



THE ATHENS INSTITUTE FOR EDUCATION AND RESEARCH

Abstract Book

8th Annual International Conference on
Architecture

9-12 July 2018, Athens, Greece

Edited by
Gregory T. Papanikos

2018

Abstracts
8th Annual International
Conference on
Architecture
9-12 July 2018
Athens, Greece

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Preface

This book includes the abstracts of all the papers presented at the 8th *Annual International Conference on Architecture (9-12 July 2018)*, organized by the Athens Institute for Education and Research (ATINER).

In total 57 papers were submitted by 62 presenters, coming from 22 different countries (Australia, Canada, Chile, China, Cyprus, Denmark, Egypt, Finland, France, Israel, Japan, Jordan, Lebanon, Norway, Portugal, Serbia, Spain, Taiwan, Thailand, Turkey, UK and USA). The conference was organized into 14 sessions that included a variety of topic areas such as Historical Architecture, Pedagogy, Methodology, Building Design, Urbanism, Inter and Transdisciplinary Relationships in Architecture, Crossings on Body and Architecture, and more. A full conference program can be found before the relevant abstracts. In accordance with ATINER's Publication Policy, the papers presented during this conference will be considered for inclusion in one of ATINER's many publications.

The purpose of this abstract book is to provide members of ATINER and other academics around the world with a resource through which to discover colleagues and additional research relevant to their own work. This purpose is in congruence with the overall mission of the association. ATINER was established in 1995 as an independent academic organization with the mission to become a forum where academics and researchers from all over the world could meet to exchange ideas on their research and consider the future developments of their fields of study.

It is our hope that through ATINER's conferences and publications, Athens will become a place where academics and researchers from all over the world regularly meet to discuss the developments of their discipline and present their work. Since 1995, ATINER has organized more than 400 international conferences and has published nearly 200 books. Academically, the institute is organized into seven research divisions and 37 research units. Each research unit organizes at least one annual conference and undertakes various small and large research projects.

For each of these events, the involvement of multiple parties is crucial. I would like to thank all the participants, the members of the organizing and academic committees, and most importantly the administration staff of ATINER for putting this conference and its subsequent publications together. Specific individuals are listed on the following page.

Gregory T. Papanikos
President

**8th Annual International Conference on Architecture,
9-12 July 2018, Athens, Greece
Organizing and Academic Committee**

ATINER's conferences are small events which serve the mission of the association under the guidance of its Academic Committee which sets the policies. In addition, each conference has its own academic committee. Members of the committee include all those who have evaluated the abstract-paper submissions and have chaired the sessions of the conference. The members of the **academic committee** of the 8th Annual International Conference on Architecture were the following:

1. Gregory T. Papanikos, President, ATINER.
2. Nicholas N. Patricios, Vice President of Strategic Planning & Analysis, ATINER and Professor & Dean Emeritus, School of Architecture, University of Miami, USA.
3. Clara Goncalves, Researcher/Associate Professor, CITAD, Lusíada University/ISMAT - Instituto Superior Manuel Teixeira Gomes, Portugal.
4. Maria Joao Soares, Research Fellow/Assistant Professor, CITAD, Lusíada University, Portugal.
5. Vladimir Mako, Professor, University of Belgrade, Serbia.
6. René Davids, Professor, University of California, Berkeley, USA.
7. Ignacio Sanfeliu Arboix, Associate Professor, Univeritat Politècnica de Catalunya (UPC) Escola Superior d'Arquitectura de Barcelona (ETSAB), Spain.
8. Donald Kunze, Emeritus Professor, Penn State University, USA.
9. Zeynep Tuna Ultav, Associate Professor, Yaşar University, Turkey.
10. Jose Angel Hidalgo Arellano, Academic Member, ATINER and Associate Professor, Xi'an Jiaotong-Liverpool University, China.
11. Sherif Elfiki, Associate Professor, Arab Academy for Science, Technology and Maritime Transport, Egypt.
12. Milica Muminovic, Assistant Professor, University of Canberra, Australia.
13. Joao Miguel Couto Duarte, Assistant Professor/Research Fellow, CITAD, Lusíada University, Portugal.
14. Riitta Niskanen, Researcher, Lahti City Museum, Finland.
15. Ana Maria Moya Pellitero, Researcher, University of Évora, Portugal.
16. Bianca Predoi, Academic Member, ATINER and Architect & Associate Lecturer, Ion Mincu University of Architecture & Urbanism, Romania.

The **organizing committee** of the conference included the following:

1. Fani Balaska, Researcher, ATINER.
2. Zoe Charalampous, Researcher, ATINER.
3. Olga Gkounta, Researcher, ATINER.
4. Eirini Lentzou, Administrative Assistant, ATINER.
5. Konstantinos Manolidis, Administrator, ATINER.
6. Vassilis Skianis, Research Associate, ATINER.
7. Kostas Spyropoulos, Administrator, ATINER.

FINAL CONFERENCE PROGRAM
8th Annual International Conference on Architecture
9-12 July 2018, Athens, Greece

PROGRAM

Conference Venue: Titania Hotel, 52 Panepistimiou Street, 10678 Athens, Greece

Monday 9 July 2018

08:00-08:45 Registration and Refreshments

08:45-09:30 (Room O-Mezzanine Floor) [Welcome and Opening Address](#)

Gregory T. Papanikos, President, ATINER.

09:30-11:30 Session I (Room D-10th Floor): Architects and Historical Architecture I

Chair: Nicholas N. Patricios, Vice President of Strategic Planning & Analysis, ATINER and Professor & Dean Emeritus, School of Architecture, University of Miami, USA.

1. [Judith Urbano](#), Dean of the Faculty of Humanities, Universitat Internacional de Catalunya, Spain & [Marta Crispi](#), Director of the Master's Degree in Arts and Culture Management, Universitat Internacional de Catalunya, Spain. José María Sert's Mural Paintings in the Cathedral of Vic.
2. Vladimir Mako, Professor, University of Belgrade, Serbia. Aesthetics and Attainability of Cultural Cohesion: Metaphorical Compositional Structure of Oresteia and Acropolis of Athens.
3. Santirak Prasertsuk, Associate Professor, Thammasat University, Thailand. Architectural Composition in Modern Thai Architecture.
4. En-Yu Huang, Assistant Professor, National Cheng Kung University, Taiwan. Between Man, Nature and Architecture: The Four-Element System in Vitruvius' *De Architectura*.
5. Takeshi Yamamura, Assistant Professor, Waseda University, Japan. The Greek Architectural Philosophies in Antoni Gaudi's Manuscripts.

11:30-13:00 Session II (Room D-10th Floor): Inter and Transdisciplinary Relationships in Architecture I

Chair: Clara Goncalves, Researcher / Associate Professor, CITAD, Lusíada University / ISMAT - Instituto Superior Manuel Teixeira Gomes, Portugal.

1. [Anke Vrijs](#), Associate Professor, Institute National Sciences Appliquées Strasbourg, France & [Karine Dupre](#), Associate Professor, Griffith University, Australia. Genius Loci.
2. Maria Joao Soares, Research Fellow / Assistant Professor, CITAD, Lusíada University, Portugal. A *Meta-Baroque* Allegory for an Architectural Concept.
3. Ronald Yee, Bridge Architect/Senior Lecturer, Yee Associates/London South Bank University, UK. The Golden Proportion and the Aesthetic Design of Long Span Bridges.
4. Gizem Saka, Research Assistant / PhD Student, Gazi University, Turkey. Art and Architecture Interaction: Critical Practices within an Interdisciplinary Context.

11:30-13:00 Session III (Room E-10th Floor): Pedagogy

Chair: René Davids, Professor, University of California, Berkeley, USA.

1. Sherif Elfiki, Associate Professor, Arab Academy for Science, Technology and Maritime Transport, Egypt. An Empirical Validation to a Process-based Model for Teaching Architectural Design, with Reference to Design Studio One.
2. [Stephen Coates](#), Lecturer, University of Salford, UK, [Ali Rachid](#), Autodesk certified instructor / PhD Student, University of Salford, UK / Teaching Assistant, Beirut Arab University, Lebanon, & Sara Biscaya, Programme Director BSc Architecture, University of Salford, UK. The Utilization of Bim to Achieve Prescribed Architectural Undergraduate Learning Outcomes.
3. Bsmah Bany Muhammad, Lecturer, Jordan University of Science and Technology, Jordan. Process in Architectural Design Education: Cinematic Approach for Architectural Experience Design.
4. Erhan Karakoc, PhD Candidate / Researcher, İstanbul Kültür University, Turkey. Differences in Spatial Understanding between Digital and Physical Models: A Comparative Experimental Design Study on "Presentation Techniques

	Studio Education”.
13:00-14:30 Session IV (Room D-10th Floor): Methodology	13:00-14:30 Session V (Room E-10th Floor): Building Design I
Chair: Vladimir Mako, Professor, University of Belgrade, Serbia.	Chair: Sherif Elfiki, Associate Professor, Arab Academy for Science, Technology and Maritime Transport, Egypt.
<ol style="list-style-type: none"> 1. Jose Angel Hidalgo Arellano, Associate Professor, Xi'an Jiaotong-Liverpool University, China. Villa Adriana. Presence and Crisis of Language in the Ruins. 2. *Milica Muminovic, Assistant Professor, University of Canberra, Australia. Place as Assemblage: Abstracting, Diagramming and Mapping. 3. <u>Laura Gallardo Frias</u>, Assistant Professor, Universidad de Chile, Chile & Maria Isabel Toledo Jofre, Associate Professor, Universidad Diego Portales, Chile. Link: Architectural Projects - Inhabitants, Through Ethnography. 4. Eyal Karni, Faculty Member, Technion - Israel Institute of Technology, Israel. Architectural Design Issues Concerning User Flexibility in Adaptable Dwelling Units. 	<ol style="list-style-type: none"> 1. Leif Hoegfeldt Hansen, Associate Professor, Aarhus School of Architecture, Denmark. Tensegrity and Interactivity. 2. <u>Supuck Prugsiganont</u>, PhD Candidate, Technical University of Denmark (DTU), Denmark & <u>Aneta Fronczek-Munter</u>, Postdoctoral Researcher, Norwegian University of Science and Technology (NTNU), Norway. Hospital Architecture - Comparing Public Areas in Thailand and Norway. 3. Raffaella Maddaluno, Assistant Professor, CIAUD - Universidade de Lisboa, Portugal. Francesco Venezia: Time, Memory, Feeling as Elements of Architecture. 4. Rahmatollah Amirjani, PhD Student, University of Canberra, Australia. Westoxification of Architecture: Another Reflection of Iranian 1979 Islamic Revolution. 5. Ozlem Karakul, Associate Professor, Selçuk University, Turkey. Designing a Village Museum Ecologically: Reuse of Historic School Building.
14:30-15:30 Lunch	
15:30-17:00 Session VI (Room D-10th Floor): Crossings on Body and Architecture I	15:30-17:00 Session VII (Room E-10th Floor): Building Design II
Chair: Maria Joao Soares, Research Fellow / Assistant Professor, CITAD, Lusíada University, Portugal.	Chair: Milica Muminovic, Assistant Professor, University of Canberra, Australia.
<ol style="list-style-type: none"> 1. <u>Donald Kunze</u>, Emeritus Professor, Penn State University, USA & <u>Claudio Sgarbi</u>, Visiting Associate Professor/Adjunct Research Professor, Lebanese - American University/Carleton University, Lebanon/Canada. Love in the Ruins: Desiccation of the Living and Dead Body in Architectural Foundation Lore. 2. Clara Goncalves, Researcher/Associate Professor, CITAD, Lusíada University/ ISMAT - Instituto Superior Manuel Teixeira Gomes, Portugal. The Experimenting Body in Baroque Architecture. 3. Joao Miguel Couto Duarte, Assistant Professor/Research Fellow, CITAD, Lusíada University, Portugal. Body Challenges - Between Architectural Scale Models and Architectural Objects. 4. Susana Tavares dos Santos, Assistant Professor, CITAD, Lusíada University, Portugal. Interceptions between Cinema and Architecture in the Construction of a Mental Map. 	<ol style="list-style-type: none"> 1. Zeynep Tuna Ultav, Associate Professor, Yaşar University, Turkey. Archiving Balcony Railings as a Representative Element of Collective Memory for Ankara Dwellers. 2. Nicolas Stutzin Donoso, Architecture Studios Coordinator, Universidad Diego Portales, Chile. Playground Politics: Ideologies for the Shaping of Urban Childhood. 3. Aycan Kizilkaya, Research Assistant and PhD Student, Istanbul Technical University (ITU), Turkey. An Assessment of User and Designer Perspectives on Mosque Interiors: A Case Study. 4. Gonca Zeynep Tuncbilek, Research Assistant and PhD Candidate, Middle East Technical University, Turkey. Experimentation in Architecture: Pavilion Design.

