All manuscripts submitted to the UOU scientific journal have been reviewed by the Editorial Committee, which approved the academic quality, format and publication standards.

The scientific articles included in the Sections: Representation as Emancipation, Representation as Speculation, Representation as Imagination, Representation as Interpretation, Representation as Participation have been double-blind peer-reviewed by external evaluators, chosen by the Editorial Board from among experts in the relevant fields of study.
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LEARNING FROM SOTO AQUA

Letter from the director

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Surely you have also seen him. In the last months, I will have crossed him several times at the airports. He is unique, a very curious character. But, I mean it literally: he is always staring at things, how people behave, continuously taking notes, observing new creations... for a long time I was convinced he was an architect!

Finally, I could not hesitate anymore and approached him. I was at Schiphol airport for five hours, waiting for the connecting flight to Wroclaw, where we will celebrate the first summer workshop of UNIVERSITY of Universities: “ProtoLAB design & build 2022”, at the end of July and beginning of August.

http://protolab.archi/

It will be an intense experience, to enjoy a first face-to-face meeting with colleagues who have been collaborating with us on-line for the last two years. But let's go back to our man. He was sitting in front of me, intrigued by the fun clock at the international terminal. “Real time” it is called, a video installation in which a worker can be seen painting the time, minute by minute. It was then when I took advantage of the stillness of the moment to introduce myself. He was friendly and it was easy to establish a conversation. My first doubt was quickly clarified: he was not an architect but the Honorific President of a Cultural and Rowing Association in Venice called SOTO AQUA. In the Venetian dialect, it means UNDER WATER.

Right from the first moment, I became hypnotized with the story of his position. Basically, his role in the Association consists of travelling around the world, looking for good ideas to bring them back to Venice. His aim, as he likes to say, is to make the association SOTO AQUA more important. The Honorific President explained that he had already been travelling for a complete year, without any fixed idea of what he would find in each destination. He is working with the Unknown, always pursuing the same ambition; that is, to find a good idea in each culture, to send it by post, and to apply in his beloved Venice. The more information he gave me on his project, the more I identified with it. Starting from an intuition, sometimes even from a naïve joke, the Honorific President has built, step by step, a way of thinking, a methodology, of how a collaborative project with the participation of different cultures redefines the role of a leader.
ICELAND

Reykjavik was his first destiny, as a form of fulfilling his childhood dream. For many years, from his window in the Venetian Ghetto, looking at the canal *rio della Misericordia* – in Cannaregio District, where SOTO AQUA is also located coincidentally – he could imagine fantastic animals swimming along the gondolas.

Now, being an adult with a task, but without any specific indication, his first impulse was to travel to Iceland... to learn about the living conditions of whales. Would it be possible to have a young whale swimming up and down *rio della Misericordia*?

LA REUNION

All the Icelandic fishermen in Húsavik, a town on the north coast and on the shores of Skjálfandi where whales of different species frequently enter the bay, explained to him that the whale calf would suffocate in the warm waters of Venice.

After this unsuccessful trip to Iceland the Honorific President decided to change strategy, and he travelled to the other side of the Globe: Reunion Island in the Indian Ocean!

Attracted by its beautiful Coral Reefs, our President explained how he had just been collecting small pieces of coral that one can find on the Hermitage beach, mixed with the white sand. This time, he would not try to take back with him some fantastic creatures like butterfly fish, three-banded damselfish, or Picasso triggerfish. His new project would consist of covering the banks *della Misericordia* with white coral. The idea was stunning!

But, he did not realize that it is forbidden to collect coral, even from the sand. Consequently, he was taken to prison unable to convince the French police of his noble cause.
Those were difficult days for the President. He was not liberated until the gendarmerie received an email from SOTO AQUA with a document certifying that our friend was their Honorific President with a vital mission for the city of Venice.

The gendarmes were sympathetic toward his mission and allowed the President to take with him some samples of coral, just a few, as a precious memory. At the same time, they advised him to carry with him an official stamp for future certificates.

