jargon was replaced by local terminology and the use of technology such as mobile phones (available with them) and digital fabrication (available at institute) was built into the exploration process. The resident artisans and the design students of the university used the same workshop and makerspace resulting in free exchange of knowledge and spontaneous collaborations.

Illustrations

process of experimentation in color composition, pattern making - applique work

Understanding the culture of artisans and making it part of pedagogy - Bamboo craft

Zohreh Zarrinhaghighi

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"Designing Imagination: The Poetic Possibilities of Uncertainty"

Intermediate-Level PhD Student

In the field of design, it is always the case that designing requires a process, the necessity of which is undeniable because, regardless of the approach taken, the design process leads the designer to create the final product. Confronting this product, in my case the built landscape architecture, can offers a range of opportunities from ordinary experiences to imaginary atmospheres, as the most sublime possible experience any designer desires to build. Therefore, while the current study targets the role of the design process in creating imagination, addresses a common misapplied design tool, namely the "Narrative".

If we follow the subject of "Narrative Design" in comparison with imagination discussions, I just do it with an exaggerated expression in this abstract to show better my point, in narrative architecture the designer is imposing his ideas at every moment on the perceiver, as someone who is reading the built space of the architect. On the other hand, there is an anti-narrative design approach where the designer deliberately avoids the typical conventions of the narrative and actually tries to be absent to let the perceiver to engage in a bodily experience. It is worth mentioning that the absence of the designer should not be interpreted as abandoning the design, but it should be seen as consciously creating an opportunity for the perceiver to grasp the atmosphere without attempting to dictate "How". In this regard, I employ the term "Narrative/Anti-Narrative Being" in this study to illustrate an in-between approach where although the designer has the control over his design through his scenario but intentionally leaves something for the imagination. In this design approach, the designer creates spaces that involve the mind and accordingly imagination, rather than deliberately directing it. In fact, it is the knowledge of the designer that shows his/her presence, not his/her continuous interventions. This concept raises two main questions:

i)   **How** a designer is able to build the space of narrative/anti narrative being?
ii)   **What** transforms this built space into an entity that aligns with this concept?

To be able to answer that Let's take a look at a more familiar word for narrative that is used in the art of cinema, namely "Storytelling". Potteiger and Purinton (1998) in the book "Landscape Narratives: Design Practices for Telling Stories", take a closer look at the meaning of this term. In narratology, "Story" is usually defined as the content plane of narrative, which means "what" is told as opposed to "how" it is told. But there is no story without its telling. The binary distinctions between story as the content and telling as the expression become difficult to maintain. As can be seen in Fig. 1, this study focuses on the "Act of Telling" which mediates and constructs the story. In this definition, narrative implies a knowledge acquired through the contingencies of the lived experience.
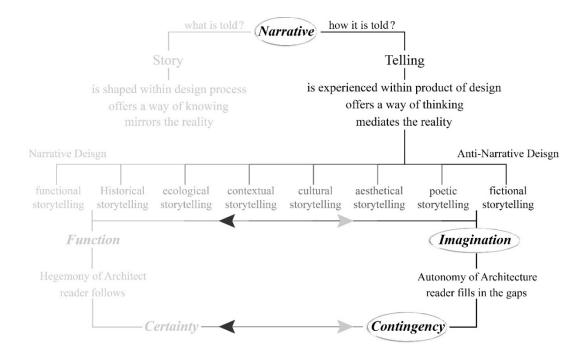
Fig. 1) The "Act of Telling" and its relation to Narrative, Imagination and Contingency in a bodily experience.

To follows this subject within the realm of design, the unifying element that ties up the trio of narrative design, imagination and contingency is their capacity to evoke the *"Poetic Possibilities of Uncertainty"* within the physical manifestations of design. Discussions centered around uncertainty, especially related to the perception/experience, has been highlighted in numerous associated phenomenological studies as a turning point for the design to become an outstanding work of art. Hence, this study considers contingency as a focal point.

In order to explain what is the exact meaning of the underestimated word of "Contingency" in design, I draw your attention to this fact that each architectural work follows 2 kinds of programs:

i)   related to "Design Process", where architects consider different possibilities.
ii)   related to "Product of Design", where the built architecture loses contingency.

Let's think that the design process is like the design of a "game" and the final product is like a "puzzle". Game design simply means simulating a replica, a copy or a model of product on a smaller scale, considering contingency, which means a future occurrence that is possible but cannot be predicted with certainty, a kind of "Potential". Accordingly, the game designer tries to define a program through simulation and checking all the possibilities before making the final product to be able to produce the most difficult type of puzzle. How much he tries and considers all the probabilities, as soon as the puzzle is made, all these possibilities are eliminated and there is only one solution to deal with this product. In other word, it becomes "flat". This is exactly what happens to the most narrative landscape architecture designs that despite of their contingent design process, they finally become a physical product, which is inevitable. But what can designers do to run away this flatness?