<p>17:00-19:00 Session VIII (Room D-10th Floor): Approaches to Architecture and Environment</p>	<p>17:00-19:00 Session IX (Room E-10th Floor): Urbanism and Other Issues</p>
<p>Chair: Donald Kunze, Emeritus Professor, Penn State University, USA.</p>	<p>Chair: Zeynep Tuna Ultav, Associate Professor, Yaşar University, Turkey.</p>
<ol style="list-style-type: none"> 1. René Davids, Professor, University of California, Berkeley, USA. Quarries and the Conservation of Disturbed Landscapes. 2. Kornkamon Tantiwanit, Assistant Professor, Thammasat University, Thailand. Thailand's Movement on Enforced Energy Efficient Building and Voluntary Certified Green Building. 3. <u>Prittipoen Lopkerd</u>, Lecturer, Thammasat University, Thailand & Srisak Phattanawasin, Lecturer, Thammasat University, Thailand. Low-Cost Innovation of Automatically Adjustable Sun Louvers: An Affordable Solution for Climate Responsive Architecture. 4. Serdar Erisen, Research Assistant, Middle East Technical University, Turkey. The Architecture of Knowledge from the Knowledge of Architecture. 5. Emre Gokdel, Research Assistant, İstanbul Commerce University, Turkey. All Work and no Play; Whatever Happened to Mysteries in the Dark? 6. <u>Pelin Saricioglu</u>, Research Assistant / PhD Student, Gazi University, Turkey & Semra Arslan Selcuk, Associate Professor, Gazi University, Turkey. A Taxonomic Study on Kinetic Architectures Inspired by Nature. 	<ol style="list-style-type: none"> 1. Riitta Niskanen, Researcher, Lahti City Museum, Finland. To Remodel or to Develop? The Planning and Controlling of the City Development in Sopenkorpi in Lahti. 2. Mai Li, PhD Student, Southeast University, China. The Reunion of Organism and Mechanism in Modern Architecture Today. 3. <u>Guopeng Li</u>, Lecturer, Dalian University of Technology, China, Yue Fan, Professor, Dalian University of Technology, China, Zhubin Li, Lecturer, Dalian University of Technology, China & Xixuan Fan, Lecturer, Dalian University of Technology, China. Regenerative Design Patterns towards the Control of Multiple and Complex Residential Issues in the Northeast China.

21:00-23:00 Greek Night and Dinner

Tuesday 10 July 2018

07:45-10:45 Session X: An Educational Urban Walk in Modern and Ancient Athens

Chair: Gregory A. Katsas, Vice President of Academic Affairs, ATINER & Associate Professor, The American College of Greece-Deree College, Greece.

Group Discussion on Ancient and Modern Athens.
Visit to the Most Important Historical and Cultural Monuments of the City (be prepared to walk and talk as in the ancient peripatetic school of Aristotle)

11:15-13:00 Session XI (Room D-10th Floor): Inter and Transdisciplinary Relationships in Architecture II

Chair: Joao Miguel Couto Duarte, Assistant Professor / Research Fellow, CITAD, Lusíada University, Portugal.

1. Teresa Belo Rodeia, Assistant Professor / Research Fellow, CITAD, Lusíada University, Portugal. Thinking as Drawing - Reflections based on a Drawing that no Longer Exists.
2. Jennifer Hardi, Senior Lecturer and Course Director, London South Bank University, UK. Assessing the Requirements and Academic Impacts of Collaborative Multi-Disciplinary Working within UK higher Education Sector. Case Study from London South Bank University.
3. Sena Gulbahar Tuncel, Research Assistant / PhD Student, Gazi University, Turkey. Reading Architecture and Literature Intersection on Philip Dick Novels.
4. Ece Konuk, Graduate Student, Istanbul Bilgi University / Research Assistant, Altınbaş University, Turkey. Documentation of Modern Cities: Turkish Cinema and Modernity.

13:00-14:00 Lunch

14:00-15:30 Session XII (Room D-10th Floor): Crossings on Body and Architecture II

Chair: Ignacio Sanfeliu Arboix, Associate Professor, Universitat Politècnica de Catalunya (UPC) Escola Superior d'Arquitectura de Barcelona (ETSAB), Spain.

1. Rui Manuel Reis Alves, Assistant Professor / Research Fellow, CITAD, Lusíada University, Portugal. Experiencing, Knowing and Building Architecture. (ARCBOD)
2. Maria de Fatima Silva, Assistant Professor / Research Fellow, CITAD, Lusíada University, Portugal. Scale Reading: Support for Landscape Requalification. (ARCBOD)
3. Ana Maria Moya Pellitero, Researcher, University of Évora, Portugal & Victoria Hunter, Reader in Site-Dance and Choreography, University of Chichester, UK. The Somatic Landscape of Urban Multicultural Identities: Mapping Emotional Engagements of Site, Dance and Body in Raval, Barcelona, as Case Study. (ARCBOD)
4. Miguel Brito, Architect, Lusíada University, Portugal. The Limits of Tactil Space. (ARCBOD)

15:30-17:00 Session XIII (Room D-10th Floor): Architects and Historical Architecture II

Chair: Ana Maria Moya Pellitero, Researcher, University of Évora, Portugal.

1. Ignacio Sanfeliu Arboix, Associate Professor, Universitat Politècnica de Catalunya (UPC) Escola Superior d'Arquitectura de Barcelona (ETSAB), Spain. Cases of Study of New Language for the Rehabilitation Type Typologies Masia and Similar in Barcelona and in the Region of the Maresme.
2. Nazli Taraz, Research Assistant, İzmir Institute of Technology, Turkey & Ebru Yilmaz, Assistant Professor, İzmir Institute of Technology, Turkey. National Identity Construction of Turkey in the Early Republican Period: The Grand National Assembly of Turkey and its Architectural Representation as a Memory Space.
3. Tugce Darendeli, Research Assistant, Yildiz Technical University, Turkey & Can Şakir Binan, Professor, Yildiz Technical University, Turkey. Seljuks Inherited to Anatolia, Caravansarais.
4. Sefika Karaderi Ozsoy, Senior Lecturer, Near East University, Cyprus & Hasan Altan, Senior Lecturer, Near East University, Cyprus. Traditional Khan Culture in Cyprus and Today's Space Design with the Effect of Culture and New Functions; "The Case Study on Great Khan".

17:00-19:00 Session XIV (Room D-10th Floor): Special Topics

Chair: Riitta Niskanen, Researcher, Lahti City Museum, Finland.

1. Esin Yilmaz, Research Assistant, Yildiz Technical University, Turkey & Ibrahim Basak Daggulu, Associate Professor, Yildiz Technical University, Turkey. In 20th Century the Spatialization of Paint Art: Contemporary Architecture.
2. Muhammet Ali Heyik, Research Assistant, Yildiz Technical University, Turkey & Yasemen Say Ozer, Associate Professor, Yildiz Technical University, Turkey. Analysis on Istanbul Baths in the Context of Social and Physical Sustainability: Mapping with GIS Tools.
3. Seda Cengiz, Lecturer, PhD Candidate, Izmir University of Economics, Turkey & Fatma Sezgi Mamakli, Research Assistant, PhD Candidate, Izmir University of Technology, Turkey. Evaluation of Childhood House Memory through Spatial Indicators.
4. Fatma Sezgi Mamakli, Research Assistant, PhD Candidate, Izmir University of Technology, Turkey & Seda Cengiz, Lecturer, PhD Candidate, Izmir University of Economics, Turkey. A Luxury and Unhappy District: Sulukule, Who Would Be Blamed?
5. Basak Gucyeter, Assistant Professor, Eskisehir Osmangazi University, Turkey & Orkun Alptekin, Assistant Professor, Eskisehir Osmangazi University, Turkey. An Investigation of the Effects of Indoor Air Quality and Thermal Comfort in Eskisehir Osmangazi University Faculty of Architecture Classrooms.
6. Yonggao Shi, Professor, Southeast University, China. The Warmth of Room: Bringing Adolf Loos to the Present.

20:00- 21:30

Wednesday 11 July 2018
Mycenae and Island of Poros Visit
Educational Island Tour

Thursday 12 July 2018
Delphi Visit

Friday 13 July 2018
Ancient Corinth and Cape Sounion

Rahmatollah Amirjani

PhD Student, University of Canberra, Australia

**Westoxification of Architecture:
Another Reflection of Iranian 1979 Islamic Revolution**

Since the advent of the industrialization in Iran, architectural manifestations have not only showed the advancement of building industries, but also initiated the governments' ideologies in different epochs. In this regard, pre-revolutionary situation in Iran can be considered as a significant period in the country's contemporary history of architecture. In the pre-revolutionary era of 1908-1978, the Pahlavi dynasty utilized modern architecture expressions as an ideology to position the nation on the track of universal modernization and to propagate a new identity for the society. At the time, many argued that modern manifestations invaded the traditional fabric of cities; as a result, one can argue that the 1979 Islamic revolution took place in part opposed to the state's "Westoxification." Discussing several contemporary projects from pre- and post-revolutionary Iran, this paper will attempt to highlight the impacts of westernization on Iranian architecture and the society in these two contradictory historical periods. This paper posits that the pre-revolutionary ideology, along with the American consumerism influences, have had influences on both architecture and the country's inclination towards western lifestyle. Since the 1970s, the society has been metamorphosed by modern architecture language, and most of the traditional fabric of cities and local cultures have almost been vanished by the impacts of Westoxification and the globalization of consumerism.

Bsmah Bany Muhammad

Lecturer, Jordan University of Science and Technology, Jordan

Process in Architectural Design Education: Cinematic Approach for Architectural Experience Design

This paper suggests a cinematic approach method for teaching architectural design students in studio, to raise student awareness of the connection between human sensorial system (experiential qualities) and the built environment qualities, students learn how to do space analysis and design by a way of film making process (cinematic techniques) .

The student learns how to use their own senses as a tool of design (bodily experience and sensorial system), through the exploration of the film making process and techniques, beginning with the analysis of idea concept ,planning of narrative , visualization by storyboards ,editing and montage in sequence ,adding effects ,and finally the film production . it aim to develop creative thinking by compelling the students imagination, and process of thinking, it stimulate the student's precociousness in architectural design of experience.

The students learn final project presented in a text, narrative, script, sequence series of still images describes the journey through the project with detailed material models for each stage, combined with the general physical models and drawings.

The pedogeological goal of the studio is to put the designers mental and cognitive skills in the right way of understanding the strong relation between user's sense of place and the design of the built environments, and to present it in a more comprehensive way.

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Thinking as Drawing - Reflections based on a Drawing that no Longer Exists

“Unless you draw something, you do not understand it. It is a mistake to believe that now I understand the problem and now I draw it. Rather, right at the time you draw you realize what the problem is and then you can rethink it” (Piano in Robbins, 1994, p. 127).

Architects use graphic representation to invent architectural objects. As it is not the architect who builds the architectural objects, that work is done by others, it is through confrontation with the object’s representation, and not through confrontation with the construction thereof, that such objects are created.

One could accept, perhaps it is even desirable, that the drawing is a translation of the thought, returning it to the creator in a new form; but one would also have to acknowledge that the drawing never reveals itself to be an exact record of the thought process. Nevertheless, it is through the drawing that thought becomes understandable, so any lack of correspondence between thought and its representation must be regarded as something more than a deficiency. It is also important to consider the drawing to be more than just a reflection of the thought one wishes to develop further.

In contemporary architectural design practice the drawing no longer enjoys the hegemony that a certain nostalgic idealisation of the work of the architect would confer upon it, but the relationship between the drawing and the design thought process remains closely knit, in that the creation of architectural objects continues to be dependent on representation thereof.

Using a specific design process as an example –the Gallo House (1968-1970), in São Pedro de Moel, Portugal, by Manuel Mendes Tainha – in which the drawing was a decisive presence, this paper seeks to study the relations between thought and representation beyond the general notion of a certain subordination of the representation to the thought that brings it about. It is through the drawing that the thought can be realised, for it then to be confronted with the drawing.

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The Limits of Tactile Space

"Borders and Limits". Difficult is not to build a building, difficult is to build a meaning. Choosing a pavement that you will live in, making a choice on what surface it will be, and choose the details on a wall, is just part of a global process of setting boundaries and connecting materials. Peripheries that identify the marginal limits of surfaces are relevant to its interpretation, effectiveness and functioning.

Just as a picture lacks a frame, or its absence tells us something about the choice made, also the material in surfaces need to mark their boundaries in a defined way or not, but always keeping contribution to the recognition of their character. It may be: different or equal, contrast or camouflage. It is important to reflect, and think on the cultural context, the meaning that supports the choice, and leads to validation of the options.

We should not overlook the importance of the detail to validate the whole. Little things make a big difference. The scale of proximity to the human being, the contact of the foot and the hand as an interface between the human being and the built work, is a process of sensory apprehension of architecture, and of possession of the physically built space, implying choices and options, bringing different results to the experience and success of the concerned.

Whether natural or artificial, the limit can be a confrontation, or can be softness, whether in nature or in a built environment. We have fluid transitions or we have aggressive transitions. And this process is repeated in the various scales of analysis, from the question of country borders to mere transitions between compartments or transitions of different areas. The question of limits is often omitted in detriment of valorization of surfaces, an error that leads so many times to the bad resolution of the limits and compromise the final result of the whole, unbalanced by the absence of reflection around the solution of limits.

To solve the details is to solve the amplitudes, turning work done in a consistent piece, from a practical and functional point of view, and at the level of aesthetic and cultural coherence. Choosing boundaries is to implement character and culture perception onto a complete work, a higher level away than by only delecting surfaces.

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&

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Evaluation of Childhood House Memory through Spatial Indicators

Apart from being tangible cultural heritages, buildings and spaces have intangible values. These intangible values based on memoirs and leave trace on people's minds. These can be read on the spatial indicators and becomes 'spatial memory'.

