BOOK OF ABSTRACTS

Online conference for
Artistic and Architectural research
NTNU Department of Architecture and Planning
27th March & 10-12th June 2020, Trondheim

NTNU Norwegian University of Science and Technology
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Prof. Markus Schwai

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Prof. Markus Schwai

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MARCH 27TH
ONLINE SESSION

Stream 1

09:45  A1  Eva Demuynck
10:35  Jo Van Den Berghe
       Thierry Lagrange
       Gennaro Postiglione
       Andelka Bnin-Bninski
       Tadeja Zupancic
       Mia Roth

10:45  B1  Enrico Miglietta
11:35  Gennaro Postiglione
       Thierry Lagrange
       Jo Van Den Berghe
       Mia Roth
       Claus Peder Pedersen

12:45  C1  Monica Tusinean
13:35  Ignacio Borrego
       Alessandro Rocca
       Tadeja Zupancic
       Claus Peder Pedersen

13:45  D1  Javiera G. Zarzar
14:35  Horacio Torrent
       Tadeja Zupancic
       Andelka Bnin-Bninski
       Edite Rosa

Stream 2

10:00  A2  Chiara Pradel
10:50  Alessandro Rocca
       Mathias Ballestrem
       Ignacio Borrego
       Pier Paolo Tamburelli
       Roberto Cavallo
       Fabrizia Berlingieri
       Claus Peder Pedersen

11:00  B2  Aileen Iverson
11:50  Mathias Ballestrem
       Roberto Cavallo
       Pier Paolo Tamburelli
       Andelka Bnin-Bninski
       Fabrizia Berlingieri
       Tadeja Zupancic

13:00  C2  Wiktor Skrzypczak
13:50  Mathias Ballestrem
       Edite Rosa
       Pier Paolo Tamburelli
       Andelka Bnin-Bninski

14:00  D2  Agata Kycia
14:50  Ignacio Borrego
       Mathias Ballestrem
       Claus Peder Pedersen
       Anders Kruse Aagaard
       Fabrizia Berlingieri
A1 THE EMBODIMENT OF CONSOLATION
an architectural unfolding of dwelling in the presence of absence
Eva Demuynck [paper]
The Embodiment of Consolation

an architectural unfolding of dwelling in the presence of absence

Recent bereavement studies are observing and documenting a growing divide between the well-known existing ‘deathscapes’ (Sidaway & Maddrell, 2016) and the changing socio-cultural landscape of mourning within our secularised western society. Memorial practices are moving away from the public domain towards the everyday and private environments while the strive for closure is shifting towards a longing for ‘continuing bonds’ with the deceased: an ‘open-ended process of ritualization’ (Hockey et al., 2010) which relies on the sensation of the deceased’s presence attached to a material object or a place.

This study positions itself within the aforementioned ‘gap’ and argues that this evolving landscape is full of potential to explore new ways of designing space within the context of loss.

This claim is supported by the author’s master dissertation ‘Consolatio Locî’: a design-driven research that involved the hypothetical renovation of the author’s childhood home in response to the passing of one of its inhabitants. Materialising site-specific memories into the architectural detail culminated in a series of three spatial interventions: a room for saying goodbye, one for remembrance and one for dreaming.

A reflection on this first successful case study reveals how both the design process and the resulting space were able to transform the uncanny sensation of the deceased’s presence inside of the house into a comforting experience, thereby embodying consolation. The author subsequently uncovers possible intersections between the disciplines of Architecture and Creative Therapy by contextualising the different steps leading up to the final design and by unfolding them as a 'rite de passage' (Van Gennep, 1909) consisting of the following phases:

1. separation: observing the initial experience of the home environment while mapping emotional traces throughout the house and conceptualising these observations by means of a literature study and the reading of existing case studies

2. transition: associating the concepts from phase 1 with spatial elements and implementing these elements into the home environment through a cyclical drawing process

3. incorporation: reflecting on the consequences of these spatial propositions on the analogous space of the house and observing the changed experience of the home environment

The author is currently preparing for a PhD project relying on Kolb’s Experiential Learning Cycle to research how architecture’s non-verbal media ‘drawing’ and ‘space’ can be implemented towards the development of a more empathic architecture. This reframes the position of the architect as a mediator between mental and physical space.
A2 MONUMENTAL GROUND
Infrastructures and the design of Landscapes
[artefact] Ciara Pradel
Earthworks, Biasca, Tessin, Switzerland
MONUMENTAL GROUND
Infrastructures and the design of Landscapes

The PhD research is addressed to the investigation of moving ground action and its founding role inside landscape architecture discipline, reflecting on contemporary complex construction sites and on the design solutions based on earth coming from the realization of big infrastructural interventions, as the New Rail Link through the Alps. After the presentation of the general framework during the Ca2re Berlin and the discussion of different parts of the research during the Ca2re Lisbon and Ca2re Ghent, the next phase will focus on the attempt to map and interpret the landscapes of the overall *Infrastructural Monument* of AlpTransit through a set of drawings. The exhibition will create a unitary narration composed by seven different points: a description by drawings of valleys, alpine villages, urban areas located in Switzerland, where the construction of AlpTransit deeply affects landscape. In these places the movement of great volumes of earth often is not acknowledged or easy to recognize, while the inert materials coming from the infrastructure building sites are spread as spoils inside the nearest territories. Indeed only the tunnelling work of the Gotthard axis, which consists of two single track tubes around 40 metres apart linked to each other by cross-passages, originated more than 13.3 million of cubic meters of earth and rocks.

**Methodology**

The investigation on the AlpTransit construction sites is made from the perspective of a landscape architect, for this reason, after the definition of a theoretical framework and the critical analysis of the official NRLA documents - through literature, in-situ surveys and interviews-, the research is shifting from the prominent technical, organisational, constructive issues and is moving away from the engineering and geologic drawings that constitute the main public documentation. Each point of the drawing series will rather advance through following steps:

- *Observation, between memory and imagination (pictures, sketches and collages)*, to foster a critical attention to the understanding of the spaces resulting from ground movements during construction activities.
- *Temporary maps and sections*, to follow the tracks of ground movements inside landscape before, during and after the realization of the infrastructure.
- *Topographical drawings*, to integrate each earthwork to its environment and to its new possible shape.
Unveiling Monumental Grounds

The final objective of the research is the translation of the existing AlpTransit groundworks into objects of Landscape Design. Drawings serve as design tools to expand and unveil the imaginary potential of contemporary earthworks linked to infrastructural construction activities, between engineering, architecture, landscape, art and the feeling of the sublime.

Gotthard axis and Ceneri Tunnel. Section of the underground new rail line and of the superficial landscapes of the access points to the tunnels.
B1 The archaeological attitude as a design strategy
[paper] Enrico Miglietta
The archaeological attitude as a design strategy

With archaeological caution, the research aims to find in the practices, in the material vectors of the works or drawings, a form of tacit knowledge, a design attitude outside of a historiography, as restitution of an interpretative orientation, (in)actual and extensible methodology of analysis and design.

Lessons of balance, the works of architects such as Scarpa, Pikionis, Lewerentz or Fehn seem to move from the fragment, from a work on the detail where each singularity participates in the organization of the organism-architecture.

A way of proceeding that draws not from a language but from the material, the place, from design as a selective practice that (re)reads and (re)writes on the existing, archaeological process that reaches the definition of the form as a moment of verification and not as an operational matrix.

This paper and, where words cannot arrive, the images that accompany it, will try to re-read a work as a paradigmatic example of this way of proceeding, proposing at the same time an investigation strategy that uses the same tools as the practice to be investigated.

The role of the fragment as a construction paradigm is a constant in Carlo Scarpa’s research and is made very clear in the drawings prepared for the realization of one of his most interesting and complex works: the Brion Cemetery in Altivole (1969-78).

Two particular types of readings are proposed: the first - tomographic - plans to combine its genealogical analysis (Reichlin, 2013) with a stratified representation of the work, showing the overlap of the traces, the exogenous and endogenous modifications, identifying in this way the moments (and movements) of the marking operated on the fragment and its subsequent transformation into a figure. The second - chronosynthetic - involves the construction of several synthesis models for the project, inventions that have the strength to reverse the finished work to a paradoxical state that is both sensitive and ideal, that “element-form” described by Goldschmidt (1985) that makes the whole intelligible (therefore, expose) and, as a potential paradigm, can produce and generate the new.

Without a clear final destination but through a path made of attempts and uncertainties, we will try to define the mechanisms, the strategies of a project that works by analogy around the content, a method that in this way manages to adhere to a relationship with time through a «disjunction and an anachronism» and, in this sense, strongly contemporary (Agamben, 2009).
B2 Rabbithole Research (rbt_h0l)
Towards a Hybrid Modeling Technique in Architecture
[artefact] Aileen Iverson
Rabbithole Research (rbt_h0l): Towards a Hybrid Modeling Technique in Architecture

“The hand is the cutting edge of the mind.”  

This research centers on architectural model-making as thought process traditionally occurring at the intersection of hand, materials, and space. At stake are:

“not just the particular material from which (models) are made, but ... materiality itself as it confronts the creative human imagination.”  

This negotiation between material properties, spatial forces and spatial effects (perception, time, movement) fuels a critical architectural thought process and defines architectural form-making as an interlocking of object and space.

“Architecture ... is a mode of existential and metaphysical philosophizing through the means of space, structure, matter, gravity and light.”

In digital model-making, mathematically based computational materials (meshes, surfaces, etc.) are engaged through parametric code and scripted software; all within an infinite, user-defined, digital environment with limited spatial characteristics – freeing form-making of material and spatial limitations. This shift in modeling methods can be diagrammed as:

physical model-making, $M_p = \text{hand/material/space}$
digital model-making, $M_c = \text{eye/computational materials/reduced spatial characteristics}$

As a thought process, this shift represents a significant break in the feedback/critique between materials and space of physical model-making described above.

Therefore this research seeks to develop a hybrid-physical-digital-modeling technique combining: material agency, spatial characteristics, and modeling methods, of both physical and computational modeling.