LAPLAND

Understandably, to get an official stamp for the Association, became the next mission for the President. He investigated who should be the designer of SOTO AQUA’s stamp. Without any doubt, Astrid Båhl, was the best candidate: the prestigious Sámi artist who designed the flag of the Laplanders and works with stamps made from horns of reindeers and moose.

And this was the result from the President’s trip to the North of Sweden: Astrid produced a stamp with few lines that are full of meaning. As the president explained to me, the members of the Association in particular, and all the Venetians in general, feel very identified with it; the battlement of Venice defending the city from the rising water level.
THE BLACK FOREST

Instead of a destiny, the next venture was a trip-in-itself. It was the moment, when he defined his role as the Marco Polo of the 21s Century:

SOMEWHERE IN SOUTH-EASTERN SPAIN

It seems that our Venetian friend also suffered from the cold temperature in Lapland, so he decided to move to the South, looking for the Mediterranean. His bus journey came to an end somewhere in south-eastern Spain, he did not have any money left. Murcia was the name of a city surrounded by orange and lemon trees... and, of course, as soon as he landed, he started looking for an idea to send to Venice.

It is often said that many times a foreigner gives more value to an everyday product than the locals. That was the case with the typical Murcian dessert called Paparajote. Paparajotes consist of lemon leaves which give taste and shape to the dough that covers it. The President found the Paparajote to be a perfect design, and as he explained, it is also a joke: the locals make fun of visitors when they offer it. People who don’t know it take a big bite... eating the hard lemon leaf, which provokes a mighty laugh among the locals.

It was a surprise for our President to realize that kiosks in Murcia have not a single postcard of this magic product. So, the first thing he had to do, was to propose the prestigious SANAR editorial to produce and commercialize the postcard. The next step was to share the recipe with SOTO AQUA: it would be great to create a new typical dessert, the Venetian Paparajote, but with, of course, to use a leaf in the shape of a gondola!
LISBON

Still I had time to follow the generous explanations of the President. He introduced the important element of financing the project. At this point in time, the President considered it important to obtain funding for the association. It was crucial to maintain its position and its aims.

That was the reason for him investing the money he got from selling the Paparajote postcards, amongst other products to be sold in the Mercatino of SOTO AQUA’s web:

https://www.sotoaqua.org/mesmerize/mercatino/

A result of that conviction, which by then had become obsessive, was to contact VICARTE in Lisbon, the most significant international research centre of glass and ceramic for the arts. His commission consisted in asking VICARTE to produce a new material, and with it a new design, that represents the values of SOTO AQUA: transparency, brightness, and plasticity … ‘just like our dear free-swimming jellyfish!’ – he said.

The result of the research was an incredible textured glass that continuously changes colour. It was applied precisely to a jellyfish-form as beautiful earrings.
CAPRI

Eager to learn from the others, and proposing collaborating projects, has been crucial. The Honorific President has been making many friends in every destination.

For example, Ólafur Ólafsson, one of the Icelandic fishermen who helped him try to catch a young whale. He had an accident at sea and injured his knee, which forced him to give up fishing. They remained in close contact during the following months. Ólafur told him how at that moment everything went black, he was lost and without a future. In their conversations, the President asked the retired fisherman what else he liked other than the sea. He liked beer, so learned how to produce beer, and in that way, Ólafur managed to stand again on his own feet. From the tap of his own house ran the pure Icelandic water, so he only needed to buy sacks of barley from the Czech Republic and he opened a microbrewery. Now, he produces the incredible beer KALDI, and with the profits he has managed to move to a milder location, better for his knee, but, of course, always by the sea: the island of Capri in the calm Tyrrhenian Sea.

It was nice to hear that Ólafur invited the President for a visit to his villa in Capri, where he gave a present to the Association. It was inside a box of Gay Odin log of chocolate in sheets, a baby whale done with real leather from a fish skin Ólafur is innovating...’ the closest to a whale that SOTO AQUA would be able to have’, he laughed!

For our President, it was a touching moment, seeing in the mobile so many moments of his life.

ANKARA

His meeting with Ólafur in Capri marked the turning point for the new evolution of his project.