Memory is not only an individual capacity, but also collective, accordingly cultural. These individual spatial memories intellect with the others' and create 'collective memory'. It is the most important element that makes the individual, a part of the society. Both individual memory and collective memory based on tangible collective experiences. They are remembered with spatial elements and reminders. They are connected to the space. Space can be a defined space like a rural house or a freer space like a cultural landscape.

Memory is an interdisciplinary topic. The themes of how much of the memoirs are related to the space and how the elements of the space affect the memoir, constitute the concept of spatial memory. Within this study, spatial memory concept is studied through the 'childhood house', have an important place in a person's life. A questionnaire on spatial elements is used to determine how memorable the childhood house is.

In this paper, spatial memory indicators are evaluated by analyzing memorability of childhood house elements. The spatial indicators and memory indicators were tested on university students without an age limitation to define the spatial memory perception.

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The Utilization of Bim to Achieve Prescribed Architectural Undergraduate Learning Outcomes

Building Information Modelling, a process integrating 3D graphics and data, is being adopted into the delivery of undergraduate architectural programmes. This object oriented approach offers a range of benefits over the more traditional CAD approach that uses lines and arcs and manual techniques, by adding the third dimension creating a database model for wider ways of thinking and working for students and future architects. Moreover the requirements of architectural programmes are defined through their learning objectives meeting professional requirements such as those set by the RIBA. This paper aims to investigate how the capabilities of BIM can be utilized to more effectively deliver the requirements of undergraduate architectural programmes.

Purpose: The aim of this paper is to illustrate how BIM can be utilized to meet the needs of undergraduate architectural learning outcomes.

Methodology: This study considers the learning outcomes as defined by an undergraduate architectural programme (which is designed to meet RIBA requirements) by analysing a study case curriculum and learning objectives.

Understanding BIM's application is achieved by semi structured interviews with teacher, practitioners and BIM experts.

Findings: This paper provides a recommendation for how teachers can more effectively integrate BIM into architectural undergraduate programmes assisting undergraduate student development.

Originality / Value: This paper addresses changing technologies and process and provides a timely consideration of how BIM can be adopted in the architectural undergraduate domain.

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Body Challenges - Between Architectural Scale Models and Architectural Objects

“The domain of inhabitable objects that architecture claims as its own finds its first intimation in the model.

The model purports to present architecture, not represent it” (Hubert in Frampton e Kolbowski, 1981: 17).

Scale models have long been recognized as a powerful device to envision architecture, having - as architectural objects do - a three-dimensional existence and involving - as those objects also do - a constructive process. That is why scale models are still trusted as architecture closest representation, even if the relation between one and the other must be acknowledged as a strictly arbitrary one, since all relations of representation are arbitrary.

But some scale models seem to aim to challenge their representational condition. By virtue of their size and also of the materials they are built with, some scale models compel one to enter into them rather than just to face them, allowing a comprehensive experience that emulates the experience desirably allowed by the architectural object being represented. The body is challenged to live inside those scale models, to immerse in their interior, even to move around it, becoming those scale models inhabitable objects. And even if not of a regular use, the history of architecture proves the adoption of these scale models as a pervasive practice.

One question must thus be poised: are those objects still representations, or have they crossed a threshold by becoming architectural objects?

This paper aims to discuss the role of the body in the distinction between an architectural object and certain scale models, thus contributing to the comprehension of both. Rather than on a set of intrinsic features pertaining to each one of those objects, the distinction between one and the other will be sought after on how those objects are signified. Those objects become either an architectural object or a scale model depending on how the body challenges itself to get embraced by them.

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&

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Seljuks Inherited to Anatolia, *Caravansarais*

The history of Anatolia intertwined and layered manner is composed of many historical mosaic of culture. In this chronology, we see the Anatolian Seljuk State in the administration of the era when Turkish identity was set up in Asia Minor. This state has become an important force especially in the 11th and 13th centuries, even if it is not absolute in commercial, military and economic . At that time, the continuity of the state union was due to the intense trade and lack of scarcity in the country. The Seljuks were aware of this. With the expansion of Anatolian Seljuk State borders, which give importance to the trade, new road networks have been formed and the existing ones have been strengthened. Old Anatolian cities such as Konya, Kayseri, Sivas and Erzurum have become important trade centers. It is necessary to ensure the safety of the roads and caravans in all of this commercial activity in the country. Caravanserais and khans were constructed on the roads to meet the needs of the caravans in order to stay and to continue their way. These buildings, which have an enclosed architecture with thick masonry walls, look like a castle and have become a power show. Anatolian Seljuk period Caravanserai differentiating from accommodation building before him and that they have the original building typology. In this study, the change of the commercial activities and accommodation during the history and the spatial organization, plan typologies and functions of the Anatolian Seljuk Caravanserai constructions are discussed.

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Quarries and the Conservation of Disturbed Landscapes

Although vital to the needs of growing cities for building stone, paving materials, gravel, and sand, the extraction of rock and other materials from the earth is widely regarded as an environmental hazard and quarries as dangerous places which must not be abandoned once depleted of their resources. The literature dedicated to the reclamation of quarries is extensive, describing procedures intended to integrate quarries or other disturbed sites with the surrounding terrain, usually by restoring a natural grade, providing suitable topsoil for vegetation, and installing key species of plants to reestablish a working ecosystem. Natural succession, which allows gradual development over time without human intervention, has proven to be at least as successful and is increasingly favored by ecologists for habitat restoration. Half a century ago, Robert Smithson and the other pioneers of the Earthworks movement proposed that art become a process mediating between nature and culture, and the unrelenting forces of decay and renewal, chaos and order, should be embraced as inseparable from the act of creation. Quarries and similar excavations combine important historical narratives of urbanization, industrial production, and everyday life with spatial qualities of enormous power. As a hybrid of natural topography and human intervention, each quarry represents a unique balance of social, artistic, and ecological factors.

Rather than damaged ruins in need of repair, quarries are massive constructions carefully built into the earth, landscapes of exposed geological structure and strata whose beauty would be obliterated through reclamation. This paper will discuss built works from the fields of landscape architecture, architecture, and art which provide alternatives to anodyne reclamation initiatives while protecting fragile ecosystems within their surrounding contexts.

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An Empirical Validation to a Process-based Model for Teaching Architectural Design, with Reference to Design Studio One

It is widely agreed that 'Design Studio' is central to architectural education. Therefore, many process-based models have been developed for teaching architectural design. One of these models was developed by the Author in (Elfiki, 2013). Its main challenge was to regulate the amount of information students need to handle in their first studio, yet within a sound integrated design process. The model is described in two phases. The first phase comprises six steps that set the medium for gradual and cumulative learning about the principles of architectural design. The second phase comes in four steps, which aim at introducing students to a systematic design process that they can pursue in their future work.

For that the above model is being in-application for several years now, the present paper is meant to be one step towards its empirical validation. To realise this objective, the study employs a purpose-designed questionnaire survey, which involves a sample of former 'Design I' students, teaching assistants, co-tutors and examiners – who took part in the application of this model. The questionnaire examines the extent to which every step in the model has responded to the aforementioned challenges. Then, data gathered are analysed using SPSS and analysis of variance tests are applied to the responses, to identify the points of strength as well as the areas of potential improvement in the studied model, as addressed by different respondent groups. It is hoped that the findings of this study would contribute to further students' development, hence promote better architectural education and practice.

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The Architecture of Knowledge from the Knowledge of Architecture

Architecture of knowledge is a function of the spatio-temporal mechanisms of experience signifying for the discourse of university and the autonomy on space integrated with the scientific rules of learning and knowing. The role of the institutionalization in the architecture culture, thus, corresponds to the embodiment of the architectural knowledge re-substantialized for the spatialization of scientific knowledge itself.

The scientific inquiry upon the modalities and the rules of causality in nature, as a recipe for the modern architecture, revealed the conditioned mode of making in the early modern period – which can be acclaimed as the formation of new knowledge – the knowledge of natural sciences in the spatio-temporal experiences of the built environment. The learned experience from the modernism, accordingly, offers for some further alternatives that have not been discovered yet; and creates an alternative domain for the architectural praxis both on the design methods and their implications as well as their theoretical excursions.

Derived from the empirical studies of natural sciences, the modernist learning from the nature was configured in the CIAM experiences as a pattern of the conditioned knowledge. After the collective experience of the congresses, what has been left as a domain for the collective praxis after the post-war period was the new scale of urban planning in the definition of the altered space-time experiences. Just to broaden the futuristic projections of the modernist experience towards the compact solution of neo-modernity, the institutional freedom engaged with university, of universality, and has enabled architecture to practice in flexibility beyond the clichés of the conventions of making yet with a concern of efficiency. As a battery of the collective suggestions upon the decision making of the spatial design and its dynamics of the user-space interaction possibilities, the discourse of university, respectively can be seen as a function of reading the emergent reality of the demand on a set of spatio-temporal expectations superposed onto the modern way of ordering and clustering spaces. Facilitating the learned experience from modernism in the age of change and instability of the post-industrial period, it is to re-visit the consequential evolution of a tradition; the tradition of the modernist mode of making altered by the transformation of architectural and spatio-temporal knowledge; that is transferred by the discourse of university.

Using the modernist mode of making registered as knowledge in the agency of urban design, the architectural experience in the Free University of Berlin with its design has integrated the rules of making with respect to the principles of nature; engaged with the desire of the subjective freedom and

the demand on utility. Creating a rehearsal from the culture-nature dichotomy into the contradistinction with the togetherness of the first and second nature, this essay correlates the cultural endeavor of freedom with the order of scientific rules of nature in the particular design approaches.

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&

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Linking Architectural Projects with Inhabitants through Ethnography

We present the first part of an interdisciplinary investigation, belonging to the FONDECYT project N.11170140, whose central theme is the relation of inhabitants with architectural works.

Habitation is fundamental in architecture, many authors have reflected on this topic. Habitable places have also been written about, given that one of the purposes of architecture is the search for a place where human beings can inhabit. Architecture is the art of creating habitable places. The challenge, then, is to generate habitable places when little is known about the inhabitant. Therefore, a methodological strategy is proposed that allows the establishment of a link between inhabitants and the context where they are located, for the design of new buildings or for the analysis of existing buildings. In order to develop this strategy, ethnography is used as a methodology of anthropology, which, in turn, is defined as the study of otherness. Thus it is through the approach to the Other that we can rescue the perspective of the inhabitant that must be considered at the moment of the architectural design.

In this paper, Ethnography is defined and its way of realization is explained. Thereafter, a methodological strategy is proposed that considers seven steps: delimitation of the ethnographic situation and project location; wandering and definition of the objective of the observation; identification of the types of inhabitants; selection of places, informants, and key informants; participant observation and ethnographic interviews; registration of information; and preparation of report and synthesis sheets. This is done in order to obtain information directly from the primary sources, that is, from the people in their place and time, to understand the daily life of that fragment, and to accomplish architectural projects that are linked closely with its inhabitants and its context.

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All Work and no Play: Whatever Happened to Mysteries in the Dark?

It is likely for the 24-7 city to present and promote itself as a place of endless possibilities where boredom does not exist. Although, whose definition of *boredom* is this exactly? The 24-7 city can be considered as a spatiotemporal reality where dualities such as work – leisure, productive – non-productive, fun – boredom are defined over their relation to capital, and divided into categories. Capital, by the instrumentalisation of technology, regulates the relations between these categories and places them in a systematic framework. Together, they define boundaries in space-time, permitting some actions for the individual and neglecting/banning/eliminating others. This system also takes part in defining the rules of urban everyday life by exposing us to certain repetitive acts/experiences/encounters, and bends the duality of day – night - along with other temporal aspects - to its will. For the sake of becoming a time spent in productivity, having fun, catering to certain needs, etc. the nighttime is tried to be adapted to daytime through technological means. The individual's use of space at night, becomes directed via technology and what it provides.

This system may be considered as stabilized and productive in capital's terms. Yet in a way, this is a framework of repetitive patterns, predetermined routes, and predictable/presentable outcomes; a framework of taming/domesticating the night, in this context. A domestication that creates a comfort zone of an enormous scale, which then leads to a lack of production of certain values that may be the outcomes of unique experiences. The concept of “**play**” can perform a provocative intervention in such cases. It reshapes the spatiotemporality within the everyday life, lets the individual act on her own terms, and makes it possible to stumble upon certain niches outside what this system offers.

So, how does and how can the individual cope with these aspects, erode the borders that are defined by this system, and create unique experiences in the night? For this study, the duality of light and darkness in the nighttime will be stressed, to be read along with elements of play such as surprise, mystery, curiosity, and discovery. Through “play”, these values and outcomes may manifest themselves, and the nighttime can be a welcoming laboratory of such a pursuit.

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The Experimenting Body in Baroque Architecture

With the advent of the Scientific Revolution, and (as argued by Alexandre Koyré) the destruction of the old cosmos and the infinitisation of the universe, or its geometrisation, the approach of architects to design that was based on arithmetic, more specifically on commensurable proportions, was replaced by complex geometric design. In the Baroque period, geometry replaced arithmetic as the dominant base for the architectural design. Architecture also looked to reflect the notions of infinitisation and geometrisation, and no longer an “old microcosmos” as the image of old macrocosmos. Architecture became the image of the new universe: infinite and geometrised. In buildings, and in urban and territorial design, geometry – the “geo” prefix reflecting its own importance – adapted, more so than arithmetic (which was used to the human scale), to this new reality, because the line and the surface were continuous and infinite.