Now in its 3rd year, this research has developed as a series of hybrid-modeling tools or “sensor-models” [image 1] – in which sensors are wired to physical models [image 4] and linked to parametric code which shape computational elements; resulting in models exist partially in physical and digital space [images 2, 3].

“space is the machine”

Further, this research has produced an unexpected outcome: adding digital sensors to physical models effectively places the sensors in spatial relationship. The type of sensors used (forces, light levels, distance, etc.) and the location of each sensor relative to the others creates a spatial network of data in which altering the physical model alters data collected which alters the digital model. By extrapolation, this creates a feedback loop between the physical and digital parts of the model in which data is a quasi-independent and autonomous actor.

Lastly, in attempting to integrate physical and digital methodologies, this research attaches to contemporaneous philosophies: post-digital 5 and second turn 6 – in which human characteristics (precariousness, intuition, chance, etc.) are intellectually valued and increasingly invited to inform the next generation of computational methods.

image 4_Hybrid Model Case Study 02 - physical model wired to sensors

- flex sensor
- light sensor
- micro controller (Arduino)
C1 Strategies for the transformation of abandoned industrial sites in Romania

[paper] Monica Tusinean
Strategies for the transformation of abandoned industrial sites in Romania

Abstract

Large scale areas are being left permanently deserted by the continuing trend of deindustrialization. A particularly striking example of this phenomenon is observable in the states of the former Eastern Block, continuing from the 1980s to present day.

The tendency towards urban and peri-urban decay has catalysed the emergence of necrotic, idle and uncontrolled landscapes, often in the immediate proximity of metropolitan centres, as well as the systemic erasure of industrial and cultural heritage in these regions.

While the approach towards maintaining and reclaiming such sites has been a focal point of architectural and urbanistic research and planning in Central Europe since the late 1970s, the particular socio-economic characteristics of Eastern Europe have not been closely examined, leading to maladjusted solutions in the few cases where the necessity for intervention had been identified. The grafting of superficial urbanistic and architectural concepts, often „borrowed“ from successful projects in Western Europe, onto sites that are not fit to support them, lead to unsustainable solutions facing a plethora of issues that local planners and communities are struggling to solve.

The role of industrial architecture as a generator of memory and remembrance is to be clarified and exemplified, as well as the aesthetic quality of decay. The research aims to interrogate the minimal scale of interventions that can still lead to sustainable re-use, maintenance and preservation of chosen sites. The concept of curating disrepair weaves into the exploration of structured strategies of transformation and a broader view onto representations of ruins, both abandoned or in transition.

The underlying questions are whether abandoned industrial ruins in Eastern Europe can be approached with an architectural purpose, and what parameters can be defined in order to identify sites that can be worked on and with, in order to create sustainable solutions for their preservation.

Two projects, both located in the city of Sibiu, Romania, have been currently identified as relevant and available for research: the transformation of the „Sinecon“ concrete prefab factory into theatre spaces for „Fabrica de Cultura“, based on my project from 2012, and the yet unexamined derelict site of „Independenta“, which harbours significant potential for another transformation proposal.

The focus falls on transformative processes: the objective is to explore these complex yet inexact pursuits through methodic research as well as architectural design. My research aims to investigate whether strategies can be developed in order to formalise the morphological, functional and social disparities of these types of territories.
Transformation of the site of “sc Constructii sa” into “Fabrica de Cultura” Sibiu (2012-2016)

Photos by Monica Tusinean (2018) and Teatrul Radu Stanca Sibiu
Transformation of the site of “sc Constructii sa” into “Fabrica de Cultura” Sibiu (2012-2016)

Site of potential transformation and reprogramming design research “Fabrica Independenta Sibiu”

Photos by Monica Tusinean (2018) and Teatrul Radu Stanca Sibiu
C2 Imaginary Inhabitation and Bodily Imagination of Architectural Space

[artefact] Wiktor Skrzypczak
Imaginary Inhabitation and Bodily Imagination of Architectural Space

Keywords: bodily self-consciousness, space perception, spatial imagination, somatic movement, phenomenology, perception psychology, embodiment theory, practice-led artistic research, architectural design methods

The architectural design process may include imaginary inhabitation of the conceived space. However, this cognitive and embodied effort is often replaced by computer-aided modelling and reduced to visual images and sterile geometries. The presented doctoral research develops bodily movement practices which emphasise the moment of imaginary inhabitation in order to relate the designed space to architect’s own body1 and by doing so to infuse it with poetic, existential and humane qualities, as advocated for by thinkers such as Gaston Bachelard, Juhani Pallasmaa or Alberto Pérez-Gómez.

Experimental psychological studies show, that a heightened bodily self-consciousness enhances the perception of the environment². How can this correlation be consciously and effectively applied in architectural practice? Imaginary inhabitation is a competence which involves both embodied and mental processes. It includes spatial perceiving, remembering, imagining and shaping. Followed by methodological translation of those experiences through media of language and drawing they can converge into an architectural design. In its current state, this research seeks to hurdle the transition from imaginary wandering to analytic choice making. The aim of the research is a ready-to-use design toolkit for immersive, aesthetic design practice and sensually elaborated architecture.

The study’s interdisciplinary framework draws from body-oriented architectural theory (Einfühlungsästhetik³, phenomenology⁴, perception psychology⁵) and post-Laban somatic movement methods, such as Body-Mind Centering⁶. This study investigates the reduction of a spatial experience to a bodily felt phenomena⁶—a method used in both somatics and phenomenological analysis. It also discusses, how the tacit knowledge of the body sensing and feeling itself correlates with explicit knowledge about its near environment. In this sense, it is an educational approach, which is currently being developed and tested within a university experimental design seminar.

Somatics, as a field of corporeal practices and methods which mostly developed throughout the 20th century, seeks to heighten bodily self-consciousness and relate the body-mind to the environment, by means of perception training⁷ (cf. Neutra’s similar concept in architecture⁸) and particularly through the focus on kinaesthetic and proprioceptive experiences of the practitioner.

Besides spoken word—the introduction to and instructions for the imagination practice, this performance lecture will include presenter’s moving body and a projection of the visual documentation of similar previous practices. This presentation is open for audience participation through contemplation of one’s own kinetic responses or active movement.

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1 Pérez-Gómez in: Jacquet, Benoit; Giraud, Vincent (2013): From the things themselves: Architecture and phenomenology. Kyoto: Kyoto University Press., 467 Pérez-Gómez call for “recognizing ourselves as complete, in order to dwell poetically on earth”.
D1 A retroactive theorem for the “Caracoles”
[paper] Javiera Gonzalez Zarzar
In “Delirious New York” (1978), Koolhaas applied the idea of “theorem” to a cartoon drawing made in 1909. The intelligence of the diagram was that it could describe “the ideal performance of the Skyscraper […] as a utopian device for the production of unlimited numbers of virgin sites on a single metropolitan location” (p.69). In 1963 in France, another theorem arose from the minds and hands of Parent and Virilio. With the name of “Oblique Function,” the inclined ramp was conceptualized as a visionary device for urbanizing a new world.

In both cases, the theorem was more than a drawing. It was a place between theory and practice for exercising the social potential of architectural ideas. On the one hand, with Koolhaas, the ideological independence among floors, on the other hand, with Parent and Virilio, a new structure for the production of consciousness on single bodies. In contrast with the Skyscraper, which was reproduced around the world, the architecture of the Oblique saw fewer examples.

However, with the name of “Caracoles,” part of the theorem of the Oblique took material shape in Chile between 1974 and 1982. The idea did not travel from France, instead arose from the geometric space of Chilean architect’s imagination. These buildings were characterized by an atypical floor plan solution, shaped by a footpath with an ascendant spiral ramp, surrounding a central void to accommodate small shops.

The scheme was supported by the precepts of a liberal architectural education that took the economic crisis as an opportunity. The “Caracoles” was designed with a deep belief in the transformative power of the architectural project. Indeed, no large corporations that would have entered into free plan spaces were willing to invest in Chile. The “Caracoles” shaped a new business model by reorganizing the size of the capital investment and the form of the administration.

This Ph.D. redraws the geometry of singles examples of the “Caracoles” to reinvent its theorem, but not only as a drawing, rather, as an exercise that can reformulate its social implications. Today academia is increasingly dominated by the idea of practice as the primary space of knowledge within the field. Studying the “Caracoles” from the perspective of the theorem, however, can shift the logic of the project back to the nature of our own architectural thinking.
D2 3D PRINTING ON PRESTRESSED CUSTOM KNITTED TEXTILES

[paper] Agata Kycia
ABSTRACT

This paper investigates the technique of 3D printing on prestressed fabrics as a way of creating three-dimensional textile composites and explores potential applications of this method in the architectural industry. Design methodology takes advantage of the elasticity and self-shaping properties of these structures, looking into aspects such as materiality, modularity and scalability.

Design methodology relies on 3D printing a less elastic material such as thermoplastic polymer on top of an elastic, pre-stressed fabric. After releasing the tension, the fabric transforms into a three-dimensional textile structure. This self-forming process results from the interplay and search for the balanced state between the two opposing elements: the elastic, prestressed fabric and the stiffer, 3D printed polymer. Forms created in this way are pure representations of their material properties, energy stored in these materials and forces acting on them. As a result, they are structurally stable and inherently efficient.

The study consists of two parts. The first one aims to understand the physical and geometrical principles that influence the shape transformation. In nature, out-of-plane deformations of flat sheet materials are often the most energy-efficient solutions to deal with material access. Examples of such systems are kale leaves or seashells, which curl towards the perimeter since it costs them less energy than extending. In the case of prestressed fabrics, their embodied energy acts in the opposite direction and causes shrinkage, whereas the excess 3D printed material deforms out of plane creating wrinkles and curls.