This study suggests that landscape architecture can separate itself from being a flat unchangeable physical construction, if the designer takes the dynamic elements of nature such as water, light, vegetation, landform and climate as the leading roles of the story, as many designers do, but tells the story through defining a "Medium" which is responsive to the co-existence of "I" and "Nature" to offer more and more probabilities. To make it clear, this concept is able to promote additional potentials because it relies on two contingent factors namely the unstable unpredictable imagination of the perceiver and the ever-changing natural elements of landscape architecture. These factors are intertwined through this medium, resulting in a dual impact. It is not an ordinary medium, but the **"Medium of Contingency"**. [1]
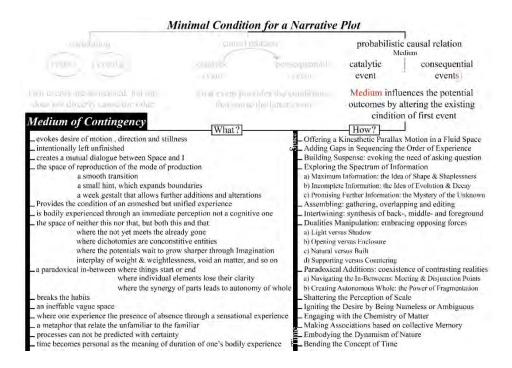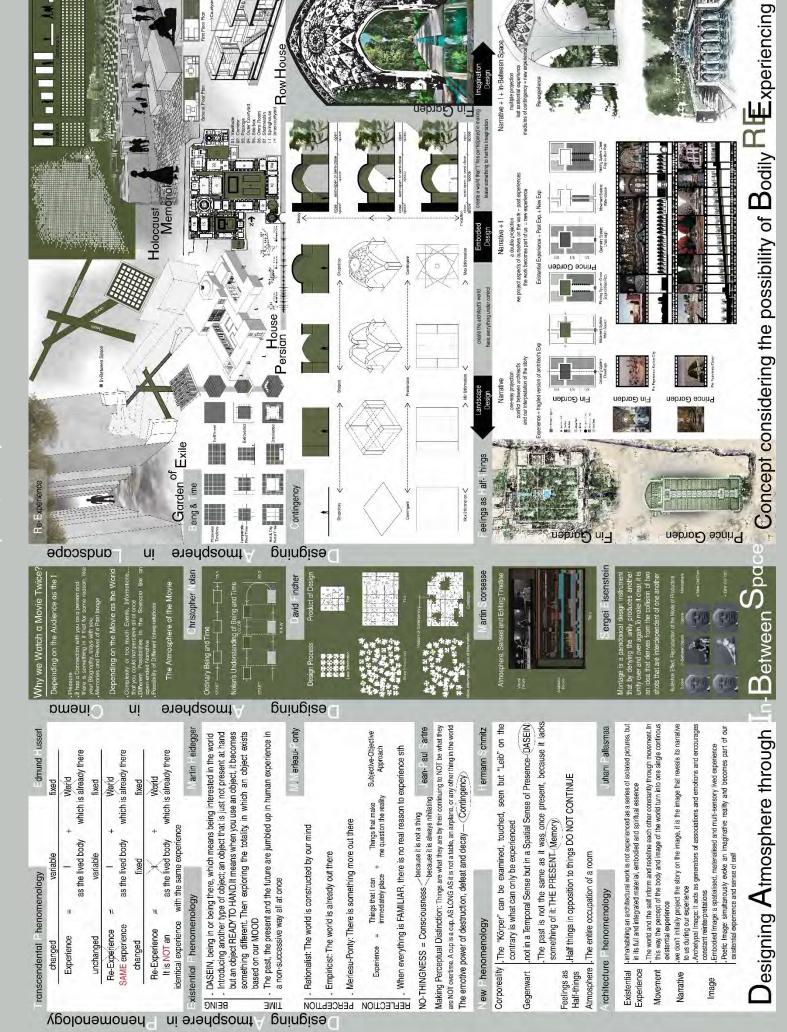
Fig. 2) Medium of contingency at a glance

The outcomes of this concept can be understood through two perspectives within the realm of design:

_Firstly, it manifests as the creative process of designing sublime imaginative atmospheres which offer an immersive experience that captivates the perceiver on multiple levels. In fact, this research sheds light on the profound impact of contingency in design, which deeply engages individuals in their bodily experiences as it evokes the imagination.