However, if this was the age of rationalism, it was also an age of emotion as well. The Baroque played out against the backdrop of the Counter-Reformation and the demonstrations of the pomp of absolute power at the royal courts. Paradoxically, alongside rationalism this period set the stage for militant mysticism and a revelling in royal pomp and ceremony. In Baroque architecture, the previous emphasis on intelligibility was gradually replaced by an emphasis on seduction, sensuality and theatricality. Complex geometric design helped provide this new reality.

In this space, in this new architecture, the body that inhabited the architectural space now inhabited the infinite space. The planet Earth was no longer at the centre of the former “closed world” (Koyré). It was just another planet, just another star revolving around the Sun. Likewise, the body was no longer confined to a closed building, to a finite space. Now man lived in the infinite universe, and the human body moved in the infinite space. It escaped its own limits to live in the Baroque *trompe l'oeil*: in the infinite miracle, in the illusionistic ballroom, in the infinite garden... In church and at court, in prayer and performance: the infinity and the body moving infinitely in space was the perfect idea for linking architecture and mysticism and architecture and royal representation and pomp; it achieved the perfect connection to the both the world of the saints and that of the strictly choreographed ceremonies involving the whole court in the large public squares.

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&

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An Investigation of the Effects of Indoor Air Quality and Thermal Comfort in Eskisehir Osmangazi University Faculty of Architecture Classrooms

Indoor air quality and thermal comfort is acknowledged as one of the significant factors that affect the wellbeing of building occupants. According to the United States Environmental Protection Agency (EPA) and its Science Advisory Board (SAB) indoor air pollution is among the top five environmental risks to public health. A desirable level of indoor air quality therefore becomes an important aspect of the indoor environment, especially for education facilities where students almost spend the majority of their day. Especially, exposure to carbon dioxide, an important indicator of indoor air quality problems, could cause symptoms such as coughs, headaches, fatigue, drowsiness, eye irritation, and inability to concentrate. Given the fact that outside air contains carbon dioxide around 400 ppm (parts per million) accepted standard carbon dioxide level in a classroom is considered as 1000 ppm. Above this level, students in the classroom could start to experience the above-mentioned symptoms, which later could result in health problems such as asthma, allergies and respiratory diseases. On the other hand, thermal comfort values could trigger further these symptoms at variable levels. In this respect, the present study aims to present the outcomes of a field study conducted during the final exam periods in the Eskisehir Osmangazi University Faculty of Architecture Building. The building is naturally ventilated, and carbon dioxide and indoor thermal comfort values were measured during the final exams. In addition, the students were submitted a brief questionnaire regarding the possible symptoms they could experience during the exam period due to indoor air quality and thermal comfort problems. The outcomes of the present study are considered significant in terms of contributing the research area and strengthening the awareness of architecture students for future endeavor in achieving better indoor air quality levels in their designs.

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Reading Architecture and Literature Intersection on Philip Dick Novels

Architecture has always been a discipline that is fed from different disciplines and forms the intersections with these disciplines. The multidimensional nature of architecture has brought about the interaction of the languages of different disciplines with architecture. Language was seen as a common denominator, and each discipline reflected its own language. The literature that corresponds to the language as text intersects many areas with the architecture that corresponds to the language as visual. Although they are different disciplines, they are both fictional, allowing them to be considered on a common ground and offer rich contents to each other. Both disciplines have begun with dreaming and drafting and have included relationships in time, space, and event sequencing. The different fighters intersected between the two disciplines and were organized at that intersection. The design process was observed in both disciplines. What started out as draft and sketch has become a product after that process. While literary works depicted architectural space, architectural works were able to express themselves in literary language. Cities, structures and streets are the subject of literary essays, or are portrayed through that work and transmitted to different periods. Or, conversely, the fictional spaces in literary work have opened the way for us to imagine different cities or communities and the transformation of fiction into architecture. Thoughts in mind are found in the intersection of fiction through words or forms. Science fiction novels that can be seen clearly in the face of the fictional situation are not considered independent of the existence of architectural spaces. These novels have become places where the borders of places have been lifted, words have turned into places, and imaginary simulacrum has begun to visualize. The works of Philip Dick, a science-fiction novelist, have edited planes in which architectural space and literary space intertwine. The situation in which the boundaries between the two disciplines became blurred and intertwined was examined through Philip Dick's novels.

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Tensegrity and Interactivity

The subject of this paper is an analytical description of the conceptual transformation of the Korean street kitchen, or 'pojangmacha', to a contemporary interactive street furniture in the streets of Gwangju in the southern part of the Republic of Korea. The project is part of a research orientated teaching program at the Aarhus School of Architecture and is a built contribution to the international Gwangju Folly 3 exhibition 2016-17. The exhibition achieved 'the president's medal' for best architecture in South Korea 2016 by the Korean Institute of Architects.

The often-experienced chaos in the fluctuating streets of Asia, where the hectic social life takes place among market stands, casual kitchen arrangements and labyrinthic systems of electric wires and tilted posts, has a great inspiration value for artists and architects. A key element in Korean street life is the 'pojangmacha', a unique mobile street kitchen, which transforms its character throughout the year from exterior to interior activities, depending on the weather condition by use of different sorts of coverage. Especially the use of translucent plastic with light and people underneath gives these casual kitchen arrangements a mysterious and gloomy character during dark evenings and nights.

This inspiring flux of the dense Asian city led to the creation of a new flexible street furniture designed for the city of Gwangju. The labyrinthic systems of electric wires and tilted posts was transformed into a tensegrity construction of two tilted steel posts with steel wires and sticks. The flexible use of the sitting arrangements of the 'pojangmacha' inspired to the design of a wooden base divided into two parts with different heights, which can be connected in three ways according to the need of the situation. The dynamic Asian city night light inspired to the design of two groups of RGB lights in the base, which project light on a group of textile surfaces placed above on the tensegrity construction. In this way the street furniture can both function as a meeting point for casual social gatherings, and as an interactive platform, where the shades of the movement of people create dynamic coloured figures on the textile surfaces.

The design fulfills the intention of the project to provide a social space for rest, play, relaxation and casual meetings, but also a space which can manifest the same beauty as the street stalls in the local community and contribute to the local street narrative.

The designed street furniture was named SPECTRUM, and it is a flexible and mobile mini folly or street furniture like the 'pojangmacha', which can easily be moved to different locations in the cityscape according to the situation and assembled in various configurations adopting to the

site conditions, and by that way become a small sculptural and interactive landmark in the local community.

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Assessing the Requirements and Academic Impacts of Collaborative Multi-Disciplinary Working within UK Higher Education Sector: A Case Study from London South Bank University

The construction industry comprises a number of individual professional disciplines; however, various studies (Latham, 1994; Egan, 2002; Morrell, 2015) highlight the fragmented nature of the industry and the silo mentality as key inhibitors to collaborative working. The need for collaborative working in a multi-disciplinary environment become even more critical to meet client's demand for efficiency, value for money and improved productivity.

A recent study from the academic point of view also identified a gap in research evidence to inform the design of team-based learning experiences that reflect current workplace and professional learning contexts (Evans et al, 2015). The need for built environment, architecture, engineering and construction education system to be reviewed on a cross-disciplinary basis becomes crucial (Edge report, 2015). It is important for institutions to encourage greater integration in preparing the future professionals to work collaboratively in a multi-disciplinary environment.

The aim of this research is to establish the most appropriate way in incorporating Building Information Modelling (BIM) as a catalyst to encourage multi-disciplinary collaborative working across the formal curriculum of architecture, engineering and construction subjects within London South Bank University as a case study of a UK university. Primary data has been gathered using questionnaire, interview and focus group aimed at professionals in the industry, academia and students. Initial results suggest the challenges of collaborative working and potential solutions that can be implemented to tackle these challenges. A model is developed to foster and encourage a multi-disciplined collaborative approach based on this study.

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&

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Analysis on Istanbul Baths in the Context of Social and Physical Sustainability: Mapping with GIS Tools

Baths are important elements of the built environments they carry socio-cultural sentiments; with their formations, standing in the urban texture, and social life. However, the Turkish baths, being a successor of the ancient baths, seem to have difficulties in maintaining their physical and social functions. Unlike traditional bath culture, these baths, which have been detached from their contexts, abandoned or converted to different functions with alterations. These transformations parallel to the social structure exhibit different developments such as artistic, educational, tourism and commercial-based. The aim of the study is to evaluate the physical and socio-cultural effects of changes in the structural and environmental scale within the scope of sustainability. In this context, the thesis to which different uses can be provided with sound transformation and principles should be tested with correlational analyses. Extensive literature review, comparison of new-old data documentation, survey, post occupancy evaluation and observation were used as method of study. With qualitative and quantitative characteristics, Istanbul baths -Çemberlitaş, Beyazıt, Kılıç Ali Paşa, Koca Mustafa Paşa, Davutpaşa and Mimar Sinan Baths- have been determined as the scope of the research with different uses and context changes in the urban scale.

In conclusion, it has seen that the interaction of the baths with the close environment and social life is significant for use of the baths and their use for different purposes could be an opportunity for the sustainability. Cases are defined as an object exhibited in decontextualized situation, lost in uncontrolled construction, or adapted to new conditions with extreme intervention; and as a lack of existing potentials, insensitivity and gentrification in spatial scale. In the light of the findings, it has been reached that the Turkish baths which are representing bathing cultures should be kept alive with their physical and social dimensions in the multiple concepts within the changing context, usage and social structure.

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Villa Adriana: Presence and Crisis of Language in the Ruins

At the beginning of the 15th century, Brunelleschi and Donatello made an initiatory trip to Rome that would lead them to discover the wonders of Antiquity. Vasari explains carefully how they "set themselves to measure [all the buildings] and to draw out the plan of them, sparing neither time nor expense." From then on, the history of architecture will be understood as the creation of a new language that discovers the purity of Antiquity (Summerson, 1966). The culminating point of this process will be Bramante's *grande maniera* (Vasari).

However, a current visit to the Villa Adriana ruins can lead us to a different conclusion. In the Villa we discover inarticulate fragments of language. Everything related to the orders has been fragmented. We find here and there senseless remains of capitals and cornices without continuity: fragments of a vanished poem (De Franceschini, 1991, Reggiani, 2000).

However, volumes, matter and light are presented to us with a force that seems to take on new meaning and produces a new atmosphere. Piranesi had already shown a new way of understanding Villa Adriana beyond the classical language recovery (Bettagno, 1978, Ficacci, 2001). We discover something similar in Le Corbusier's drawings (Gentili, 1999). Language gives rise to presence. At a time when styles and languages seem to have entered into a crisis, the concept of presence prevails (Sontag, 1966, Gumbrecht, 2003).

This article describes this phenomenon focusing mainly on a fundamental piece of Villa Adriana: *Pecile's Wall*. In an architectural element devoid of its original meaning, transformed over the centuries, destroyed and restored, we find the essence of the architectural element called wall. In this way, this architectural element is a source of inspiration for contemporary architecture, becoming part of its visual culture.

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Between Man, Nature and Architecture: The Four-Element System in Vitruvius' *De Architectura*

Vitruvius' *De Architectura* is probably the most significant treatise on architecture of the Western classical period which survived to this day; many ideas and theories derived from it began to exert an influence since the Renaissance. However, the important role of the classical system of the four elements – fire, water and earth – in this treatise seems to have been neglected in the field of architectural history. This paper aims to discuss how this system is seen as the fundamental principle shared by man, nature and architecture. As a cosmological idea developed by many ancient Greek philosophers, the four-element system was associated with a variety of meaning systems such as those of light and heavy, upward and downward movement, and the four contrary qualities of cold, hot, dry and wet. In *De Architectura*, the four elements are further assigned with the four properties of soft, tough, hard and brittle. This paper shows that, by means of these associations between the four-element system and other meaning systems, the four elements provide a basis for the establishment of many theories for the town planning, the design of different types of buildings and the selection of building materials.

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**Traditional Khan Culture in Cyprus and Today's Space
Design with the Effect of Culture and New Functions:
"The Case Study on Great Khan"**

Cyprus which is the third largest island in the Mediterranean Sea after the Sicily and Sardinia Islands, has been under the rule of many civilizations throughout the history and has also hosted the architectural styles of these civilizations. The Eastern Mediterranean trade routes which are passing through Cyprus, has also made the island's geopolitical position stronger. On the other hand, in the historical process the people who have traded and stopped here made the accommodation an important issue and with the domination of the Ottoman Empire in the 16th century, the Khan buildings, which are considered to be the most important key of the architecture of this period, have begun to be built. The khans which have built in the various cities of the island have met the need for temporary accommodation in these areas.

As a result of the restorations during various periods of the history, the Great Khan still remains in the present time. The building which was built for accommodation has a variety of functions throughout the history and in our day the khan continues its own existence with a restaurant which includes local handicrafts production places and its salesrooms and serves local foods to the visitors.

In this paper, both past and present functions of the Great Khan which is the most important symbolic building of the walled city of Nicosia will be examined. Also, how its functional change has returned to today's society will be examined. Once, the Great Khan had a different importance and mission for the city. Analyzes of the value of the Great Khan in the 21st century and positive effects of the Great Khan at the city will be determined on the site, considering the building, the user and the relation with immediate surroundings.