The second part of the research focuses on the fabric itself by looking into the relationship between the knitted pattern and the self-shaping properties of the textile composites. It investigates 3D printing on custom-knitted fabrics with various degrees of porosity and elasticity. Being able to control the trajectories of individual fibers results in efficient material distribution and allows integration of various functionalities into one heterogeneous knitted fabric. The purpose of this study is to explore how the pre-programmed knitted patterns affect their three-dimensional transformation. Both parts of this research are examined through a series of physical experiments and analytical studies.

As additive manufacturing becomes more affordable, materials more intelligent, and textiles more robust, the pool of potential applications of textile systems is continuously expanding. Proposed methodology suggests novel applications for lightweight textile structures in architecture and construction.

KEYWORDS

self-shaping textiles, material form-finding, 3D printing on textiles, custom knitted fabrics
JUNE 10TH - 12TH
ONLINE CONFERENCE

Stream 1

Wednesday 10th

0900  Intro
1.1  1000  Marieke Behne [abstract]
1.2  1100  Greta Maria Taronna [abstract]
1200  Lunch
1.3  1300  Gianfranco Orsenigo [abstract]
1.4  1400  Sofia Senos [abstract]
1.5  1500  Sinan Mihelcic [abstract]
1600  End of day

Thursday 11th

1.6  0900  Joel P.W. Letkemann [paper]
1.7  1000  Gisle Løkken [abstract]
1.8  1100  Chiara Lionello [abstract]
1200  Lunch
1.9  1300  Mirjana Lozanovska [abstract]
1.10 1400  Taufan ter Weel [artefact]
1.x  1500  Stream 1 spare slot
1600  End of day

Stream 2

Wednesday 10th

0900  Intro in Stream 1
2.1  1000  Pietro Quattropani [abstract]
2.2  1100  Viktorija Bogdanova [abstract]
1200  Lunch
2.3  1300  Greta Allegretti [abstract]
2.4  1400  Martin Allik [abstract]
2.5  1500  Luyi Liu [paper]
1600  End of day

Thursday 11th

2.6  0900  Dirim Dinçer [abstract]
2.7  1000  Valentina Rodani, Gianluca Croce and Mariacristina D’Oria [artefact]
2.8  1100  Ghazaleh Afshary [abstract]
1200  Lunch
2.9  1300  Alise Plavina [abstract]
2.10 1400  Carola D’Ambros [abstract]
2.x  1500  Stream 2 spare slot
1600  End of day
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1.1 Interactions in housing production
[abstract] Marieke Behne
Interactions in housing production

keywords
democratisation of planning; everyday and empirical-, experience knowledge; housing biographies; housing needs; housing practices; housing production; interdependencies; sufficiency (social, economical, ecological)

Various formats of participation appear to be current (again) on very different levels. Especially in planning, these formats are integrated into planning processes and even institutionalized. Public construction tasks in particular can no longer resist the general demand – or even necessity – and are forced to integrate these formats into their planning processes. Following Lefebvre in *Das Recht auf Stadt* it does not seem to be arguable that we have to take part in the discussion, but there remains the question of how. What impact do these processes have? How and where are the effects reflected (meaningfully) in the planning and production processes? My research attempt to portray these relations in the planning and production processes of residential buildings and living space. It is following the question: What impact do participation processes have at the level of politics, proceedings, planning, construction, operation and use today? Which could (or should) they possibly have in the future? The research starts with the individual experience knowledge of those who are involved in the processes: How is (and how could and how should) experience knowledge acquired, made available, visible and used projectively? On the basis of three different case studies of collaborative housing models and three different levels of project development, the research aims to examine the relationships of the responsible actors and their decisions in their concrete effects on project development and architectural production. Their impact of socially sustainable and affordable living space is to be worked out to make the opportunities (re)negotiable from an architecture-producing perspective. Since collaborative projects often act in an exclusionary manner, the knowledge gained should be transferred in various formats to the conditions of general housing construction in order to point out possibilities for a more accessible and simplified collective and collaborative project development. The interest in knowledge and the possible insights are: 1. to prove the effectiveness of collective action and 2. to work out transferable strategies, formats, procedures and methods for the development of alternative models in affordable housing as individual patterns of action and 3. to develop new foundations and forms of development for non-profit housing construction. The research therefore first asks for existing and then possible conditions for the development of alternative housing models in affordable and non-profit housing construction.

2.1 The concept of copy in Arts and its application in architectural projects
rebuilding proposal of Villa Deliella in Palermo

[abstract] Pietro Quattropani
The concept of copy in Arts and its application in architectural projects.

Rebuilding proposal of Villa Deliella in Palermo.

Doctoral thesis at HafenCity University Hamburg

PhD student: Pietro QUATTROPANI
Supervisor: Prof. Dr. Mona MAHALL

Abstract

The dissertation investigates the concept of the copy, its ideological and aesthetic value in current architecture. The focus is on the theoretical and practical discussion of the question, if, after western modernity's rejection and postmodernity's reconsideration, the architectural copy is rehabilitated today. In which context, under which conditions and interventions does the copy of a past lost building seem to become a model for the future?

The project idea starts from the case of Villa Deliella in Palermo. Designed in 1906 by Jugendstil architect Ernesto Basile, the Villa was located in the nineteenth-century district. In 1959 the City Council, in an obtuse and aggressive system of urban speculation typical of those years, authorized its demolition to construct a multistore building, never realised. Currently the politic administration is working to launch a design competition for its reconstruction in the original place.

The aim of the research is to explore the theme of imitation in an attempt to find a theory of reconstruction that can mark the guidelines and be the foundation for cases of lost buildings in complex urban situations, where city development has to consider architectural heritage. A practical part of the thesis consists in a specific rebuilding design project for Villa Deliella.

Archive materials are being studied and the poetics of Basile is being explored, with particular reference to his conception of copying and reconstruction. Also the evolution of the notion of mimesis is being investigated, starting from the philosophers of antiquity to contemporary aesthetic theories. The analysis of classical rewriting techniques (interpretatio, imitatio, aemulatio), which differed from each other for the different degree of adherence to the model and for the different personal creative contribution of the artist, are providing food for thought and impulses to research. Particular attention is paid to Benjamin and his ideas of originality, authenticity, and aura. Also the positions of scholars, such as Eco and Latour, are analysed, who consider the replicas as a trait of the life of the artwork and argue that, sometimes, they can even surpass the original model. From the theoretical study is deduced a methodology for procedures of copying, referring to artistic strategies of appropriation and re-enactment, which will be applied to the reconstruction proposal.

In an excursus, case studies of architectures recently reconstructed according to three different ideologies are analysed and compared: the contemporary approach, Kunstmuseum Moritzburg; the pseudo-philological, Berliner Stadtschloss; the re-enactment visions, Dessau Masters’ Houses.
1.2 **Architecture on the Modern**
methods and design actions for the
school heritage within seismic Italy

[abstract] Greta Maria Taronna
Architecture on the Modern
Methods and design actions for the school heritage within seismic Italy

Greta Maria Taronna
PhD candidate in Architectural Urban and Interior Design (AUID) - XXXIV cycle
Department of Architecture and Urban Studies (DAStU), Excellence Department on “Territorial Fragilities”, Politecnico di Milano

The investigation, part of the research programme on Territorial Fragilities by the Excellence Department of DAStU, deals with the necessity to intervene for the adaptation and prevention of the Modern architectural heritage in Italy through a design methodology. The field of interest, in particular, concerns the school heritage, built between 1950-1970, and realized with frame RC structures in seismic risk areas.

The relevance of the topic, to which also “Casa Italia” department is interested in, imposes a resolution for which architecture and design actions must be central in the debate on the field.

The dense net of schools, realized after the Second World War up to the Seventies, constitutes more than half of the buildings of this typology in Italy. The obsolescence, especially in the structural elements, to which these buildings are exposed, determined by the materials of which they were constituted, highlights the fragility of a heritage that must be adapted because of the strategic role it fulfills.

The interest of the research will be aimed at buildings designed by the so-called "minor" architects who, after the establishment of Centro Studi per l'Edilizia Scolastica in 1952, have experimented innovative typological and technological solutions to renew the typology of the school building. Attention focused on the "minors" since it is aware that these buildings are more exposed to interventions that could be disrespectful of their architectural matter. In fact, even with the regulatory difficulties and the absence of constraints, there is a greater awareness about the value the buildings by the Masters possess and about their need to be preserved.

The aim is to experiment, through design actions, solutions that can intervene on this valuable heritage for adapting it to the new needs. Interventions that can provide new vitality through the introduction of modifications that can dialogue with the architectural spaces through the structural strengthening. Working in contrast with the widespread emergency practices and rapid interventions that often change the architectural object irreparably and undermine its liveability.

Using specific instruments like Carta del Rischio, data by Ministry of Architectural Heritage, Education and “Casa Italia”, it is possible to select case studies to test a methodology that, starting
from the work on buildings with distinct architectural qualities, can be applied to the dense network of schools in Italy. The aim is to **outline a methodology based on the architectural design** as a decisive element of intervention on the Modern architectural heritage.
2.2 Illuminating the poem-drawing
an insight in the entwinement between believing, learning and making

[abstract] Viktorija Bogdanova
Abstract

**Illuminating the poem-drawing**

An insight in the entwinement between believing, learning and making

Poem-drawing is a way of expressing thoughts and feelings related to a specific environmental situation – *existing, imaginary or designed*. The dialogue between verses and drawing lines creates a silent record of author’s architectural understanding and thinking, by intensifying his/hers presence in the processes of spatial interpretation. Poem-drawing invites both the author and the reader, to immerse emotively in a research-through-design task; there, the subjective and objective dimensions of place-making complement and correspond to each other.