Once the Icelandic fisherman had decided to move for good to the Gulf of Naples, his house, right in the centre of Reykjavik, was put up for sale ... an opportunity for our President “to extend the Association around the world”.

That was the beginning of his new passion, the opening of “SOTO AQUA Embassies” around the world to transmit the principles of Transparency, Brightness and Plasticity for peace in the world.

Convinced and full of enthusiasm, the President told me about his trip to Ankara, where he went to speak to president Erdogan about his mission. With that journey he wanted to test himself, to see whether he would be capable of convincing any other president, no matter how different the ideas they held... and indeed he managed: The Turkish leader was happy to contribute by providing the Association with students, as many as needed, to research for new creations. Indeed, at that moment, 5 candidates were offered to the Association, ready and waiting for instructions: Senem, Dilara, Emire, Eda and Alper.

Asking the President about their talents and strengths, one of the students gave him this peg. It was a promising beginning:
Convinced of the need for embassies, the President went back to Lapland, this time to commission Astrid Båhl for the design of a flag for the embassies.

At that moment, Astrid wondered if the President should not need ambassadors before embassies.

And yes, two new projects started from that moment:

1. To elaborate the list of ideal candidates to transmit their values around the world, each of them would be awarded with the badge designed by Astrid, made with dust of reindeer horns.

2. That insignia of the association would be granted by taking an oath, so he needed to start thinking about the statement of promise.
BUDAPEST

It seems to me, and he agrees, that the President jumps from one destination to another without a fixed plan. The project is fed by itself, so every new step leads him into the exercise that follows next.

Still, the President insists he never forgets the Water; except for accidently landing in Murcia, and the meeting with Erdogan, his trips are always to harbour cities.

He describes how throughout history the element Water has been crucial to make the Venetians the people they are: tireless travellers, eager to learn from different cultures, and with sensitivity to come back and design the most beautiful city on Earth.

This was the way he began his new adventure; to consider the UNDER WATER condition to be an imaginative future. Invited by the Bolyai Mathematical Society, he went to Budapest, the two cities that were separated, and now joined, by water. Precisely, in the immense Széchenyi Baths, they unveiled their secret research for making pull-up Platonic solids: the Icosahedrons with Active Corners. As if they were animated, these volumes close in the same way that some flowers do at the end of the day.

For the President, it was the closest he came to post an alive object.

He appropriated the research, naming it the “Capturer of Fragrances from Venice”. His plan is to fill in the icosahedrons with petals and leaves from his Venetian Ghetto, and to hang the Capturers at the halls of the embassies.

REYKJAVIK

At the moment of our conversation at Schiphol airport, the President revealed that he was waiting again for a flight to Reykjavik. It was already official:
they got it! – He repeated, while embracing me. The Association was going to open the first embassy of SOTO AQUA in Iceland, where this series of trips started:

HÁKOT is the name of the house, the oldest stone-built house in the country, built in 1893 with basalt ashlar “borrowed” from the construction of Iceland’s House of Parliament, Álþingi.

The President continued describing the house of their first embassy: ‘Right in the centre of Reykjavik, in Garðastræti 11a, this tiny house has a garden with a huge tree. It is immense and indeed, selected as the best one of Iceland... it won that prize in 2016, and there is a plaque on the façade that proves it!!! All of us will dance around it...’

This story was for me too much of a fantasy, but the President started showing documents. His friend Ólafur Ólafsson had finally donated HÁKOT for his mission... and even given a model of the embassy and its tree to be included in their Mercatino.

VENICE BIENNALE

Listening to the President's stories, the long wait in the airport passed very fast. In fact, I had to run when the last call for my plane to Wroclaw woke me from his narrative. While running through the terminal, I thought that surely many of you, collaborators in the UNIVERSITY of Universities, would identify with the President. All of us have the same curiosity for learning from others.