As a model for the re-use of other quality historical buildings owned by Cyprus, which is a rich island in terms of cultural heritage, the Great Khan has had many interventions in the design of its spaces as needed and thus has succeeded in reaching the present generations from past generations. In this study, the dimension of the intervention to the interior of Great Khan will be determined, and the function of today's building with a future design understanding will be discussed. The methods that will be used in the research; an extensive literature review, on-site

observation, detection of places, photographing and interviews with business owners and users of building.

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Differences in Spatial Understanding between Digital and Physical Models: A Comparative Experimental Design Study on “Presentation Techniques Studio Education”

In architectural education, “Presentation Techniques” is the first course that is obligatory for students who take the “Architectural Studio” course in order to improve their drawing skills. The purposed outcomes of the Presentation Techniques can be classified as two major principles such as: To have ideas and knowledge about two-dimensional and three-dimensional drawing techniques for appropriate manually prepared presentations, be able to identify, interpret, and use of two-dimensional and three-dimensional techniques to express the design correctly.

In architectural education, instructors use digital or physical model for explaining form and its data. Students have many different approaches measuring and understanding the spatial properties of the given form. Presentation Techniques course have two different sessions. In the first session, the drawing methods are explained theoretically. In the second session, an application upon the theoretical part is completed. Students are experienced, assessed and analyzed spatial relationships of forms and subsequently constructed real models and digital models.

One of the main purpose of the study is to identify how architecture students perceive forms in digital and physical platforms and how they sketch what they perceive. This study focuses on the differences in spatial understanding between physical and digital models. The methodology of the paper is structured on informing the differences of spatial understanding of digital and physical models regarding Presentation Techniques course, literature review, experiments, expected outcomes, and results. The experiment has two phases. Students who are participated in the same theoretical class are randomly separated into 2 groups named A and B. Students will have the same duration for both of the experiments. Participants will have the same object, but for the first experiment, the participants of the group A will have a digital model of the object and group B will have the physical model of the object. After the submission of the drawings of the given objects there will be a survey analysis that will be applied to the students for examining spatial understanding of the digital and physical models in terms of the geometries and operations upon them. These drawings and surveys will be evaluated with a method that aimed to measure students’ perception and understanding. The study achieves to find out which model is the better for teaching form and its data to students. The evaluations and results of the experiments will provide a proof for a better way of teaching spatial understanding to the instructor of the course. Future work should be done in different numbers of participants as perceived by

professionals and non-professionals in the field of architectural education. Because of the drawing existing forms or models is the way of learning the representation of the 3D objects.

Ozlem Karakul

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Designing a Village Museum Ecologically: Reuse of Historic School Building

The number of the village museums has highly increased in recent years parallel to the increase in the care of the ways of life, intangible cultural heritage of societies. Designing village museums necessitates to understand the tangible and intangible characteristics of village accurately, specifically, both the architectural language of traditional buildings and the cultural practices of people. This study aims to present a process of designing a village museum in a historical building in the village as a common design problem between the disciplines of interior design and conservation.

The reuse of the historic building primarily necessitates to deal with both the structural system and the values of the building which constitute the reasons for conservation of the buildings and the architectural significance of the building besides the natural, economic and cultural characteristics of its context. The reuse of historic buildings necessitates its adaptation to the program of the new function by certain interventions, like, new extensions. This study presents a specific framework for reusing of a historic school building in Botsa Village in Konya as village museum developed within an interior design studio. The design framework is mainly based on discovering the ecological principles of local architecture and oriented to the needs of villagers emerging within cultural and touristic developments.

Eyal Karni

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Architectural Design Issues Concerning User Flexibility in Adaptable Dwelling Units

Adaptable dwelling units are designed to address altering dwelling needs. Such needs may arise during the familial life-cycle, resulting from a number of reasons such as: new-born children, work from home, grown-up children leaving home and hobbies. Changes in the number of dwelling family members as well as in the nature of activities carried out in the dwelling unit call for addition (or sometimes, reduction) of dwelling space.

Several strategies have been proposed to address the need for adding dwelling space. One strategy is re-use of the available present dwelling space in a different way by utilizing modular, lightweight, movable partitions placed on a design grid, - creating a variety of interior dwelling space configurations designed to address specific dwelling needs.

In order to achieve this goal, architectural design issues regarding the potential of the dwelling unit interior space sub-division should be realized and addressed adequately when architectural design of adaptable dwelling units is performed. Attaining this design objective may result in enhancing satisfaction among dwellers by reducing building costs and, sometimes, saving the trouble of moving to another residence.

In this paper design issues such as the geometry of the dwelling unit, location of entrance, number of free ('open') facades, and number and location of wet areas are brought forward, in view of their relevance to maximizing the interior space sub-division potential. A number of interior space sub-division configurations of a theoretical adaptable dwelling unit are presented graphically.

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An Assessment of User and Designer Perspectives on Mosque Interiors: A Case Study

The mosque is the generic name of the places where Muslims worship together. It is also the center of certain social and public activities in Muslim societies. Therefore, in Muslim societies the mosque has been considered as one of the crucial building types through the history. When it comes to Turkey, despite the existence of more than 80.000 mosques, only a limited number of mosques has been designed with innovative or creative approaches. In other words, merely imitating the Classical Ottoman Period mosques leads the lack of an authentic typology regarding the mosque architecture. This study aims to investigate the tensions between the populist view and the idealist view through the users and designers, in order to achieve insights for new mosque interior design. The focus is on differences and commonalities between “perceived and living space” and “designed space”. In the scope of this study, Karacaahmet Şakirin Mosque is chosen to be examined as a controversial sample of a mosque design recently built. In the data collection process, two separate surveys were conducted, one of which was for the frequent users of the mosque and the other for architects, interior architects and industrial product designers. Both surveys contain questions related to headings such as the qualities of the interior, colour and light, form, texture and material, architectural elements, scale and ratio.

The form of the dome, the use of transparent facades in the interior space, the designer's interpretation regarding the material, form and dimensions of the architectural elements, and the collaboration of various designers specialized in different fields in the design process all help the Karacaahmet Şakirin Mosque to be distinguished among its peers. Karacaahmet Şakirin Mosque also stands out, due to drawing attention especially in printed media as well as the critiques written by architectural theoreticians. For these reasons, the criticisms about the chosen mosque have been considered as three poles which are expert criticism, user criticism and designer-peer criticism, with regard to Attoe's (1979) definition of criticism [1]. Where these three poles overlap and where they disintegrate were investigated and it is aimed to make deductions for future mosque designs by using that data.

Interpretation of different subjects on mosque design has the potential to reveal a trace of deepening tension between architectural and user-based viewpoints. Taking this potential into consideration, it is intended to open up new inquiry axes for the architects who will take part in the mosque design processes, by analyzing the differences in expectation

between the designers and the users with a critical perspective for increased quality of the mosque's interior architecture.

Ece Konuk

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Documentation of Modern Cities: Turkish Cinema and Modernity

When cinema was invented by Lumiere Brothers; cinema didn't simply take place in the modern city, it was *about* the modern city. Cinema is an eye, very similar to Baudelaire's "Flâneur", strolling in the everyday modern city life.

The image of the modern city is not limited to its urban infrastructure and its visuality: Occurrence of new social classes, the new daily routines, the increasing speed, and the change in the perception of time are the founders of the modern life. Cities emerged around these new social conditions and the newly 'formed/disciplined' societies. Therefore, the essence of cinema-city relationship lies beneath the 'Ordinary' stories of 'Ordinary' people. Cinema has strong descriptive poetics of this new city life. The recurring cinematographic motifs describe the subconscious of the societies, which allows a vivid analysis of the urban sociology.

One of the strongest examples of the cinema revealing the modern city life can be seen in Turkey.

Turkey experienced industrialization during the early 1950's. Therefore, Turkey witnessed the phenomena of urbanisation/modernization, which many European countries witnessed after Industrial Revolution, during the mid-20th century. Almost every single movie made in the 50's is about the informal housing, the domestic migration from Anatolian villages to Istanbul, and the fringes of the cities expanding continuously. Turkish cinema portrays the consequences of modernization and the transformation of the city perfectly.

The scope of this research is to investigate ways cinema describe the modern city with the daily life. Initially, the perception of the modern cities through cinema will be questioned. As an example, the urbanisation and modernization motifs seen strongly in the Turkish cinema will be analysed.

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&

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Love in the Ruins: Desiccation of the Living and Dead Body in Architectural Foundation Lore

The body's relation to wetness/dryness is not simply a matter of its historical ties to the theory of humors, where choleric and melancholic maladies were connected to the hot and cold extremes of the lack of moisture which divided the young from the old, the lover from the warrior, the convivial crowd-pleaser from the alienated artistpoet.

Rather, it could be said that desiccation as such as played a formative role in the ways subjective processes such as cognition, judgment, and even falling in love have correlated to architectural procedures such as refining the ornamentation according to meroic vertical sequences, configuring symmetrical crossings (chiasmus), and prescribing perspectival and orthographic "depths" within the imagined *temporal* "plane" of architectural experience. These correlations constitute the basis for claiming that architecture's "interiority" has its counterpart in cosmic "exteriority"; and thus this inside-outside "extimity" provides a grammar for architecture's Big Ideas.

The fundamentals of desiccation are mainly found in the ethnographies of cultural practices related to the preparation of the body after death. Salt is the common substance, used in drying and preserving the corpse physically but also as a magical substance allowing the soul to find a corrective path (orthography) linking literal death with the soul's Symbolic terminus at a scene of judgment. The key can be found in the way architectural drawings treat spaces of projection as either radial (perspectival) or parallel (orthometric); our presentation will engage the dialectic between drawings and bodies, paying close attention to the "contronymic" presence of dualities in both that allow for the construction of depth — and, hence, the pursuit of architecture's native Big Ideas.

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**Regenerative Design Patterns towards the Control of
Multiple and Complex Residential Issues in the Northeast
China**

There is a huge stock of existing residential areas in China, with low quality and low comfort. Although the functional life of these areas has expired, it is far from the end of their designed period. Therefore, it is of great significance to retrofit in order to enhance the living quality. However, due to the multiple and complex residential issues, the retrofitting of existing residential areas is not only the revising and reconstructing projects of residential buildings and environments, but also the multidimensional and interdisciplinary theoretic research and engineering practices. Thus, this research study, taking the residential areas built between 1980 and 2000 in the Northeast China as the research objects, attempts to systematically put forward hierarchical and periodic regenerative design patterns that offer an overall retrofitting plan of residential areas. Dealing with the issues of the existing research on practical retrofitting of residential areas in China, such as lack of basic data and statistics, neglect of preliminary design planning and lack of guidance evaluation criteria, this study, based on the case studies, establishes prototypes of existing residential areas, and designs on these prototypes for the hierarchical control of retrofitting patterns. The findings of this research will extend and improve the role of architecture design in the retrofitting of residential areas. It can also provide a variety of means and methods for the achievement of the living quality upgrades and long-term sustainability.

Mai Li

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The Reunion of Organism and Mechanism in Modern Architecture Today

A wider importance of a conception of organism is seen as central to architectural thinking. Organism with its counterpart mechanism, both find their origin in Greek: *organon* and *machina*. They were not so much in conflict until the recent hundreds of years, especially when industrialization polarized them in many aspects. In this paper, I attempt to propose an organic architecture defined as integrated industrialized building through meaningful fabrication in correspondence to topography, and I will argue that only through this way, architecture can undertake its fundamental task in the new era. The paper begins with a brief etymological study of *Organon* meaning "instrument" or "tool" in Greek, and that is why Vitruvius found it necessary to distinguish between *machinae* and *organa*. From that point, the paper introduces a technological and philosophical history of the separation and union of organism and mechanism.

This dichotomy between the organic and mechanic was taken by architects in the 20th century, but often interpreted in very different ways. Frank Lloyd Wright defined organic architecture as "a sentient, rational building that would owe its 'style' to the integrity." Here "Integrity" resembles Leon Battista Alberti's notion of *concinnitas*, a unity from which no part could be taken without weakening or destroying the whole. Though paradoxically, Mies van der Rohe occasionally claimed his architecture "organic" as a result from "meaningful construction." Mies didn't make the wrong argument in consideration of the origin of the word. Confronting with industrialization and prefabrication today, one challenge of architects is to integrate functional interdependence parts with internal intentionality as wholeness into territorial obligations.

With the historical survey and study of architects in the 20th century, I will argue my discourse of Organism in architecture today in regard to the contemporary situation. Several recent pieces of practice from China, including works by MAD Architects and Trace Architecture Office, will be presented with my observation and criticism to better illustrate my idea.

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&

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Low-Cost Innovation of Automatically Adjustable Sun Louvers: An Affordable Solution for Climate Responsive Architecture

The energy crisis and global warming nowadays drive many issues of architectural practice and research fields. The effective strategy of reducing the solar radiation passing into the building, is to design building skins responsive to the climate and radiation from the sun. However, today few of intelligent systems imparted to the responsive building skins, have been already invented and selling. Unfortunately, these equipment cannot be offered to all consumers, but only for the high-end projects due to their high technology process and expensive cost as mostly the same as other eco-friendly products in the market, especially in Thailand. The question arises as to whether it is possible to develop the climate responsive building skins by low-cost technology.