The exhibition would be aimed at illuminating the ties between the three processes (three parts of the PhD) where poem-drawing is being found: the defamiliarization of the phenomenological (back)ground, the (a-)historical reverberation of chosen case studies, and the researching-through-making (designing the (im)Possible as a hopeful critique of the Real). The first frames the candidate's re-thinking of the existing sources of related theory ('vision of truth') as a *structure of belief*; the second frames the candidate's reflection on the *varieties* of poem-drawing manifestation in the work of different personalities (Hejduk, Le Corbusier, Ponsi, Friedman, Kulper, Lequeu, Brodsky, Sejka, Archigram, Holl, Wilson, Bo Bardi, Ishigami, Van Den Berghe); the third frames the candidate's observation of the personal practice, poem-drawing collaborations and pedagogical experiments as a first-person-experienced ladder from *self-cognition* to *self-abandonment*.

Considering the fact that the research is in the final stage, the exhibition strives to unfold, in a visual and understandable language, the mode and the meaning of non-linear confluence of the three parts. Unlike the previous (five) exhibitions in the CA2RE, where chosen fragments were being elaborated thoroughly, this installation aims to convey the importance of the whole – that is – the modes of interacting between the fragments. Whereas the previous exhibitions were elaborating on how a poem-drawing can *free oneself from the known* (defamiliarization), this exhibition aims to emphasize when *do we encounter and experience a responsible way of forgetting*.

Keywords: poem-drawing, defamiliarization, spatial interpretation, research-through-design.

Figure 1: Author’s chronological section(s) of the practice (part 3) overlapped with the moments of encounter of the case studies (part 2) and the structure of belief (part 1). 50x70cm.
1.3 Experimenting the possible
the transformation of space as a inquiry tool

[abstract] Gianfranco Orsenigo
Experimenting the possible. The transformation of space as a inquiry tool.

A space for familiar relationships: a small redwood pavilion inside the meeting garden of the Milano-Bollate prison*.

A new public space of coexistence: a grass, a wooden platform, four seats, three flower boxes and a painted pavement**.
Two experiments of real transformation of space carried out by a group of researchers at the Politecnico di Milano into two different research, in which I have actively taken part in. Although completed, their value lies in being part of a wider project network.

Through the storytelling of their conception and realization process, performed collaboratively, we want to investigate a possible innovation of the role of architecture design. In particular, contributing to making decisions in transformative processes of marginal contexts. Marginal areas are those multi-problematic situations which, due to their complexity, are often excluded from requalification programmes and projects.

The realizations described are not to be understood as attempts to resolve, but as tools to investigate the opportunities of contexts, following the cut (Ingold 2013) to see where it goes, ever alert and responsive to clues in a variable environment. Starting from what the project does (and not what it could be), putting the peculiarities of architectural knowledge at work, the project opens up to the collaboration of others. The engagement takes place through doing.

The project assumes the form of a relational process, a contingent and relative 'social object' (Ferraris, 2009). It opens to the contribution of different actors and knowledge, professional and common. In this habitat, the specific contribution of the architecture is to advance tentative forms, an explorative prefiguration of the conditions of transformation. They aren't a prototype but an attempt to define an effective method.

From this point of view the designer becomes an activist as described by Hirschman "it is not my aim to predict trends; rather, I apply myself to trying to understand what is possible and to calling people’s interest in it" (1994). It turns out that the project is not so much an image of a future state of the world as an orientation to action and "continuous work on potential effects" (Pasqui 2018).

* Prison Architecture: from Space of Detention to Place of Relationship, FARB2016, a call for basic university research.
** West Road Project. A device for activating networks and public spaces throughout the diffuse neglected areas. Polisocial Award 2017 that rewards research with social purposes.
- The Formal approach as a first experience to the practical case, the design investigation through the development of a concrete project: the architect's house.

- The experimental opportunity through design research methodologies to address the issues and establish a relationship and comparison with the case study of reference.

The procedural moments of various orders will be recorded, those that determine, validate or reject the various options throughout the design project development. A support for an experimental training environment, framed with the project objectives, through the main stages of the design project, from observation and sharing to comparison. We hope that through a careful and systematic exposure of the design driven methodology, this approach can be transformed into a concrete research, safeguarding issues such as:

- What is the role of the author's own experience in this work? How to frame the constant change of the author himself over time?
2.3 **Architecture and UNESCO Buffer Zones**

the architectural project as a tool for the UNESCO Buffer Zones of «fragile» archaeological sites. From safeguard planning to the development of design models for the enhancement of heritage.

[abstract] Greta Allegretti
Architecture and UNESCO Buffer Zones.
The architectural project as a tool for the UNESCO Buffer Zones of «fragile» archaeological sites. From safeguard planning to the development of design models for the enhancement of heritage.
Greta Allegretti

The object of this research is the relationship between the architectural project and two of the current UNESCO tools for the safeguard of heritage: the Management Plan and the Buffer Zone. Today these tools are mainly descriptive and programmatic; they are here given new meaning and use, as they should not only be seen as mere guidelines of protection, but also as a concrete design opportunity.
The architectural project is identified as the key element to convert what now is a binding regime into a development and valorization plan.
The research is focused on UNESCO archaeological sites and their «fragility»; in particular, on that condition of fragility which is rooted in these specific territories, and which can arise from both natural and artificial causes. There is a need to identify actual «design actions» that, along with the analysis and study of the sites, can build «design models». It is important that these models don’t remain too theoretical, on one side, but neither too specific, on the other side: they must be able to interpret a specific area, but also be useful for many areas. In order to reduce what would be potentially infinite scenarios, three Buffer Zone profiles – corresponding to different types of fragility – are identified:
- low-density Buffer Zones (mainly unbuilt, rural and natural);
- medium-density Buffer Zones (partially unbuilt and partially covered by urban fabric);
- high-density Buffer Zones (saturated, fully covered by urban fabric).

Each profile is studied through a selection of case studies – one per category. The deep understanding of the areas is achieved thanks to reading the UNESCO and local regulations documentation, the observation of maps and satellite views, but especially with field surveys: visits, photographical reportages and direct contact with local institutions are fundamental to comprehend the true limits and possibilities of every site. For each profile, the identification of problems and conflicts will be turned into general objectives and into the definition of the appropriate design actions. Through architectural project, all these elements, all these open questions and possible solutions will be systematized in a design model – a written and drawn plan – tested on each case study and applicable to all sites that belong to the same profile.
1.4 Industrial Colony of Vista Alegre (1924) 
nationalist aesthetics in the European context 
(early 20th) the influence of Raul Lino

[abstract] Sofia Senos
Industrial Colony of Vista Alegre (1924): nationalist aesthetics in the European context (early 20th)- the influence of Raul Lino

Sofia Senos, Universidade Lusófona

Industrial Colonies are symptomatic urban study objects that allow a focused analysis, like a laboratory experience:

- By their typology: small villages built around a factory, monofunctional and monosocial, with a private promoter (paternalistic character).

- By their motivations: they reflect the prevailing thinking of the time about the working class, models of production, social organization and national identities.

Vista Alegre is a Portuguese industrial colony founded in 1824. Two-hundred years of the history of the urban ideologies: from Utopian Socialism to the Garden-City.

Raul Lino, the German-trained architect and the architect of the “Portuguese House”, introduces (1924) an “anti-urban” aesthetics with a nationalist character, influenced by the first Germany Garden-City of Hellerau (1909) and Muthesius's book “The English House” (1904).

In 1924, the workers' village was enlarged. In contrast to the initial proposes, the urban plan follows the garden-city principles: an hierarchical plan, marked by a single-family dwelling (like the country-side) with a nationalistic aesthetic, which refers, in a picturesque way, to the imaginary models of vernacular architecture.

Until now, there is not clearly and systematic evidences of the project authorship, but too many connections with Lino could be guessed.

The main goal of this thesis is to establish this connection through 4 different topics:

1. Early XX : RauL Lino in Germany (Whilmine period 1890-1918)

From the Deutscher Werkbund and the Garden City Movement (influenced by the English experiences of Ebenezar Howard, Unwin and Parker).
Study Case: Garden-City of Hellerau (1909).

2. Raul Lino (1890-1920): the construction of nationalist architectural aesthetic.
From British Ultimatum (1890) until the establishment of a dictatorship “Estado Novo” (1926)
Study Case: Workers Quarter “Lucas e Ventura” by Carlos Ramos (the important director of Porto School that worked with Raul Lino (1918-1921))

Through the way that is celebrated the centenary of the Porcelain factory, understanding the context of the Portuguese economic and artistic political elites.
Study Case: Pinto Basto Family House by Raul Lino

4. Raul Lino’s Architectural Language
To establish a genealogical relationship between Vista Alegre’s architecture and the projects idealized and designed by Raul Lino.
Study Case: School, kindergarten and single-housing projects of Raul Lino

Understanding Lino to understand the consciousness and theorized choices that transforms Vista Alegre into a relevant urban and architectural example, which translates models of social and ideological organization.
2.4 Envisioning Resilience
principles for creating urban greenspaces that adapt to change

[abstract] Martin Allik
Envisioning Resilience: Principles For Creating Urban Greenspaces That Adapt To Change

Mentor: Veronika Valk-Siska  
Co-mentor: Kristi Grišakov  
Author: Martin Allik  
Affiliation: TalTech (Estonia), MARELD landskapsarkitekter (Sweden)

Abstract for application to the 7th CA³RE Conference for Artistic, Design and Architectural Research in Trondheim, 2020

30.11.2019

This thesis investigates how ecological resilience of urban greenspaces can be increased by an evidence-based design process and the landscape architect expanding its role throughout the design and construction phases. It defines principles how the ecological value of new urban greenspaces can be raised.

In urban landscapes, ecology can’t be isolated from societal and/or cultural factors. Therefore, creating ecological resilience while maintaining societal and cultural significance in an era of rapid change is a formidable task. These changes can be of various type and impact such as passing architectural trends, changing maintenance routines, changing policies and politics, budget cuts, urban densification and sprawl or both predictable and unpredictable weather phenomenon caused by climate change. The success of an urban habitat, a fundamental aspect in any resilient greenspace, is coupled to aesthetics, perception, maintenance, and foremost to adaptability.