_Secondly, this concept unveils its significance as a catalyst for engaging an unending desire to repeatedly re-experience a particular work of art due to its inherent potentials for change that can be reinterpreted and rediscovered in each existential experience.

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[1] In the following, you'll find the initial poster that was presented as part of the first Doctoral Colloquium in 2021, which was forged through the fusion of three disciplines: phenomenology, cinema, and landscape architecture, giving rise to the foundational framework of the ongoing study. Additionally, the subsequent poster from 2023 is presented to demonstrate the main categories of suggested contingent natural elements in built works of outstanding designers associated with each category. It is shown in the diagrams that how changing the medium between the I and Nature affects the atmosphere of the space to shed light on the operational dynamics of the concept of my study in the field of the design.

Designing Atmosphere through In-Between Space
Concept considering the possibility of Bodily RE-Experiencing

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Designing Atmosphere in Phenomenology

Transcendental Phenomenology — Edmund Husserl

	changed		variable			fixed
Experience	=	I	+	as the lived body		World which is already there

| | unchanged | | variable | | | fixed |
| Re-Experience | = | I | + | as the lived body | | World which is already there |

| | changed | | fixed | | | fixed |
| Re-Experience | ≠ | I | + | as the lived body | | World which is already there |
| It is **NOT** an identical experience with the same experience |

Existential Phenomenology — Martin Heidegger

- DASEIN, being in or being there, which means being interested in the world
- Introducing another type of object; an object that is just not present at hand but an object READY TO HAND. It means when you use an object, it becomes something different. Then exploring the totality in which an object exists based on our MOOD
- The past, the present and the future are jumbled up in human experience in a non-successive way all at once

M. Merleau-Ponty:
- Rationalist: The world is constructed by our mind
- Empiricist: The world is already out there
- Merleau-Ponty: There is something more out there

Experience = Things that can immediately place + Things that make me question the reality

Jean-Paul Sartre
- NO-THINGNESS = Consciousness — because it is not a thing / because it is always nihilating
- When everything is FAMILIAR, there is no real reason to experience sth
- Half things in opposition to things DO NOT CONTINUE
- Subjective-Objective Approach
- Making Perceptual Distinction: Things are what they are by their continuing to NOT be what they are NOT overtime. A cup is a cup. AS LONG AS it is not a table, an airplane, or any other thing in the world
- The emotive power of destruction, defeat and decay — Contingency

New Phenomenology — Hermann Schmitz

- **Corporeality**: The "Körper" can be examined, touched, seen but "Leib" on the contrary is what can only be experienced
- **Gegenwart**: not in a Temporal Sense but in a Spatial Sense of Presence — DASEIN
  - The past is not the same as it was once present, because it lacks something of it: THE PRESENT — Memory
- **Feelings as Half-things**
- **Atmosphere**: The entire occupation of a room

Architecture Phenomenology — Juhani Pallasmaa

- **Existential Experience**: inhabiting an architectural work is not experienced as a series of isolated pictures, but in its full and integrated material; embodied and spiritual essence
- **Movement**: The world and the self inform and redefine each other constantly through movement. In this way, the percept of the body and image of the world turn into one single continous existential experience
- **Narrative**: we don't initially project the story on the image, it is the image that reveals its narrative to us during our experience
- **Image**:
  - Archetypal Image: It acts as generators of associations and emotions and encourages constant reinterpretations
  - Embodied Image: a spatialised, materialised and multi-sensory lived experience
  - Poetic Image: simultaneously evoke an imaginative reality and becomes part of our existential experience and sense of self

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Designing Atmosphere in Cinema

Why we Watch a Movie Twice?

Depending on the Audience as the I
- Pleasure
- It has a Connection with you as a person and there is something in it that for some reason like your Biography stays with you
- Memories and Revival of a Past Image

Depending on the Movie as the World
- Complexity or too much Events, Informations,... that you could not perceive all at once
- Different Possibilities in the Scenario like an open-ended Narrative
- Possibility of Different Interpretations

The Atmosphere of the Movie

Christopher Nolan
- Ordinary Being and Time
- Nolan's Understanding of Being and Time

David Fincher
- Product of Design
- Design Process

Martin Scorsese
- Atmosphere, Senses and Editing Timeline

Sergei Eisenstein
- Montage is a paradoxical design instrument that by denying the unity produces another unity over and over again. To make it clear it is an idea that derives from the collision of two shots that are interdependent of one another
- Kuleshov Effect: Reproduction of the Mode of Production