Undoubtedly, our learning project UOU is based on that same principle. Already sitting in the plane, I recalled that our international learning project started out of an instinct, and every collaboration opened as a new window of opportunities:

The Exchange of Workshops, the Common Crits, the Web, Moodle, the Port Talks, more workshops for the Student's Election, the Journal, the Master, the Summer Workshop, Erasmus agreements, our Blended Classes, our dear Jerzy Łątka, Mauricio Morales Beltrán and Agata Jasiolek presenting their workshop while building new constructions to welcome Ukrainian war refugees... everything LIVE in our classroom. Has it ever happened at university?

Step by step, with more and more universities joining, 33 by now, we are building a future for the University of Europe. We have seen it and it works!

Inspired by the Honorific President, my colleague Joaquín Alvado and I believe that it would be a real contribution to his search for the future of Venice to complete our course of architecture with a new UOU workshop: VENICE IN THE METAVERSO. It is an exercise to immerse into imaginary realities, which allows to question ours.

As soon as I returned to Alicante University, we proposed this to our students. They accepted the challenge and produced a video game with the whole collection of the students’ works. You will find the projects at the end of this Journal. Having played the video game the President wants to present it in the Venice Biennale 2023.

https://vertice.cpd.ua.es/271675

This is our tribute to SOTO AQUA.
(Re)Presenting Representation

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Representation is a broad umbrella that covers different disciplines such as design, the arts, architecture, cinema, literature, politics, economics, semiotics, etc... We may even say that representation is in every act of human beings whenever they think about something. This fundamental role of representation makes it very critical in the design process, thus the design process is based on the dialogue between the inner and outer representations. In this third issue of UOU Scientific Journal, we would like to focus on the nature of representation, its own ontological aspects, materiality, immateriality, and its crucial role in the design process rather than its metaphorical side related with politics and semiotics.

Hans-Georg Gadamer points out that "representation does not imply that something merely stands in for something else as if it were a replacement or substitute that enjoys a less authentic, more indirect kind of existence. On the contrary, what is represented is itself present in the only way available to it." In this respect, representation can be the subject of research. Here two conceptions may occur: representation of the world and the world of representation. The former proposes the origins of representation for the agenda, such as the ways of representing the world during the Medieval, Renaissance, Baroque, Modern or contemporary periods. The latter highlights the ontology of representation and its emancipatory, participatory, imaginative, speculative, predictive, and interpretive characters.

"The tension between the productive and the creative reality of architecture may be better understood if we examine more closely the nature and role of representation. In a conventional understanding, representation appears to be a secondary and derivative issue, associated closely with the role of the representational arts. However, a more careful consideration reveals, very often to our surprise, how critical and universal the problem of representation really is. What we normally refer to as reality, believing that it is something fixed and absolute, is always a result of our ability to experience, visualize, and articulate—in other words, to represent so as to participate in the world. Countering representation's participatory function is its tendency toward emancipation and autonomy. This is particularly evident in areas where representation has acquired a high level of coherence and relative independence. In design, which can serve as a good example, such coherence is achieved through drawings, models, different projective techniques, and more recently through digital simulation, known better as virtual reality. (...) The limited range of emancipated representations can be challenged only by different attitudes toward culture, sustained by a different kind of knowledge that is based on the principles of dialogue."

In order to create a dialogue, representation may act like a pendulum between the designer and the designed thing. All the tools and techniques that we use while designing have a significant role in this fluid action. "The creative reception and adaptive assimilation of what architectural representations stimulate all reflect the imaginative capabilities of the designer, the critic as well as the contemplating observer. Therefore, questioning these tools and techniques and extending their limits may open up new worlds of representations, such as new forms of spatial qualities and architectural manifestations.

"Architectural conception and realization usually assume a one-to-one correspondence between the represented idea and the final building. Absolute control is essential in our technological world. Although drawings, prints, models, photographs, and computer graphics play diverse roles in the design process, they are regarded most often as necessary surrogate or automatic transcriptions of the built work. However, an invisible perspectival hinge is always at work between these common forms of representation and the world to which they refer. To disclose appropriate alternatives to the ideological stagnation plaguing most architectural creation at the end of the second millennium, the first crucial step is to acknowledge that value-laden tools of representation underlie the conception and realization of architecture."