This thesis is based on five case studies. Three completed projects, Briggen Passage, Entrance Park and Shoreline Park are situated in Gothenburg, Sweden. Play & Learn Park is a project in late design stage (as of December 2019) and is set to be opened in June 2021 as part of Gothenburg’s 400th anniversary celebrations. An additional fifth project, yet to be named and located, will be designed and built as part of this thesis. The latter will provide a feedback loop to the tools synthesized from the first four case studies.

The thesis critically analyses both the success and shortcomings of the case studies. Though every site is unique with its specific challenges, the tools proposed in the thesis create a backbone to a successful process and establish the right preconditions for creation of resilient urban greenspaces. The proposed design process is firmly grounded on research, statistics and previous experience of both the author and other architects, and experts from other disciplines. This is combined with a series of user workshops, workshops with maintenance staff and municipal employees, and active participation in the building process.
1.5 DESIGNING AND STRATEGIZING THE CREATIVE CLUSTERS FOR SUSTAINABLE REVIVING of SUBURBIA

[abstract] Sinan Mihelcic
DESIGNING AND STRATEGIZING THE CREATIVE CLUSTERS FOR SUSTAINABLE REVIVING of SUBURBIA

Abstract:

Purpose:
Suburbia, with its many sustainability problems, is possibly the next biggest frontier of extensive pro-sustainability measures in Slovenia (or and Europe). One of the possible measures how to revive suburbia is through establishing and supporting creative clusters, which are small sub-urban areas, with stronger concentration of creative industries. The aim of this initial phase of my doctoral investigation is to elaborate possibilities how to design and support those clusters and why some of them are succeeding, others not.

Methods:
To answer this question, I will analyse my professional work with those clusters in the last decade, including “bottom up” and “top down” projects and initiatives and compare it with similar practices from local and regional level. First part of the research will focus on experience through interviews and personal observation, later in the process I expect to add some amount of measurable data.

Implications:
Within the research, I expect to create a better understanding, where in suburbia creative clusters are appearing and why and how creative clusters effect on local circular economy and sustainable development. Later I will use this data to create guidelines for developing the tactical urbanism policies, for designing creative clusters and frameworks how to invest into creative areas in order to shift from existing models of suburbia into more sustainable developments.

Trondheim goals:
The initial data and personal experiences indicate, that fluidity of people, accessibility of affordable individual transport and less constant way of life (peer to peer way of life) are main challenges for creative clusters areas to achieve positive impact on the sustainability.
My first goals for Trondheim are to present my personal experiences and findings from my creative practice in suburbia and elaborate on the findings. I will expose the question of how much mobility (physical and mental) of creative class individuals is effecting the success or failure of those creative clusters initiatives. I will present story and experiences of people involved in Štajn students architecture group (later Štajn architects), which I have lead for last decade. Through the printed graphic material, statistical data and presented parts of interviews with its members, I intend to open a debate around the table on the topics of reviving suburbia with creative clusters.
DESIGNING AND STRATEGIZING THE CREATIVE CLUSTERS FOR SUSTAINABLE REVIVING of SUBURBIA

My personal *mental hypercity image*, as a result of testing my less constant way of life (*peer to peer way of life*), which I live in the last few years. Is that kind of living opportunity for suburbia, product of suburbia or cause for suburbia?
One of many “bottom up” strategic projects, where we designed moving mammoth, to show the local people, where the real bronze statue of mammoth could be. It was a test. It was an creative and learning experience. This project was one of many tactical tests, how to change and develop the public space trough creativity.
2.5 **An Accessible Frame**
research on ancient Chinese landscape architecture, towards an interactive practice paradigm

[paper] Luyi Liu
An Accessible Frame
Research on ancient Chinese landscape architecture, towards an interactive practice paradigm

Based on contemporary interpretation of ancient Chinese landscape, at epistemological and ontological level, this research towards a sort of interactive practice method for today's spatial design.

The full Ph.D. thesis contains three main parts.

In the initial part, beginning with a narrative analysis of one typical spatial phenomenon from ancient Chinese landscape: *Enframing the Scene*, the study tries to explore “another way of seeing” and “another way that following this visual habit to create space”. This is a common chain of human visual perception and spatial creation. However, here it is different from the current global general one, which is tamed by linear perspective and is criticized due to certain limitations of dominating conceptual position in culturally diverse and dynamic contemporary society. *Frame* holds the fulcrum role in the chain translating 3D space to 2D picture. In linear perspective principle, it plays a serious boundary between the real space and illusion space. In *Enframing the Scene*, *frame* is accessible.

In the second part, aims to refine certain paradigm from phenomena, retroactive research about the philosophy root of the ancient Chinese landscape has been extended. This kind of interaction that happened in the perception field also could be explained as a sort of intersubjectivity between human beings and the world. It works through empathy both in landscape spatial designing and enjoying. This coincides with the phenomenology framework in many aspects. Moreover, based on the assumption that human knowledge of space includes some a priori, that means reducing cultural differences, there should be common spatial prototypes that can serve people of varied cultural backgrounds. Thus, this kind of interaction was a design method in ancient China and also could be used in today's global networked culture society.

The last part is the highlighted part of the present paper. It will explain one practical project under this kind of interactive paradigm. It is a home construction project, in a sensitive culture context space, with well-educated clients. The architect here plays as a guide instead of the decider. While users are the decision-makers of their living space. The main aim of explaining and reflecting this project is to articulate some guidelines for practice that might be more sensitive to the realities, values, and questions arising from the depths of culture and lifeworld. From these guidelines, different implications may be drawn in different design conditions. *Frame* here is the practical projects' work-frame, it is accessible.
1.6 Science Fictioning Architectural Pedagogy
[paper] Joel P.W. Letkemann
Science-Fictioning Architectural Pedagogy
Abstract submitted to CA²RE Trondheim, 1.12.19

Joel Letkemann, PhD Fellow
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Science fiction (SF) has often been used as a descriptor, sometimes dismissively, of much work in architecture and architectural pedagogy. Often, the descriptor is used as a synonym for a project’s novelty, or for its aesthetic relationship to works of popular culture, rather than for its more nuanced investigation of futurity. Such banal aestheticization merely reproduces the normative, easily digestible imagination of the future - what futurist Scott Smith calls “flat-pack futures,” rather than opening a discursive space about what we, collectively, might want the future to be like. Thus, the qualities which might make an architectural work most like SF — its SF-ness, so to speak — are insufficiently established, and as such, the nature of what architects might learn from SF and how such learning might happen has been insufficiently explored. On the other hand, SF authors and critics describe SF as a mode of speculation rooted in interwoven technical, socio-political, and affective imaginings whose difference from empirical experience produces a dialectical relation between that future imagination and the readers’ present — a revelation of the present through the projection of something that does not yet exist.

The paper describes two experiments in architectural curriculum designed to take advantage of elements of SF storytelling to illuminate what and how prospective architects might learn from SF. In these examples, SF pedagogy oscillates between hermeneutic and heuristic modes of engagement with students hopes and imaginations for the future. The research engages with SF literature directly, as well as drawing on the fields of SF and Utopian Studies to elaborate potential avenues for an SF pedagogy through such vehicles as estrangement, critique, and worldbuilding. Rather than providing a blueprint for any specific future, SF pedagogy aims at understanding the future as a contested space, a space open to continued definition by those who will live in it.
2.6 **Atlas of Threshold**  
Spatial Narrative of Others  

[abstract] Dirim Dinçer
Atlas of Threshold: Spatial Narrative of Others

After modern humanity’s first exodus from Africa, human had wandered to the Middle East, to Europe, Asia, and the Americas. However, after nearly 3500 generations, migration has been introduced as a national security issue to the world in which one in three countries use surveillance technologies to control human traffic at their borders/border-zones. As it is visible from the aftermaths of the recent conflicts, the more strict controls implemented on the routes or the more walls, whether concrete or mesh wire built, more permanent migration and routes are created. The continuous wars and conflicts in the world, especially in the Middle East and Africa, combined with climate change, deforestation, energy resources, and inequitable financial systems, still cause displaced populations. Today, the “precarity” of the status, movement, narratives, and places of the displaced populations become visible more than it has ever been. However, the spatial narrative of the journey of the refugees subjected to bio-politics and bio-legitimacy is often neglected in contemporary cities in which precariousness, a quality that becomes an emblematic term of the neoliberal milieu, is immanent. Within this context, the research seeks to investigate the spatial implications of displacement through precarity, and liminal phases of the movement by examining the multiple formations of the border as frames, and its spatiotemporal constructions.

In this scope, even though territorial borders seem to be drawn from above with “arrogant” gaze, by constant fixation and regulation of the mobility, it is understood that they reproduce social practices and spaces. Therefore, researchers need to leave the spaces of certainty associated with Cartesian “knowledge” and “Euclidean” space to understand the reality of the ground. Architecture, as an ideological position through which power reified as space, limits and separates one thing from another, and thus, it is a form of reproducing territorial logics in smaller scales. Within this interface, social and political power becomes spatial, boundaries of status, spaces, movement, and narratives get blurred, and both definitions and formations of borders overlapped. This research seeks to understand how critical, counter, and radical approaches towards knowledge production and representation may be used in architectural discourse to challenge the “ancient order of discourse” as the view from above, which sees space as only representable by being precisely visible and, of course, two-dimensional. The main argument will be how anthropological data can be visualized and discussed through counter practices using mapping as a performative act in architectural perspective, and potential of the ambiguous spatial vocabulary of bodily inhabitation based on terms such as “groundless,” “uncanny,” and “liminal.” In that sense, atlas, as an outcome of the research, will be examined through its structure — “content, context, and technique.” This framework includes investigating other ways of geographical presentation and cartography of anthropological data to represent generative spaces and architecture(s) of transition/waiting. Thus, atlas, as a heterogeneous collection could be active, performative, and subjective rather than being a product of the traditional notion which has come with a promise of showing the world as “it really is” and to produce “true knowledge” about the surface of earth. Within this perspective, God-like, totalizing gaze obsessed with seeing everything at once will be discussed by investigation of sequences, pieces, and divisions in different scales. Therefore, this methodology suggests “other” perspectives rather than “familiar” or “tested” methodologies of the “objective” production of knowledge that particularly fails to cover differences and multitude aspects, particularly at the interface of migration and place. Thus, this research tries to answer these questions: How the movement of displacement can be visualized, how spatial relations can be reconsidered with the narrative of precarity and which tools and scales can be used to investigate “suspended,” “in-between,” “uncanny” architecture of waiting inhabited by others.
1.7 Deviating mapping as an approach to liquid planning
complexity, adaptation and change

[abstract] Gisle Løkken
Deviating mapping as an approach to liquid planning - complexity, adaptation and change
Gisle Løkken

Keywords: deviating mapping, complexity, liquid planning

Abstract:
The existing planning regime lack flexibility for rapid change, and has on the contrary proven to restrict innovative planning. We therefore need better investigation methods, and more dynamic measures adaptable to the changes to come.