This research proposes the innovation of low-cost responsive building skins: an automatically adjustable louvers with real-time solar tracking systems. Enhancing the efficiency of solar radiation protection into the building, the operable sun louvers can be gained the indirect natural daylight in the same time. With emphasis in the low-cost technology, this product is composed of light weight steel blades installed with inexpensive adjustable prefab hinges, solar tracker system with sensor of LDR (Light Dependent Resistors), and local microcontroller board. Applying Lux sensor to measure the light resistant meter and passing the signal to control panel to adjust the right angle of louver blades to protect the direct sun accordingly, is proposed as the key solution with the accurate position of solar trackers. Also designing the precise code on microcontroller board based on open-source software, makes this product possibly low-cost if compared to other adjustable louvers in the market. This climate responsive sun louvers with simple, uncomplicated, and economical systems can be integrated into both existing buildings and new design buildings, and be an ideal part of the "green" architectural solution affordable for every single households.

Raffaella Maddaluno

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**Francesco Venezia: Time, Memory, Feeling as Elements of
Architecture**

Vladimir Mako
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**Aesthetics and Attainability of Cultural Cohesion:
Metaphorical Compositional Structure of Oresteia and
Acropolis of Athens**

The aim of this paper is to investigate the essence of three partite compositional structures as developed in a few important cultural monuments of the fifth century BC classical Greek art. This structure appears as a possible mutual aesthetic approach to metaphorical interpretation of a particularly shaped mythological meanings revealing the essential cultural and social believes and values of the epoch. In that context, discussion on Aeschylus's trilogy Oresteia and appearance of three essential forms of Athena's holy places on the Acropolis of Athens can help us to understand one of many aspects of cohesion of cultural and aesthetic expressions of that period. Moreover, this investigation can focus our attention on possible aspects of aesthetic development of fundamental ideals of a society and the forms of their variable appearances.

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A Luxury and Unhappy District: Sulukule, Who Would Be Blamed?

Urban regeneration projects are the most popular projects of İstanbul especially after the expectations that showed up during the European Capital of Culture 2010 Event. Most of the areas which are defined as squatter settlements by the municipality in Historical Peninsula have been decided to be included by an urban regeneration projects.

Sulukule is a district of Historical Peninsula which had a special life style because of the routines of locals. Sulukule locals have been able to settle a different culture in Istanbul for many years thanks to their routines: Romani culture. They created a living environment including their houses, jobs and social activities. However, Sulukule has been taken as squatter area to the records and Sulukule Urban Regeneration Project is prepared in 2005 by Fatih Municipality. A new design which is completely different from the structure of the area, aims creating a 'better environment' for visitors without concerning about the locals and their needs by changing the physical and social structure of the area. After the declaration of the project, the process of losing a culture and right to live of locals has begun.

This paper is about the Sulukule Urban Regeneration project's life span and evaluates the lost culture in terms of human rights.

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&

Victoria Hunter

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**The Somatic Landscape of Urban Multicultural Identities:
Mapping Emotional Engagements of Site, Dance and Body in
Raval, Barcelona, as Case Study**

The historical neighbourhood of Raval, in the district of Ciutat Vella in Barcelona, is a multicultural urban landscape that contains a patchwork space of differentiated cultural identities. Raval counts with 122 different nationalities (48,5% of its population). From 2000's onwards, the historical tangible and intangible identity of its urban heritage has been transformed greatly due to the elevated degree of social mobility processes by migration and city tourism. Our objective is to observe the multisensorial aspects of this urban landscape and the participation of the multicultural community in the representation of their collective subjectivities and in the creation of landscape through their bodies, with the final elaboration of an experimental cartography of a somatic urban landscape.

We will generate an artistic site specific material that will articulate the social, mental and environmental registers of space (Guattari, 1989). The mapping of urban space through the body allows us to understand the subjective engagement of the participants with space (feelings, emotions, rhythms, movements, intensities, memories, wishes, visions) (Harvey, 2006). We create urban landscape through the body. Landscape is an active and predicative creation of a subjective and vital experience, conscious, cognitive and sensorial. We are not contemplating and observing space but we are producing space (Lefebvre, 1974). We explore body-site relations by drawing attention to the body and its relation and reflection with urban space. Through "co-mapping" bodies and urban sites we explore the intra-active nature of these engagements through New Materialist lenses (Barad, 2003; Haraway, 2016), spatial theory (Lefebvre, 2004), discourses of urban flow and mobility (Edensor, 2010; Merriman, 2012; Harvey, 2012; Smith, 2015), and the work of urban planners, designers and architects concerned with body-site interactions (Le Corbusier, Gropius, Libeskind). Our work methodology is based in a five-day movement workshop that will engage participants in site-based movement experimentation trying to answer and understand the redefinition of affects, engagement, familiarity and sense of belonging to space.

Milica Muminovic

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Place as Assemblage: Abstracting, Diagramming and Mapping

Place is an ambiguous concept in architecture used to denote various elements of environment, both built and natural. It could be applied to a range of scales, such as interior of the building and the whole city. Place is used in psychology, geography, architecture, and urban design, just to name few. There are various philosophical approaches to the place, those that focus on morphology of built environment and those deriving from experience. However, most of the theories agree, that place is more than what we can see, more than just a build environment and summarizes the complexity of built and social into one aspect and quality that we call place identity. Different theories generate divergent methods to analysis of place. Most of the approaches are developing objective mapping of the place in which all the subjective and less quantifiable data are lost. That is why this paper asks what subjective approaches of mapping the place could be used as part of its analysis? To which extent are they helpful in analysis and conclusions about the place?

The intent of this paper is not to fully discard the objective mapping of the place but to discuss other ways of mapping as additional tool for understanding the complexity of place. The paper aims to discuss how diagrammatic approach can be exploit in the process of place mapping. It starts with the brief definition of the place and outlines its main characteristics. Secondly, the paper summarizes some of the experimental methods of using subjectivity as a mapping technique. The map becomes a piece that can stand for itself as a visual expression of the intangible aspects of place. The abstraction plays important part of the process and the outcome represents the diagram. Diagrams are defined as visual tools that embody the essence of idea behind place. The paper shows three different case studies of diagramming as mapping process of understanding the place. It uses the cases of streets in Tokyo and Canberra to explore how objective data could be visualized to generate objective or subjective set of place diagramming. The first case explores how objective quantifiable data could be used to generate objective diagram. The second case study explores how objective data could be transformed into subjective experiments of visualization. The third case study uses subjectivity as main force in developing diagrams.

The paper argues that diagrammatic mapping involves a level of abstraction that is then read in a different way from the intentionality of its author. Thus, a diagram starts the process of endless circularity in which the reading becomes distanced from the original intention, standing

as a pure visualization that can transmit the feeling or the atmosphere and capture the intangible aspect of place.

Riitta Niskanen

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To Remodel or to Develop? The Planning and Controlling of the City Development in Sopenkorpi in Lahti

Lahti is a rather big town in Southern Finland. Its history as a town began when the railway between St. Petersburg and Riihimäki was finished in 1870. The railway was lined beside the small village of Lahti, and some longsighted manufacturers had the hunch that Lahti could have a prosperous future. Beside the village there was also a lake, and the water routes reached Northern Finland. The new railway offered connections via St. Petersburg to central Europe.

Industry settled down quickly by the lake, the village grew and got wealthy, and in the year 1905 Lahti became a city. Lahti developed as an industrial and business town.

In 1912 Lahti city bought a fairly large area near the railway called Sopenkorpi, which was wholly meant for industry. Among the first factories were the slaughterhouse and the cattle stock market of the town from the year 1914. There have also been many famous companies, such as Järvinen ski factory and furniture factories, which have made Lahti internationally well-known. From the beginning the special character of Sopenkorpi has been the mixture of industrial activities and housing. Many entrepreneurs have lived beside their bread and butter, and this has created an individual character and functions that differ from all other traditional industrial areas.

Sopenkorpi has been categorized as a culturally valuable area. The value base is its position as the oldest industrial area of Lahti, the seat of many famous companies and many-sided activities. In Sopenkorpi there are also some architecturally mentionable buildings and built unities.

The industrial structural change has shrivelled the vitality of Sopenkorpi from the 1980's. Many factories have moved away or closed down. The amount of workshops has decreased and offices have substituted them. The aim of the city is to compress the city structure, and Sopenkorpi, which is situated near the city centre with good traffic connections, suits well for this. A new railway stop is planned near Sopenkorpi and so it could be a convenient place to live for people who use train.

The city planning of Sopenkorpi began in 2015. The targets were high: the Genius loci and nature of Sopenkorpi were to be maintained, and the area was not allowed to become a mere ordinary living area. This was stressed especially by the inhabitants of Sopenkorpi and the areas nearby. They have already developed different pop-up activities and functions based on local identity.

In my study I consider the ways to preserve cultural historic, architectural and city scape values of Sopenkorpi. I especially compare the means of traditional building preservation laws and practices with the new concept of transformation.

Santirak Prasertsuk

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Architectural Composition in Modern Thai Architecture

The question of “Thainess” in architecture has been asked among Thai architects and designers for decades. Influenced by western society and globalization, the creation of architecture in the present context of Thai Pluralistic society mostly falls in either Modern or Postmodern styles, lacking a specific national identity or locality. Although, in past decades, there has been an increasing awareness of such an identity issue, several significant civic projects received negative responses from the public due to the inappropriate use of traditional architecture in modern civic buildings.

The research framework consists of four key concepts as follows: 1) Architectural composition for utilities; 2) Architectural composition: form and proportion; 3) Architectural composition for signification in Thai pluralistic society; and 4) Architectural composition for spatial connection. The results of this research, which leads to conclusion on concepts and identities, consist of the following:

1. Architectural composition for utilities: architectural composition and planning of traditional Thai houses have been conceptually applied to modern Thai buildings with a concern for present contexts, such as the dissemination of a building’s mass into smaller components grouped around a central space, and the arrangement of central spaces for multiple purposes.

2. Architectural composition regarding form and proportion: there have been uses of form and proportion in modern Thai buildings that express a distinct identity, drawn either from Thai architecture of the past or vernacular buildings, which are well adapted to the present contexts. These features of Thainess include the steep gable roof, the multi-tiered roof, the triadic proportions of a Thai house, raised floors on posts, a sense of enclosure/cluster.

3. Architectural composition for signification in Thai pluralistic society: Integrated Thai style consists of: 1) the signification of concrete/non-abstract characteristics by referring to elements of vernacular architecture, local objects or crafts, and corporate symbols, as well as historical buildings located nearby, 2) the signification of abstract characteristics of the traditional Thai house.

4. Architectural composition for spatial connection: this manifests aesthetically the eastern spirit- i.e. living in harmony with nature. One of the design approaches is, for example, the planning of modern Thai buildings that connect inside to outside areas in relation to the aesthetic quality of light found in the sequential flow of similar spaces in a traditional Thai house.

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&

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Hospital Architecture - Comparing Public Areas in Thailand and Norway

Aim: This study is an investigation of non-clinical areas of two hospitals: Maharaj Government hospital in Chiang Mai, Thailand and St Olav Hospital in Trondheim, Norway. The purpose is to explore the similarities and differences in spatial arrangement and the use of them.

Architectural quality, usability and cultural context are investigated regarding the design and use of the non-clinical areas of the hospital because the areas are used by patients and relatives. Because of social interaction and the use of public areas in the hospital this study aims to examine whether a building assessment method could determine and explain the connection between people and the use of non-clinical areas especially in the two different cultural contexts; how local culture influences the use and the design of non-clinical areas of the hospital.

Theory: The Post Occupancy Evaluation will be used as primary assessment and evaluation theory. Thus, the culture and cross-cultural behaviour theories will be implement as support theories during the analysis and discussion part.

Methodology: The study was first conducted by adopting the concept of Usability and USEtool where a walk-through observation was used ,as a tool, to collect data regarding the first impression during the observed processes. Primary data was collected through documenting and drawings. Further analysis methods include plan analysis, the semantic differential scheme evaluation, narrative mapping, and drawings, together with the implementation of Pattern Language concept to describe good design in practice and contributing to answering the research questions.

Results and discussion: This evaluation of hospital non-clinical areas in two cultural contexts gives fundamental understanding of the influence of culture and well-being of patients to the design of hospitals and perceived quality and usability of architecture. Even though the two hospitals are located on two different continents, they share similarities as: number of patients, spatial arrangement of wards, and the specific types of use of the non-clinical spaces.

In Maharaj hospital, Thailand there are several 'informal' waiting areas created along the hospital hallways or empty spaces next to windows, created by patients and visitors themselves, without the hospitals consent, whilst in St Olav hospital, Norway the same type of areas are formally

designed by the hospital as flexible waiting areas. The significant similarity in the use of those non-clinical spaces correlate with the usability concept where users and their satisfaction are the most important aspects of design and architecture quality of hospital buildings.

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Experiencing, Knowing and Building Architecture

Introducing the theme of *experiencing, knowing and building architecture* necessarily departs from key references outside architecture's realm. The studies of António Damásio (1995) on the link and interdependence between mind and body, and the influence of the instinctive and body mechanisms over rational processes – namely in what it relates to the creative process (J. A. Marina, 1995) – as well as the body of knowledge on the phenomenology of perception by Merleau-Ponty, are then the core sources of my positing: architecture, being a physical and mental phenomenon and a mind-body experience, becomes a reflection of how the human being connects to the outside world; it delivers *visibility* to what remains otherwise concealed in other areas of knowledge – perhaps due to a tendency to simplify conceptual models throughout the creative process in architecture.