Designing Atmosphere in Landscape

Persian House
- Garden of Exile
- Being & Time
- Contingency

Row House
- First Floor Plan
- Ground Floor Plan
- B1. Vestibule / 02. Corridor / 03. Passage / 04. Outer Courtyard / 05. Stairbox / 06. Oven Room / 07. Shahneshin / 11. Springhouse / 14. Inner courtyard

Holocaust Memorial
- In-Between Space
- Re-Experience

Fin Garden / Prince Garden

Landscape Design
- Narrative: one-way projection — conflict between architect's and our interpretation of the story
- Experience = fragiled version of architect's Exp

Embodied Design
- Narrative + I: a double projection — we project aspects of ourselves on the work – past experience — the work becomes part of us = new experience
- Existential Experience = Past Exp. + New Exp

Imagination Design
- Narrative + I + In-Between Space: multiple projection — last existential experience — mediums of contingency = new experience
- Re-experience
- create the architect's world — have everything under control
- create a world that I has participated in making — Imagination — leave something to her/his Imagination

Feelings as Half-Things

Concept considering the possibility of Bodily RE-Experiencing

"Doctoral Colloquium V, September 2023"

Water
as the leading role of the story

Lawrence Halprin, Ira Keller Forecourt

- Site Plan
- Defining a medium at the same level
- Defining a medium at different levels
- Defining a medium at a higher level
- Defining a medium on the human-/non-human scale
- Synergy of Each Atmosphere

1 + Medium of Contingency + Nature
=
Narrative/Anti-Narrative Being

Light
as the leading role of the story

Tadao Ando, Chichu & Benesse Museum

- Site Plan
- isolated dark space
- vertical medium
- narrow medium
- horizontal medium
- fragmented medium
- angular medium
- curve medium
- reflective medium

1 + Medium of Contingency + Nature
=
Narrative/Anti-Narrative Being

Vegetation
as the leading role of the story

Kongjian Yu, Tongnan Dafosi Wetland Park

- Site Plan
- Defining multiple horizons through mediums
- Offering the desire of parallax motion through these mediums
- Choosing contingent species, like sunflower that reacts to the surrounding environment

Mind Presence / Physical Presence

- vernacular species
- species that attract birds
- enclosing species
- tall species
- weeping species
- ever-green species
- simple species
- deciduous species

Medium I → Medium II → Medium III → Medium IV → Medium V

- Defining the medium based on the being of each specie

1 + Medium of Contingency + Nature
=
Narrative/Anti-Narrative Being

Landform
as the leading role of the story

Garden of Cosmic Speculation, Charles Jencks

- Material Contingency
  - memory
  - substance (hard-softscape)
  - variability
  - age
  - pattern
  - color tone
- Site Plan
- Understanding landform as an immediate medium that creates a tactile experience
- Understanding landform as a design tool producing parallax medium confronting the body
- Understanding landform as a medium manipulating the meaning considering the body scale
- Understanding landform as an orienting medium
- Understanding the synergy of different landforms

1 + Medium of Contingency + Nature
=
Narrative/Anti-Narrative Being

Climate
as the leading role of the story

Historical Persian Garden

- Site Plan
- Defining a between inside-outside medium
- Understanding how this medium responds to climate
- Understanding how to multiply the medium effect

1/3 1/3 1/3

- Chaarbagh: Geometry System of Persian Gardens

historical / pavilion / modern

Wall of the Garden / Green Axe / Gate

- Creating Macroclimatic through the Medium

1 + Medium of Contingency + Nature
=
Narrative/Anti-Narrative Being

The Design-Driven Research & its Role:

To clear why design-based studies should be taken seriously is that, when we talk about the design science the question that always arises is that how the aspects of design that is used implicitly in design processes can be captured in the form of explicit theory or methodology, the lack of which is especially noticeable in the early stages of related researches. Put simply, professional experienced designers might have an innate sense of how to design but they struggle to transfer this knowledge to others and to explain precisely what helped them during this process.

In my opinion, due to the inherent uncertainty of art, however the design-based researches may not generally give satisfactory results in the sense of scientific studies, but I believe it is more like a self-discovery journey for each designer to dig deeper the design with the help of design itself. In meanwhile, communities like CA²RE can increase the reliability of the results by building this collective evaluation of design driven doctoral training with the help of different range of people who are involved in the design realm. Furthermore, attending similar conferences may enable the designer to produce more generalizable design concepts by learning how other people perceive the world of design in similar situations or even in other disciplines.