Through practice I have gained substantial experience with deviating mapping and radical planning, and will use planning projects, competition entries and conducted master studios as empirical basis to develop new understanding and theory for experimental research and potentially more operative planning. These are experiences that challenge well known ideas about landscape approach and, which in turn question ecological and democratic aspects of the latest decades of extreme urbanization and landscape consume.

My research will form around several concepts, which imply experimentation and confrontation with internalized methods. A core concept is the DeleuzeGuattarian Rhizome\(^1\), which indicates a nonhierarchical approach to complex systems, appreciating any knowledge or experience without bias. Related to other radical concepts it can develop through a schizoanalysis\(^2\) finding ways to process complex information, and to better understand the different schism, which often affect the planning process.

I will strive finding operational methods for the plan to be a continuous work in progress, rather than a static law. A progressive–regressive\(^3\) method, which always keeps the planning process informed and tested, can be highly applicable as a dynamic approach. The regressive part implies mapping of relational information in space and time, and the progressive part points at a new understanding of a comprehensive ecology.

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\(^1\) 'unlike the trees or their roots, the rhizome connects any point to any other point, and its traits are not necessarily linked to traits of the same nature; it brings into play very different regimes of signs, and even non sign states. (…) Unlike the graphic arts, drawing, or photography, unlike tracings, the rhizome pertains to a map that must be produced, constructed, a map that is always detachable, connectable, reversible, modifiable, and has multiple entryways and exits and its own lines of flight.’ (Deleuze&Guattari, A Thousand Plateaus,1980: 23)

\(^2\) 'Schizoanalysis rejects reductionist modifications in order to pursue complexification and processual enrichment towards the consistency of its virtual lines of bifurcation and differentiation’ (Felix Guattari, Chasophy, 1995: 61)

\(^3\) The method is in its nature transversal, and is inspired by Lefebvre’s understanding of spatial production and the transformation of economic, political, technological and social categories, and Sartre’s notion of a didactic relation between man and it’s social and cultural context
2.7 Architecture in a Bottle
The Time Capsule as a Design-Driven Method for the End Times

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[artefact] Gianluca Croce
Architecture in a Bottle
The Time Capsule as a Design-Driven Method for the End Times

“We know now that the idea of the future as a ‘better world’ was a fallacy of the doctrine of progress. The hopes we center on you, citizens of the future, are in no way exaggerated. [...] Brothers of the future, united with us in the spirit and in this endeavor, we send our greetings.”

T. Mann, 1938

Taking up the idea developed in the forties by Thornwell Jacobs on the Time Capsule as a repository of knowledge for the humanity of tomorrow, our hypothesis imagines the transmission of a contemporary architectural notion and the recent past as an operational kit for spatial issues of the future society. Global warming, desertification, increasing social disparities, etc., are today dominant issues as they are determining causes of the imminent collapse of one or more dimensions of the civilized world as developed and conceived in our modernity. The idea of a more or less plausible end of the world is an integral part of cultures since the dawn of time. However, since the cause-effect relation between the activities of modern human societies and the possible catastrophes appears obvious, the apocalyptic narrative has been emancipated from its eschatological dimension.

Yet in specific contexts, the catastrophe is a condition with which part of humanity must interface daily: war zones, earthquakes, floods, slums. Whether it is to represent extreme apocalyptic conditions or to produce specific emergency solutions, the architectural discipline has produced ad hoc scenarios or projects thus determining a heritage of design strategies. Our work intends to select methods and processes within this field able to respond to hypothetical critical conditions, defining in this way an operative kit that constitutes our architectural time capsule. The capsule slavishly attends Jacobs’s instructions, following his method step by step:

- expiring date: 8133;
- archivist: the architect as an archivist;
- container: dark, secure, cold and dry;
- location: deeply, buried and in
- content: a selection from sublime to popular heterogeneous materials to extract strategies to face extreme future conditions.

As Jacobs used a strict procedure to design his message in a bottle for posterity, the research aims to experiment with his time capsule as a design-driven method. Of course, whether the archivist identified popular objects, our inquiry focuses on significant disciplinary tools through the production of drawings, diagrams, models and other visual materials.

1.8 Userscapes
the interior attitude of contemporary space

[abstract] Chiara Lionello
The research project focuses on the contemporary city, wondering whether the traditional descriptive categories of Architecture, like typology, form or function, are still effective to describe its complexity, generated by phenomena like globalization, multiculturalism and digitalization. The hypothesis of the thesis is that contemporary space can’t be described just through the disciplinary lens of Architecture: it seems to need more dynamic categories, aware of the centrality that the user’s experience is acquiring in the society. Nowadays the metropolitan landscape shows a growing number of open spatial patterns where many possible activities coexist and interact: hubs, cultural platforms, coworking. Places like these can’t be described in typological terms and could be better defined as “userscapes”. Starting from this consideration, the research aims to identify a set of categories that can support the traditional ones in answering to the complexity of contemporary spaces, expanding the disciplinary boundaries of Architecture. Furthermore, the thesis would like to demonstrate that interior design, with its flexible and human-centered attitude, could be seen as an effective interpreter of the contemporary complexity. It will frame the concept of “interior attitude”, a peculiar way of reading and designing space that is not related to the condition of being inside, but, rather, to the possibility of experiencing space in a more dynamic and personal way. In order to reach these objectives, the research’s methodology is following three actions. An interdisciplinary bibliographic research, the exploration of innovative laboratories held in international universities and a selection of cases studio explaining the interest of each category. These projects, collected in a global geographical context and in the time span that goes from 2000 to 2020, will have to present a processual strategy, an open layout related to a wide possibility of being used, and a mature level of interaction with the dwellers. These rules will determine an apparently heterogeneous set of examples: from public to domestic spaces, from interior to exterior set-up, from objects to territorial strategies. Actually, they will reveal, through schemes and interpretative drawings, a strong common background: the interior attitude. At this point of the research the identified categories are five: “real/virtual”, “tran-scalability”, “geography of uses”, “inclusiveness” and “curatorship”. Each of them highlights a specific way of designing and interpreting contemporary space, putting the user’s direct relationship with places at the center of the project and expanding to the city what has always been related to the interior personal dimension.
2.8  WALKING IN USERS’ SHOES
VISUALLY IMPAIRED SPATIAL COGNITION AND
PERSPECTIVE IN ARCHITECTURAL DESIGN

[abstract] Ghazaleh Afshary
WALKING IN USERS' SHOES: VISUALLY IMPAIRED SPATIAL COGNITION AND PERSPECTIVE IN ARCHITECTURAL DESIGN

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KEY WORDS: Visually impaired user perspective; User-Centered Design process; spatial cognition research;

The initial and critical phase of any design process is to identify why and for whom we design. Considering the philosophy of design for all, which recommends that all environments should be designed with the widest range of users in mind, this research uses insights from Design for Special Needs with a particular emphasis on those with limitations of vision. In order to support the creation of spaces that are responsive to the blind and partially sighted feedback, we propose a user-centred approach which is based on the intricate relation between visually disabled spatial cognition research and architectural design. The key point of the proposed methodology is to structure spaces by developing patterns that are built upon visually disabled wayfinding behavior, strategies and cognitive perceptions. In this regard, we perform an open-search experiment which can be regarded as a pilot study in which, the direct observation of natural wayfinding behavior of visually impaired through an unfamiliar healthcare multilevel setting under time constraints, contributes to determine, from multiple perspective, the architectural ability to lend himself to exploration; the ability that cannot be "viewed" only from the designers/researchers point, but has to be seen through the "eyes" of visually impaired building users.

As a prerequisite to participate in this experiment and carrying out the site audit, visually impaired participants are required to have no visiting experience with the research setting before. First, we read, investigate, explore, compare and evaluate together the quality of the setting's internal/external spatial organisation, the physical structure of pathways, the articulation and nature of architectural and environmental features, the level of environmental information provision as well as the measures of Ei (Environmental Legibility at both global and local scale), and then, we abstract the experimental setting by means of a point grid of architectural features that have to be taken into account during the future designing phase. This is only an initial but fundamental step in our planning process which can provide a basis that leads to the formulation of post-hoc interpretations.

Since our design ideas are triggered from wayfinding behavior and spatial information needs of the visually impaired participants, we will draw the subsequent experimental design step of our research, once more, upon a collaborative process, the visually impaired involvement in design: design by people for people.
1.9 Abandoned opportunities
[abstract] Mirjana Lozanovska
Abandoned opportunities

Many important European cities have historically developed from monumental national capitals, have been recently transformed into globally integrated open cities, where transnational flows of people, goods, capital and cultures shape their present development. Yet the transformation of a particular city depends not only on the construction of new monumental architecture and urban spaces but also on different discourses, which give meaning to those changes and which directly influence the understanding and the relationship citizens develop with new spaces in their everyday life.

Skopje, on contrary, has a rather different history. It seems that in comparison to other European capitals, which have developed from grand national capitals into transnational open cities, Skopje has actually taken almost an opposite path. As a result of the current “development” of North Macedonia cities intense negative processes are taking place: from an architectural point of view, also in the demographic, social, cultural sphere. These processes are dynamic, interrelated and interdependent and often characterized by highlighted contradictions. Lack of clear development policy towards cities leads to many regions lagging behind...