Whereas other areas of knowledge are traditionally linked to rationality and science, or intuition and arts, architecture's creative process was always hazily thought about or deemed 'confusing'. Taking into account the references above, we can say that architecture's creative process – or a project-gearred reasoning – is not in essence different from other disciplines. What differs is the object and work processes.

Relating both rational and instinctive processes in the 'creative act' is then found to be part of the interplay between the memory of sensorial images and lived images. This leads me to highlight the importance of sensitive experience in both the practice and teaching of architecture – in sum, *sensitive experience* is here thought as the foundation for creative memory and creative inquiry or, in other words, real knowledge.

A number of projects will be used to examine in depth what I have posited above. With selected works of Álvaro Siza, Steven Holl, Peter Zumthor, and Le Corbusier, I will try to illustrate this apparent dance between lived images and memory levels vis-à-vis the rational-instinctive and body-mental process of experiencing, knowing and building architecture.

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Art and Architecture Interaction: Critical Practices within an Interdisciplinary Context

Architecture is an interdisciplinary practice that generates its products through its specific tools and methods. It contains a complex design process, in which various inputs are addressed from such disciplines like art, science, technology, psychology, sociology, history or economy. It is not possible in architecture to discuss the rhythm without mention of music, to handle the material selection without considering the technologic dimension or to adapt the user needs to design regardless of psychology. This is one of the manifestations of the interdisciplinarity of architecture. Undoubtedly, between all these interdisciplinary unities, art is the closest discipline to architecture. Despite the occasional divergences so far in the history, architecture has been accepted as a branch of art. The constructions that include no aesthetic concerns and artistic dimension, have not been seen as an architectural work. Differing from the other branches of art, the architecture which includes a function and consists objects that are utilisable, beyond being visual and observable, has always been benefited methodologically and theoretically from related fields of art such as literature, painting, sculpture, music or cinema. The architecture has been influenced by the ways of production of these branches and inspired by their abilities of expressing themselves. Above all, architectural work itself is treated as an art object that can be exhibited. However, as art reflects a time period, an ideology or a criticism; architecture also carries such meanings. And this study aims to scrutinise the interaction between art and architecture in the context of their duties and responsibilities, by revealing the points at which they resemble and diverge from each other. It also aims to meet the art and architecture on a common ground; in terms of their critical perspectives and oppositional aspects. It proposes that, art and architecture, as forms of architectural critical practice operating within an interdisciplinary context, their relationship could be rethought. It has been observed that, some artists perform their art considering the architectural criticism, likewise the architects express the criticism of architecture through some artworks. These works which interfere in existing architectures or distort and occupy them; point out an alternative alliance of art and architecture. The examination of these critical productions, has been seen as significant in terms of revealing the potentials of interrogating and developing the current architectural approaches.

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Cases of Study of New Language for the Rehabilitation Type Typologies Masia and Similar in Barcelona and in the Region of the Maresme

Barcelona and his surroundings has a lot of old constructions that reminds or recreates the "Masia" old typical farmers and countryside houses that spread out along all the countryside, a lot of them were reformed by the high class, to make their summer houses near Barcelona, along the 19 century and in the first decades of the 20 century. Some of them were new constructions that copy directly the style and the formal conception of this typological house so there are a lot of "Masia" remakes, in Barcelona municipality and in towns nearby like, in the coast of the Maresme region, with non-historically interest but recognizable as formalization of the Masia profile. Of course we have some beautiful examples of the great modernist architects like Puig I Cadafalch, Josep Maria Jujol, Domench I Montaner, who reformed some of them and become masterpieces.

We present 3 study cases of this rethink style Masias, designed and constructed in the 1940, and 1970 on the Maresme coast. that our office has reformed in this last 5 years, that illustrated some dramatic rehabilitation examples, of this peculiar buildings, for a contemporary house use.

Two of them were an imitation of the typological " Masia", on the Maresme region, and the third one was an old reformed "Masia" in the Sarria- Sant Gervasi Distrcit.condemned to be destroyed but reformd with new constructive philosophy.

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&

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A Taxonomic Study on Kinetic Architectures Inspired by Nature

The continuous and rapid developments in technology show its effect in architecture as well as in all other disciplines. Especially, increasing interdisciplinary platforms and studies offer architects an insight into new structures and architectonics. For instance, "biomimesis" the idea of learning from the best solution in nature is a new interdisciplinary area that is improved by technological developments and leads new design approaches for architecture. Similarly "kinetics" as a collaborative field of science such as electronics, mechanical and civil engineering has potential solutions for architecture to provide changing needs, adaptable and sustainable solutions. Within this frame work this paper discusses the possible potentials of the intersection of these two disciplines in architectures so called "kinetic architectures inspired by nature". First, it is aimed to give a general information on the concept of "biomimesis in architecture" and to make a general classification on the kinetic approaches in has been used in architecture. Then, the idea of "motion" both in nature and architecture is discussed as 'movement in nature' and 'movement in architecture'. For this purpose, the movement types of selected living creatures in the nature were investigated and grouped. Later, the concept of "kinetic architecture" was explained and the development and change in the historical process were examined through pioneering examples. To discuss the intersection of movement in nature and architecture a classification is conducted. In the conclusion part, the biomimetic and kinetic properties of the selected examples were determined and the movement types of the structures were grouped according to the classification study. As a result, it is seen that the concept of 'movement' existing as a vital necessity in nature has potentials to determine the types of movements in kinetic design approaches in architecture.

Yonggao Shi

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**The Warmth of Room:
Bringing Adolf Loos to the Present**

The “Warm(th)” of room is key to a happy occupation of space. In Adolf Loos’ influential argument on architect’s main task, this “Warm(th)” was intended to be an atmospheric description, rather than the thermal evaluation. For this, it was commonly extended to a speculation on the priority of architecture surface or the structure hidden behind. This paper reveals the other side of this Loosian argument that when the surface is thought to be the primary element in creating the warmth of a room, this atmospheric warmth cannot be detached from the thermal achievement or more generally speaking, the “environmental mediation,” and both of that profoundly challenge the orthodox conception of tectonics. It further points out that chasing for a mere atmospheric warmth would reduce architecture to its surface value, while over emphasizing the thermal comfort would relinquish the architecture significance. The paper argues that the true warmth of a room resides in its reflection of and catering for the practice of life, and a third approach is thus proposed aiming at surpassing the atmospheric-thermal dichotomy, which will bring the Loosian argument forward to the present day by tracing back to the practice of life.

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Scale Reading: Support for Landscape Requalification

"The deliberate creation of man, the only species that creates its landscape by altering the design of the environment in order to give itself aesthetic pleasure ..." (Fairbrother 1974)

In a living space like ours; we measure ourselves by comparison and the ability to dimensioning the space on our scale. The landscape as concept of space is a result of synthesis.

This is how we integrate, enjoy and dream. We scale our environment. The present future asks us to take dimensional awareness of our constructive capacity as well as same as our destructive capacity. The Landscape is a barometer and a recognition of the value of our actions of transformation of the natural environment.

The radical change in the scale of landscape architecture, poses the problem we face today with disintegration, degradation and unsustainability of these same territories. In periods of great evolutionary changes at the level of scientific knowledge, the adequacy of the "scenario" space of support for human action requires, firstly, a reasoning of identification and checkup of context, which necessarily requires a revision on fundamental principles. One of these principles is placed in this approach as fundamental for a phenomenological understanding of space, this is the notion of scale, associated to the degradation of the operational and aesthetic quality of the landscape, which is related to the evolutionary stagnation of the concept of scale itself.

To question the action of the concept of scale on the qualification and adequacy of the spaces that constitute the landscape, as well as to search for new criteria for a new systematization of scale as a criteria for the requalification of Landscape, is the central theme of this article, being approached by in the middle of a nuclear territory, the Tagus Estuary, responsible for the configuration and characterization of a singular landscape in its diversity, in the main river that is more than that, is a territory configured by one of the largest European estuaries, the Tagus estuary.

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A Meta-Baroque Allegory for an Architectural Concept

Linking architecture and other disciplines is an old *desire*, but putting that desire into practice has not always been easy or linear. Building relationships where there are no direct correspondences between common philosophical concepts, methods and rules is a task that easily slips off the mapped area of the obvious into territory where it becomes susceptible to errors. But still, we strive for this desire. The *avant-gardes* of the 20th century opened new fields of discussion on transdisciplinarity and since the turn to this century we have been witnessing a critical discourse that justly seeks - or needs at its core - the crossing of disciplines.

With this paper, we look for to contribute to the debate on the condition of architecture in the 21st century, as a reflection of society and its culture and the possibility of providing a new vision in the heart of that condition.

The *meta-Baroque*

Informed by the universe of Gilles Deleuze, in particular the allegory of the Baroque House, we make an appeal for a reactive architecture, in which the body is the active element of metamorphosis. A house, in this context, resides in our body, something close to our soul. A house of an interior universe, folded in on itself, that leaves open its ability to be captured as an image. It leaves its BEING as an open thing. It is this state of being open that will give rise to the concept mentioned above: the *meta-Baroque*.

Intrabodies and intraworlds: Kurt Schwitters and Louise Bourgeois

In the meta-Baroque, the body comes to the fore and is at the root of the design process. As a mobile, the body becomes responsible for the consequences and options of a specific architectural endeavour that we can call an architectural apparatus - an apparatus as a *living* machine. One key concept to establish, theoretically, this architectural apparatus is that of the *intrabody*. A concept embedded in a transdisciplinary mesh woven by two more protagonists with their own *intraworlds* - and *intrabodies* -, the *intraworlds* of Kurt Schwitters and his *Merzbau* - a universe of interiority in a constant alteration fold; and Louise Bourgeois and her *Femme-Maison* - as a witness of (our/her) body as a home.

“Meta-machines” on a *meta-Baroque* world

An architectural apparatus as we see it – belonging to a *meta-Baroque* world – is an opened up one, working itself on the fringe of the new machines – or “meta-machines”. It opens the path to the conception of the mind that extends beyond the body – as an *intrabody* – through experiments with the body and the machine – the machine as an extension of the body – or “a” machine as a whole. Here the *machine* will take the form of the habitable space – in continuous connections with the inhabitant.

Can we think of an architecture – an architectural apparatus – made-to-measure for an individual body?

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Playground Politics: Ideologies for the Shaping of Urban Childhood

Playgrounds are one of the most complex and enigmatic modern architectural inventions; they exist aside from the regulatory frames of production and function, defying the understandings of value and use that configured the framework in which both modern building and cities were conceived. One could argue that this as one of the reason why the relationship between play, childhood and the city was understood from so many perspectives along the 20th century and why, nowadays, the subject has been greatly handed out to industrial designers and generic mass production.

By identifying three key ideologies that linked childhood and the city through the design of playgrounds, this paper traces back a series of operations that advocated for establishing rules and codes for children on the streets. From Robert Moses' plan for the construction of hundreds of enclosed and controlled public playgrounds across New York City between 1934 to 1960, to Aldo van Eyck's famous series of more than 700 open playgrounds designed in vacant lots of Amsterdam between 1947 and 1978, to the adventure playgrounds of Carl Theodor Sørensen in Denmark and Lady Allen of Hurtwood in England, set to transform the way in which design could empower children to gain control over the shaping of the postwar city.

Playgrounds are not as naïve as they look; designing them and planning for them is a political matter, since they constitute one of the most effective and relevant spaces for social, civic and political education in which architects can engage freely. This paper shows the seriousness with which playgrounds should be considered in political terms, specially today.

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**Thailand's Movement on Enforced Energy Efficient Building
and Voluntary Certified Green Building**

This paper is about past, present and future of energy efficient building as well as green building in Thailand. It is divided into 2 parts. The first part is compulsory as it is enforced by law. The other part is voluntary as it is used for role-play Corporate Social Responsibility (CSR). However, both of all are affected by the design of architects.

Thailand's first energy conservation promotion act was enforced in 1992, and then Building Energy Code (BEC) in 1998. The code aims to regulate the construction and modification of buildings with a utilization area more than 2,000 m² by setting a minimum design performance for four systems: building enveloped, lighting, and air-conditioning and hot water (where applicable). Undoubtedly, the system that mostly failed is building enveloped. This makes architects pay more attention to the design. Finally, if the performance of one or more systems does not pass the standard requirement, an option of whole building energy compliance is considered. This option takes credit for the use of solar energy into account. Moreover, in 2009, the building energy code about performance of glass pane has been lunched. In the near future, prescriptive method of material selection of building envelope will be applied.

Apart from legislation, Thai Green Building Institute (TGBI) develops green building rating system called Thai's Rating of Energy and Environmental Sustainability (TREES) since 2009. The rating system includes Building Management (BM), Site and Landscape (SL), Water Conservation (WC), Energy and Atmosphere (EA), Materials and Resources (MR), Indoor Environmental Quality (IEQ), Environmental Protection (EP), and Green Innovation (GI). Today, 25 buildings have passed the review process. The result are 5 buildings for certified level, 5 buildings for silver level, 11 buildings for gold level, and 4 buildings for platinum level. For the famous green building certification program of U.S. Green Building Council, LEED, there are 213 registered buildings and 129 buildings already recieved certification until now. The outcomes are the number of 51 buildings for certified level, 16 buildings for silver level, 43 buildings for gold level, and 19 buildings for platinum level. They are in many categories ranging from new construction, core and shell development, healthcare, school, retail, commercial interior, and existing.