North Macedonia has a large number of abandoned and not properly used spaces, which in the past they defined the entire development of our settlements and neighborhoods. Today and in the last decade are left out of the urban development. Crucially, what these spaces require is a research that does not exist at all, and a redefinition of everything that already exists.

Here I find several issues:

What is the role of these „remains“ and what is their relation with the past and the present?

How to intervene the relation between the populated areas and the abandoned spaces („abandoned opportunities“)?

Intriguing is their connection to the past, this „remains“ help us to define the character of our society, they also play an important role as an integral part of the city’s collective memory.

Whether by analyzing certain existing forms, I would add here one of many examples, such as abandoned spaces, industrial buildings, which are part of our society-cities, what can be ascertained by analyzing the internal and external space they offer?

What is the strategy and plan on how and what these areas could become?

Lack of analysis, lack of research… These spaces have huge potential to grow into something that would make a huge contribution to our cities. From the cultural, social, and architectural aspect.

M.Arch. Mirjana Lozanovska
2.9 Using practice-led research for advancing sustainability transitions in the built environment.

[abstract] Alise Plavina
Using practice-led research for advancing sustainability transitions in the built environment.

The environmental and social challenges humanity is facing today will require a variety of shifts, also called socio-technical transitions, to new kinds of energy, mobility, housing, and food systems. These transitions involve not just changes in technology but also changes in consumer practices, policies, cultural meanings, infrastructures, and business models. (Geels, 2018) A new emerging field of ‘design for sustainability transitions’ aims at providing the theoretical background for such systemic transitions in design, and can be equally applicable to the built environment.

The architecture firm Pir II AS has recently established an R&D unit for innovation with a focus on sustainability transitions. A doctoral dissertation based on action research, and more specifically practice-led research methodology, will allow to explore and define the possible framework for such an R&D unit. The aim of the work is to customise the practice-led research methodology to best fit the purpose of advancing both theoretical and practical knowledge with efficient feedback loops between them. A practice-led research method is seen as very relevant since it is concerned with the nature of practice and leads to new knowledge that has operational significance for that practice. (Candy, 2006) The chosen methodology should also allow for iterative, open-ended processes, and accommodate insights resulting from unexpected outcomes of action. (Stapleton, 2005)

Research methodology for the dissertation will combine design approaches relevant for sustainability transitions in the built environment developed from the literature review with a practice-led research by implementing and testing selected approaches by the author in a variety of design tasks in the company during the dissertation period. Due to a large variety of possible design tasks linked to the built environment (from designing a single building to the process design of co-creating desirable futures), there is a need for flexible modes of investigation and data collection. A common framework for analysing the different projects can come from action research process characterized by cycles of action and research consisting of four phases: plan – act – observe – reflect. (Zuber-Skerritt, 1992)

The aim of this practice-led research is to gradually transform practice (Pir II AS) to accommodate for sustainability transitions in the built environment through accumulated theoretical knowledge and an iterative process whereby both quantitative data and qualitative data collected through reflective practice (Schön, 1983) on the earlier design tasks will inform further development of the selected design approaches.
1.10 Signal processing in the production of architectures of control
[artefact] Taufan ter Weel
Signal transmission and information processing enable ubiquitous telecommunication and global navigation, geolocation tracking and site-specific responsiveness – as well as unconfined surveillance and warfare by remote-controlled machines such as drones. Algorithms are designed to automate decision-making, gatekeeping and distribution of information. To keep pace with the progress, our bodies become increasingly dependent on machines, which require compatibility and continuous updates – keeping so-called users locked-in. One major problem is that control systems operate at fundamentally different levels, altering traditional hierarchies of scale but not of power. On the one hand, we can identify the formation of more advanced global architectures of control, which operate at the intersection of geopolitics and urban governance, are technology-supported and market-driven, and have radical and too often severe socio-spatial implications. On the other hand, these architectures of control operate to a large extent at the level of interactions and relations between people and machines, whereby the latter govern access to resources, spaces and infrastructure, and modify perception and spatio-temporalities. In this context, how can we recuperate the recognition of the right to actively engage in making our habitat and develop the means to do so?

This work aims to contribute to the specification of the inner workings of these architectures of control and implications of their formations by means of signal processing as analytical and compositional tool which allows for moving across different levels of control, mediating between body-machine relations and socio-spatial practices. It does so by constructing a conceptual and contextual framework focused on the relations between technological developments in signal processing with respect to waves, abstractions of space and time, and technical operations and ensembles that indicate particular relations between central control functions and socio-spatial articulations. It contextualizes specific architectures of control and resistance, enabled by signal processing technologies from the late nineteenth century up until now, and maps specific formations, which cut across different scales and temporalities, from global circuits to urban spaces to body-machine relations. The theoretical research is intertwined with a design-driven component: a series of sound installations. The presented artifact seeks to make audible particular control functions by means of real-time processing and spatial distribution of site-specific, generated and recorded signals into a dynamic spatial composition. In the presentation, the talk is combined with a live performance interacting with the installation.

**signal processing** The processing of signals by means of hardwired or programmable devices, the signals being regarded as continuous or discrete and being approximated by analog or digital devices accordingly. *A Dictionary of Computing*, Oxford University Press (2004).
Conceptual and contextual framework: signal processing, control and space-time

Image from previous work (site-specific sound installation by means of signal processing)
2.10 Interiors as Synthesis of Arts and a Critical Investigation Methodology
Milanese Architects, between French and Italian Artistic and Architectonical Influences (1948-972)

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TITLE:  
**Interiors as Synthesis of Arts and a Critical Investigation Methodology:**  
*Milanese Architects, between French and Italian Artistic and Architectonical Influences (1948-972)*

KEYWORDS:  
synthesis of arts, domestic interiors, Milanese architects, critical investigation methodology, Italian and French influences.

ABSTRACT:  
The research aims to define a particular analysis methodology of interior design obtained through the use of different investigation tools. This multi-instrumental investigation pursues the comprehension of the project’s maturation process, of the relationship between the inhabitant and his house and of the variety of "figures" and "effects" that the dialogue between arts and interior design leads to. In detail, the analytical procedure consists of: **Spatial analysis** able to investigate the relationship of the various environments; **Genetic analysis** - developed in the context of literary text criticism, then applied to architecture by Bruno Reichlin (2013) - performed by retracing the steps of project’s production and elaboration until the final form; **Inter-textual analysis** that takes into consideration works and “texts”, with which the designer came into contact, and how they are merged during the creative process, considered as a path of integration and assimilation of sources; **Perceptual analysis** used to investigate the “perceptive devices” and the architectural tricks used by the designer to create an emotional reaction in humans in relation to space; **Receptive analysis**, which studies the critical approach to the art work. It is hypothesized that the potentialities of an analytical procedure structured in this way can be more clearly highlighted through its application to a particular selection of interiors. For this reason, a series of emblematic projects of the parallel artistic and architectonical influences between France and Italy and of their transdisciplinary character that sees in the foreground a mutual collaboration between arts is considered the object of this investigation method.
The choice to have as a subject a corpus of domestic interiors designed by Milanese architects from the late 1940s to early 1970s derives from their proven ability to collaborate with artists thanks to which they deal with continuity on the theme of integration of arts and they introject creative and compositional processes typical of artists. The choice of interior as an object of a series of analytical methods is dictated by its nature of: articulated spatial device, determined by the way in which environments are linked, proportioned, illuminated; polysemic place marked by a precise Stimmung to the construction of which concur the presence of green element, the polychromy, the use of certain type of covering materials that arouse tactile sensations or synesthesia, the views of urban or natural landscape, the presence of art works foreseen in the project to create environments of particular atmosphere.

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1.11 Inclusivity on public and urban spaces
[abstract] Silvija Shaleva
Abstract on “Inclusivity on public and urban spaces”

The fundamental elements of urban spaces are to be public. Their existence significantly enhances the quality of urban life. The ‘inclusivity’ through design of public spaces has been somehow threatened, especially in nowadays contemporary cities, primarily by the politics, globalization, migration/immigration etc. Besides, the declining ‘inclusivity’ of public spaces which is also resulted from the management policies, leading to places created from exclusionary design, rather than creating inclusive spaces for all. Therefore, public open spaces should be designed and managed in a manner that they do not comfort only a particular group, but they create safety and comfort for everybody. And for health and wellbeing places. Individual differences are bound to exist so proper architectural implementation is necessary to meet everyone’s psychological desires. Hence, there is a definite relationship between architecture and psychology. How a person is perceiving a place, depends on how it’s perceiving the design elements, the illumination, materials or if the place is similar to any previous ambiance we are well acquainted with.

As for the multicultural city in South-Eastern Europe, the capital of Republic of North Macedonia Skopje. Where ethnic diversity and cultural mixing is present, in a region where the processes of building and designing urban spaces, has been led to a simplification especially on the ethnic composition. The demonstration the process of how public spaces are being designed/created and the influence of society. Focusing on a dividing city such as Skopje offers insight into the mechanisms that lead to such divisions and may be suggestive for efforts to prevent them. The analysis draws attention to overlooked cities, where processes of division may not be as visible as a wall running through the city, as the ‘Berlin wall effect’, but nonetheless exist. Because it shows potentially ‘dividing’ processes, it provides insights on the dynamics of spatial politics in urban environments.

As to seek a way to intervene on these points to show the meaningful link between society, human behavior, urban space and usage of materials. To address an important gap while taking a different research approach as interdisciplinary research and make a contribution to the geographies of exclusion, social inclusion through public space planning, and the socio-cultural dimension. Therefore, public spaces shall be understood rather as an experience created by interaction between people and place, not just as predetermined physical space.