In 2011, Ministry of Energy issued Thailand 20-year Energy Efficiency Development Plan (2011-2030). The document provided a modeling building comply with energy code in term of specific energy consumption (kWh/m²/y) for eight building types. The minimum energy efficiency requirements enforce by the law for office, education, department store,

hypermarket, hotel, hospital, condominium, and others are 171, 85, 231, 298,199,195, 211, and 134 kWh/m²/y respectively.

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National Identity Construction of Turkey in the Early Republican Period: The Grand National Assembly of Turkey and its Architectural Representation as a Memory Space

In 1937, a national architectural competition was held for the construction of the third assembly building of Turkey with a brief invitation text by saying “we need an assembly building which symbolizes the continuity of the monumental Republic of Turkey and which overlaps the contemporary architectural trends of our era in the 20th century.” With the praises and emphasis on the monumentality and stability of the Republic, the competition text plainly declares the national presence of the country in the 20th century stage and expecting architectural manifestation of modernity and durability of the Turkish nation in its fundamental administrative building. In this way, the ideological objectives and the nationalist goals were embodied in an architectural space representing the independent and monumental existence of Turkey in its assembly building as the *memory space* of the Republic.

In this respect, when compared to the first two assembly buildings of the country, the Grand National Assembly of Turkey (GNAT) points a different phase of the national identity construction process of Turkey. On the one hand, first and second assemblies represent a comprehensive transformation period from Ottoman monarchy to the Turkish Republic both in socio-cultural, political and architectural contexts, on the other hand, the third assembly become a firm and stable representation of the Turkish nation with its construction process and architectural representation in the mid-20th century.

From this point of view, this paper aims to handle the GNAT as the official and architectural representation of Turkish national identity by focusing on its construction process beginning from the competition phase and its completion in 1961 which has stayed in use until today. In order to discuss the GNAT as the memory space of the Republic, discourse analysis will be used by intertwining the collective memory and national architecture discourses in the Early Republican Turkey. In this context, architectural written media such as periodicals, newspapers and articles on national architecture discourse in the Early Republican Period will be used in addition to the archival research on the last assembly of Turkey. In this way, the last and contemporary assembly building of Turkey will be studied as a physical representation of Turkish national identity

construction process and its concretization within the national architectural understanding of the mid-20th century.

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Interceptions between Cinema and Architecture in the Construction of a Mental Map

Constructing a film narrative, I would argue, involves constructing a mental map. As we watch a film we create an internal diagram of the relationships between the different places which structure its development and the different trajectories the characters follow within and between those places. (...) In a film, each character follows a series of paths which intersect with the paths followed by other characters, and the spectator classifies different location in terms of their spatial, social and psychological relationships. The same is true of buildings. (Wollen, 2002, p.212).

The spectator is projected onto the screen in time and space. The capacity of the film director or editor to add a temporal dimension to the space, in turn generates, just like in architecture, the capacity of the viewer (or habitant) to insert themselves into that same dimension. In cinema, the film lives from the sequenced narrative, which depends on the relationship between, the place and space of the action, and time.

In architecture, too, the space provides stimuli so that the body can understand its position in relation to the space and proceed to organise the spatial structure in accordance with its own context within that space. It is fundamentally important to understand all parts that make up the architectural structure in order to read it in its entirety, understand its full intentionality.

Accordingly, the idea of the mental map - of constructing in the mind relational systems that make an understanding of the operative reality possible - is inherent to the construction of both cinema and architecture. The body is a fundamental element in appropriation of the architectural space and the cinematographic narrative.

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Archiving Balcony Railings as a Representative Element of Collective Memory for Ankara Dwellers

Specialty about balcony as a building element is explained through its attribute of connecting different spheres that are public and private, the individual and collective, the indoor and outdoor. Regarding it as the border between public and private, the individual and collective, the indoor and outdoor; this study aims to display the role of balcony railings of modern apartment block typology that developed rapidly through Flat Ownership Law in 1965, as a representative element of collective memory. Thus, the year 1965 marks a turning point in terms of housing production that in turn defines the new face of Ankara streets. The standardization of the apartment block due to the limitations of urban parcels forced architects or builders to search for means of breaking the monotony of this new face. One of the subsidiary elements were iron balcony railings that could be defined as "industrialized ornament". They act as a retouching in an industrial way in order to aesthetize what is very ordinary. This tactic of building supports Heynen's idea of dwelling, as in the first instance being associated with tradition, security, and harmony. The aesthetized balcony railings are a response to the dilemma created by the ordinary apartment block typolog and the idea of dwelling.

The representative role of balcony railings will be exhibited through an archival study on balcony railings of Ankara, in which nine districts (Bahçelievler, Emek, Anıttepe, Maltepe, Kızılay, Küçükeast, Kavaklıdere, Gaziosmanpaşa, Çankaya) were selected as the case study. Around 1900 apartment buildings built between 1965-75 that carried the characteristics of "modernized ornament" were photographed and the photographs were categorized according to the following criteria: style, form, material, details, use of color, etc. In parallel with Durkheim's belief that every society exhibits and requires a sense of continuity with the past, this study aims to reveal that the archival of these railings as a representative element would remind Ankara dwellers of their shared memory.

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Experimentation in Architecture: Pavilion Design

Since the Great Exhibition in London in 1851, the field of exhibition design has been made an inevitable impact on both architectural practice and discourse. Any kind of exhibition design offers 'new' architectural problem-solving techniques and this experimental process generates a direction towards to apply new methods, new materials and new concepts in architecture. This process leads to search, experience and open to new possibilities without the limitations of the established rules. Thus, architects can experience what the future holds for space design.

Architectural design enriches by experimenting new solutions and new materials. This paper suggests that experimentation in architecture can be provided in terms of pavilion design and also question the position of the architect in re-establishing the conventional thinking of architecture. Thus, the architect searches for new possibilities in architecture and explore the limits of the interpretation. In the light of this experimentation, pavilion design can be interpreted as an architectural phenomenon to expose something new and innovative.

The pavilion design has not only impact on where they are located but also it has the power to redefine the contemporary architecture, discourse, and their boundaries. The very limited nature of the pavilion forces architect to design a work of clear-cut expression and find different methodologies for the temporality. This experimentation not only has impacts on the architectural practice and discourse, but also leads to comment on and critique new possibilities in the field of architecture. Architects gain freedoms to experience the 'new' in architecture by means of this experimental process.

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José María Sert's Mural Paintings in the Cathedral of Vic

The group of research *History, Architecture and Design* at the Universitat Internacional de Catalunya is making an historical and artistic analysis of the Cathedral of Vic, Barcelona, in order to open it to the public. The cathedral preserves a Romanesque crypt and a gothic cloister although a new building was done in the 19th Century which was painted by Josep Maria Sert. Sert was an important muralist, he made paintings for the Rockefeller Center and for the Waldorf Astoria Hotel in New York or for the United Nations Council Chamber in Geneva.

It was the bishop Torras i Bages who ask him to paint the cathedral in 1900. After a first proposal not realized due to the death of the promoter, in the 20's Sert presented another project, which was done in 1926. During the Civil War of Spain in 1936 the church was burned and consequently the paintings disappeared. When the conflict was finished, the painter managed to let his print again, and made a third monumental mural program, which can be seen today.

The aim of this communication is to present the value of Sert's mural paintings as a work adapted and applied to architecture and to compare the three different painting proposals of Josep Maria Sert for the Cathedral of Vic from the stylistic and iconographic point of view.

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Genius Loci

The French government has a long tradition of supporting the Arts. In 1951, it even legislated with a law that states that “one percent of the total budget spent for the construction of a new state building (school, university, etc) will be dedicated to the creation of a contemporary art project to be integrated to the architectural design” (Legifrance, 2017). Further incentive emerged in the 1990s onwards to encourage artistic interventions in natural and urban spaces. In 2002, Catherine Tasca, the French minister of culture at that time announced that she encourages policies provoking collaborations between architects, city planners, landscape architects and artists (Lemoine, 2002). She argues that having contemporary art work in cities allows those places to find a real anchorage in our contemporary world. The case of the city of Strasbourg is in this sense leading. Several ambitious projects have been initiated and commissioned by the local and state authorities. For instance, a sculpture Parc (Pourtales Park) was created in the late 1980s in the north of the city where artists were asked to establish a tight relationship with nature. During the same period, while the tram was reintroduced in the city, artists were challenged to create works in dialogue with the urban context and/or the history of the place.

In this research, we question how inter and transdisciplinary training for architecture students can be one of the ways experimenting and learning about this possible relationship between art and a specific environment or place. This study is based on a ten year's land art workshop organized for second year architecture students in the forest of Brumath, a small city located 20 km north of Strasbourg. It documents the different processes through which the architecture students developed their work, from revealing the genius loci of the place to the final exhibition of their design.

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The Greek Architectural Philosophies in Antoni Gaudí's Manuscripts

This paper deals with a Catalan architect, Antoni Gaudí i Cornet. A.Gaudí wrote a note book, *Manuscrit de Reus*(1873-1879), while he was a student in the Escuela de Arquitectura de Barcelona.

In his manuscripts, it appears many ideas about the vision of architecture. However, it is written as a diary so that a theory which is underlying in the context is not clear. Therefore, this paper introduces a way of reading it as a theory with focusing on the Greek Architecture or Greek architectural philosophy that is written in his contexts. The ideological concerns of A.Gaudí in dealing with Greek architecture will help to his creation of architecture in his later career.

This paper provides three phases. The first phase is the review of the previous research on this aspect. In the second phase, it extracts Greek architecture and Greek architectural philosophy in *Manuscrit de Reus*. In the third phase, the background of these concept will be reviewed.

In *Manuscrit de Reus* appear some Greek architectures; such as The Parthenon Temple, Erechtheum Temple and, Monument of Lysikrates so on. They are cited as an ideal architecture for his vision. For example, this is a cite of Erechtheum to discuss about the form and its geometrical meaning from the nature "(...) The capital of the Erechteum is so appropriate to the theme with which it deals that the moldings are enriched with chiaroscuro,(...)providing the culminating touch is a recollection of nature - something like the beginning of the clew of beauty and forms" (p.10) (Martinell, Cesar, *Gaudi, the life, his theories, his works*,1975,p.459)

And the other hand he compared the The Parthenon Temple (BC447) with The Palais Garnier(1861) , designed by Charles Garnier, in order to discuss about the physical necessity and moral requirement of the material use (p.35) .

According to the first biographer of A.Gaudí, J.F. Ráfols wrote in his book *Gaudi*(1929) that"(...) A.Gaudí was a discipline in Aesthetic of Mila. (...) " (p.16). J.F. Ráfols was a draftsman in Sagrada Familia's office working with A.Gaudí and the first chair of Real Catedra Gaudí. From this relationship, which is discussed in my previous article, this paper provides the review about Greek architectural philosophy comparing the aesthetic of Manuel Mila y Fontanals in order to express one of a genealogy of thoughts of A.Gaudí.

The study concludes that *Manuscrit de Reus* can be read as his theory of architecture causing on the Greek Architecture or Greek architectural philosophy.

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The Golden Proportion and the Aesthetic Design of Long Span Bridges

Harmonious proportions in three dimensional space are necessary to achieve recognisable aesthetic beauty. This is particularly the case in long span bridges. It is not sufficient that designs are functional and structurally correct nor is it acceptable that the advantages of modern technology be exploited without careful consideration of appearance and aesthetics.

Since earliest times theories of proportioning have been put forward in the search for visual beauty and different rules have found favour from time to time within different cultures. However it is only the Golden Proportion that uses as its basis the ratios of the human form. By analysis of the underlying geometry of structures and works of art that are universally acknowledged as beautiful, we will discover that the Golden Proportion is present in the cultures of both the East and West.

However, the use of the rule should only be regarded as a tool for the refinement of a design. It cannot replace the creativity and judgement of the designer.

By demonstrating the details of some recent bridge designs, including the Tsing Ma Bridge - Hong Kong, Rama VIII Bridge - Bangkok, Pont Vasco da Gama - Portugal, and Bhumibol Bridges - Thailand, the universal relevance of the Golden Proportion is confirmed for the aesthetic design of long span bridge in the 21st century.

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20th Century Spatialization of Paint Art: Contemporary Architecture

From modernism which occurred as a parallel to the pace of transformation of the liberal bourgeoisie society to the consumer society, from the second world war to the day-to-day deconstructivism, all developments had emerged in philosophy and art led to architecture vitally until almost a century in industrial revolution. After industrial revolution the production of standardized works to meet the increasing population needs caused to be monopolized in a short time, the contextual continuity began to be questioned in the intellectual background. Freedom in the modernist attitude couldn't escape from the pressures of postmodernism in both painting and architecture the drowned postmodernist attitude in the contextual background had been nothing more than eclecticism in architecture. It's also reflected in the paintings of the depression periods painters was created by the second world war that arose at the beginning of the second half of the 20th century. The painters who exhibit a manner to the narrow angled sharp forms instinctively reflected their feelings of desperation and future worries by complexity, turning away from their basic forms in their works. Deconstructivism also came to exist in sculptural buildings while the paint art with the constructivism shaped by the political pressures introduced itself especially with the sculpture. When we look at the intellectual backgrounds, we see that the emerging new ideas in philosophy affected both discourse and action people with social issues. The discourses that support the spatialization of the new forms show up paint in the third dimension have brought the currents that nurtured and transformed each other in literature, painting and their inevitable conclusion in architecture that created their own contexts. The diversity of all these different ideas played an important role in the life experiences.