Silvija Shaleva M.arch
2.11 DESIGNING TRANSFORMATIVE GAMES FOR BUILT ENVIRONMENT EDUCATION

[abstract] Eszter Tóth
DESIGNING TRANSFORMATIVE GAMES FOR BUILT ENVIRONMENT EDUCATION

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Over the past decades a growing attention is to be observed towards the intersection of spatial practice and education. As a practitioner at this emergent, interdisciplinary field called built environment education (BEE), I realized the growing demand for domain-specific methods, tools and theories that support space-related and place-based learning. Thus, my initial interest was to improve this educational field by developing tools and theories which support young people to understand, critically reflect and actively shape the built environment.

My dissertation focuses on transformative games in the field of BEE. Games are increasingly used as easy-to-understand instruments at the interface of urbanism, planning and education both for learning and explaining spatial issues, and for transforming virtual and real spaces. The transformative capacity of games has a promising potential for the practice of BEE and of placemaking. Nevertheless, in spite of the increasing number of games developed for this context, there is lack of empirically grounded knowledge. Therefore, my dissertation explores in an extensive design research process how games could be designed, developed and implemented in order be effective tools for learning about spaces and co-creating them. The research aims to provide design principles for transformative games applied in space-related contexts.

The core of the research has been the evolution of the transformative game ParticiPécs. The game was developed in a collaborative design process involving youth aged 12-16 and experts (architects, planners, youth workers) in Pécs, Hungary between 2013 and 2015. The cyclical optimizing of the prototype was based on continuous formative evaluation. A variety of explorative methods and design techniques were used in order to investigate the interplay of games, space and learning. ParticiPécs is a place-based educational game which simulates and triggers small-scale real-world interventions in public spaces. Players can collaboratively design and implement urban interventions within the magic circle of the game and transfer them to real spaces. The final evaluation of the game was implemented in seven different secondary schools in Pécs with youth aged 14-18, and seven urban interventions have been implemented in public places.

The design research process incorporated interwoven cycles of analyses, design and construction, as well as the implementation and final evaluation of the prototype. Thus, the design principles on transformative games for BEE emerged across the reflective and iterative design, and my dissertation explains this iterative journey as dialogue of educational practice and theoretical reflections.
1.12 Ecologies of urban gardening

[abstract] Bjørn Melås
Ecologies of urban gardening is an artistic research project exploring the potentials of urban gardening. I believe that the urban gardening movement develops crucial knowledge/practices/politics that we need in order to sketch out, imagine, and create a livable future – beyond capitalism and our growth-based society. Departing from the essay Three Ecologies by Felix Guattari I explore the mental, social and physical ecologies of urban gardening, through practical, ongoing projects.

I think the urban gardening movement provide tools to start imagining alternatives, to break out of the existing logic and learn how to act and think differently – to help us redefine ourselves as humans. Urban gardening can be an activity that changes the way we think, who we are, how we interact with each other and our surroundings.

Urban gardening also represents a shift in our relation to “nature”. It is an activity where human and non-human life interact in an available, inclusive and pedagogical way. Hands on, small scale growing where intimate contact with plants and soil is necessary. This could be a possible entrance point for us to learn how to understand and cooperate better with nature, and first steps towards breaking down the artificial division between humans and nature. I believe it is crucial for our survival as a species, but also for our well-being and search for meaning as humans, that we start the process of breaking down this split.

In the years to come humanity will need to repair what we have destroyed. Not to take care of nature, but because we are nature. The practice of working with the soil has been a way for me to learn to cooperate with nature, to team up with the microbes in the soil. Ecologies of urban gardening explores a present/future/past in which we acknowledge that the human-soil relations are the very foundation of our existence. For the CA2RE+ conference, I will reflect upon my process so far and discuss possible pathways for the ongoing projects and the research project as a whole.
2.12 Architectural Sustainability as a Cultural Practice
[abstract] Stine Dalager Nielsen
Title of paper: Architectural Sustainability as a Cultural Practice

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Abstract:

The project engages in a theoretical discourse from the perspective of practice. It questions whether the ‘Six logics of sustainable architecture’ (Guy and Farmer 2001) may be integrated as a complex architectural sustainability in practice by using the Nordic vernacular as ‘precedence’. Thus, obtaining an intrinsic architectural sustainability.

The architectural response to the ‘Globalisation-plus’ (Latour 2018) cannot be a generic ‘one size fits all’. Thus, it is the project hypothesis that working with high complexity in practice requires the introduction of a constant, ‘precedence’, for the complex to be oriented- and related to (Deviren and Tabb 2014). The ‘precedence’ is established through a study of the Nordic vernacular practice.

The vernacular tectonics present a functional- and aesthetical unison of materials, elements and buildings components, whereof the best examples transcend their unique character and enable the emergence of a global system (Frascari 1983). Hence, the tectonics, when they are at their strongest, become the architectural manifestation of a cultural whole: Tradition, (locality), use (construction) and aesthetics. This represents the project notion of intrinsic architectural sustainability.

Christopher Alexander’s ‘Pattern Language’- approach to complexity is utilised as a theoretic framework and method to format a state-of-the-art of the Nordic vernacular practice. This is coined as ‘The Nordic Vernacular Archive’ and examines the Nordic vernacular as a case study to define a typology, or a repeating pattern, capable of articulating the tacit, sustainable aspects of the practice.

From this, a homeostatic, narrative framework with associated methods is developed as a baseline for the design- and construction process: An ample, architectural response to ‘Globalisation-plus’ (Latour 2018) to ensure that complex architectural sustainability is not lost in reductionist benchmark systems. Instead, it is integrated through implicit guidelines as the architectural manifestation of a cultural, sustainable, whole: A cohesive, composed, narrative of ‘logics’ (Guy and Farmer 2001) rather than a fragmented dichotomy.


1.13 Material Map
[artefact] Aida Espanyol
ARTEFACT Category

Material map

As one form of investigation within the PhD project “The works of the Danish architect Hans Christian Hansen (HCH, 1901-1978): materials, materialization and context”, material map, identifies and narrates certain material continuities throughout 19 architecture built works.

The overall PhD project aims at documenting and analyzing the built works by HCH developed under the policies of the Danish Welfare State between the late 1930’s and early 1970’s as a project leader at the office of the City Architect in Copenhagen. The purpose of the project is to provide knowledge of a little known Danish architect and body of work, which is material and tectonic-wise extraordinarily rich, and quite unusual in its geographical, historical and cultural context.

Both, due to 1) the lack of biographical data about the architect 2) and the claim that architecture, seen as physical permanence, should be able to reveal its own principles regardless of imposed theories, the project stands for a bottom-up approach. Considering this, the research is structured in the following phases: 1) an account of un-built and built works, 2) location of the built works, 3) recollection of existing data concerning the built works as drawings, photos, articles -if any-, 4) field work by being at the building seen as mere recollection of information with a focus on material/ construction issues, 5) analyses of information based on architecture methods 6) and discussion and conclusions.

Within the analyses phase, 3 different investigations have been set up: materials, materialization and context. Although all architecture built works could be depicted under these 3 fundamental perspectives, however it is considered that HCH’s works are specially characteristic and didactic from this 3 approaches. Five materials and one off-the-shelf element are found relevant in HCH’s works: concrete, brick, wood, eternit, metal and a window. In one hand, finding a material thread across works reveals facts and relations about the works themselves, in the other hand, it opens up for connections with other contemporary works to contextualize HCH within a broader architecture panorama through a material variable.

This material investigation is formulated and presented as a map unfolded through a number of triangular cards, each corresponding to one material format and building situation illustrated by one close up photo. The idea of the map provides with an open interactive framework that can grow and change while it is produced and encourages for participation and discussion even as a “finished” product.

Fuller, B. Dymaxion Map, 1954
2.13 The possible space in Timurid painting
reintroducing devices of pictorial composition

[abstract] Yassin Nooradini
The possible space in *Timurid painting*
Reintroducing devices of pictorial composition

Yassin Nooradini

Abstract

Although for a long time, it had been believed that the Persian miniature arranged freely autonomous fragments, there are some discoveries bring a new light of conventional devices in manuscript art. The most relevant observation had been done by Robert Hillenbrand¹, in his article entitled “The use of space in the Timurid painting” he highlighted some conventions for the depiction of space by means of four specific categories of experimental space namely; Architecture, solid blocks color or form, margins, and empty spaces. Consequently, he remarked that the spatial setting in Timurid painting had been structured as precise as Parthenon intercolumniation. Previously, Ernst Grube² implies to those conventional devices as the classical style of Islamic paintings, he stated that “One of the most fundamental elements of this style is the intense preoccupation with the relation of each element to the next, and of all elements to the total image”. A few recent studies done by Friederike Weis³ applied the golden section as one of the conventional devices painting’s composition, while the large part of this structure still remained untouched. This study firstly brings more clarities on conventional, hidden, and established devices beyond the paintings then tried to reintroduce typology as a possible alternative for pictorial composition.

In a more practical way, this study attempted to analyze paintings attributed to Bihzad during Timurid era, as the first step, by reflecting the underlain geometrical composition, tried to retrieve the indicative hidden frames as decoded device delineating the intention among placed segments into subdivided frame thereby relation of sequence of frames as total scene examined. Recalling Ernst Grube’s statement alluding to the relation of painting’s elements; considered individual geometrical diagram conveying; Architecture, figures, textual frames, and detached elements. Secondly, each frame as an autonomous structure was studied through the main typology.

According to two defined structures for architectural space⁴: 1. Geometrical composition determined the place of elements. 2. Mentally arranged fragments through hand and mind of Artist. In terms of architectural speaking, the dialectic between the content and container, regarding various typologies to the extent of possible alternatives, it seems that conventional devices and typology are following the two modes of spatial structure respectively. Precise geometrical diagrams explicitly depicted that artist deliberately adhered to conventional devices, he accurately drew frames, captured cardinal lines and points, while the entire scene sprang from his intuition to innovate the sequence of frames as the possible space.

Keywords: spatia. structure, Conventional devices, Typology, Timurid painting, Kamal Ud-din Bihzad

². Ernst Grube, The classic style of Islamic painting, 1968, p.34.
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