In an architectural inquiry, we may ask what should be represented in architecture. We may also start the debate by questioning how we define architecture today. The ontological shifts in architecture have affected the epistemology of architecture. This could be defined as another pendulum between actual and virtual, material and immaterial, visible and invisible. How can we reflect these changes into architectural representations? How do we perceive space through architectural representations? Can sensation emerge within architectural representations? Can we represent experience rather than "the building"? These questions can be multiplied so as to search for new modes of representation.

In addition to these questions above, this issue of UOU Scientific Journal aims to explore the notion of representation in the field of research in architecture through the possible keywords listed below:
Ontology of representation
The materiality of representation
The immateriality of representation

Epistemology of representation
Representation as Emancipation
Representation as Participation
Representation as Imagination
Representation as Speculation
Representation as Prediction
Representation as Interpretation
Representation as Space

Tools and techniques of representation
2d, 3d, 4d, 5d representations
Textual representation
Visual representation
Drawings / Notations / Mappings
Models / Collages / Montages
Diagrams / Simulations / Transcriptions / Translations / etc...

Theories of representation
The origins of representation
Representation in the design process
Representation as a design tool
Representation, perception and sensation
Representation and bodily deformation
Representation of experience

Within this framework this issue of UOU Scientific Journal invites you to the world of representation through 9 articles and an atlas of student works. Each article has some relationship with more than one of the keywords listed above. As the editor of this issue, I decided to create clusters around the epistemology of representation. Following this classification, you will read 3 articles related to Representation as Emancipation, two articles related to Representation as Speculation, one article related to Representation as Imagination, two articles related to Representation as Interpretation and one article related to Representation as Participation. Of course, this classification could be made in a different way, but I wanted to reflect my own relational thinking process about the articles. I am also aware that emancipation, speculation, imagination, interpretation, participation, and prediction are related with each other and sometimes it may be difficult to differentiate them. Yet, there are some nuances between them that help us deepen our discussion on representation.
that the experience can be made visible through the presence of temporality in representation. Abstract comics have been evaluated as a form of representation that will make the spatial experience visible by making the concept of time legible with the possibilities of representation. A participatory, emancipatory, and imaginative environment can be created through representations by making the invisible aspects visible.

The third article, which is entitled “The Clock(s) of A Drawing and the Hermetic Time-Reader/Teller: Dreaming of Drawing dials and the Enigmatic Hour(s) of A Drawing” portrays experimental research on the reading of time through drawings and offers a sophisticated discussion related to keywords such as representation as emancipation, representation as speculation, visual representation, and temporal representation. The article flashbacks to historical processes of time reading and states the ‘hermetic time-reader’ primarily as a ‘drawing’. The author has experimented with this process with her students and creates time-telling drawings / instruments. The projective cast of drawings create a ritualistic dialogue between the drawer and the drawing, and this continuous act emancipates both the subject(s) and the object(s) involved in this process. This attribute of the article creates a link between representation as emancipation and representation as speculation.

The fourth article, which is entitled “Visualizing Complexity in Extreme Architecture” highlights the importance of visual representation in the design process of a project in extreme conditions. Speculations on architectural design are enabled through representations of complexities. Unfamiliar conditions, extreme situations can be comprehended through various architectural representations and digital technologies. In this spectrum, the article starts a debate on representation as speculation, visual representation, and representation of complexities.

The fifth article, which is entitled “Drawing Spatial Movement” questions the duality of static and dynamic characteristics of architecture and their relation to architectural representation. The authors emphasize the presence of time and movement in architecture and propose new modes of architectural representations to represent them. In order to exemplify their argument, speculative and experimental student works of “The Moving Through” master’s course at the Bergen School of Architecture are presented. Inquiry into the “new” for speculative futures can be projected through new languages, new ways of drawings, and new forms of canvas. The article constructs the discussion around the keywords such as representation as speculation, visual representation, temporal representation, and representation of experience and reminds us of the importance of immaterial and ambiguous aspects such as movement, time, bodily experience and perception.

The seventh article, which is entitled “Visionary Representation as an Anomaly” discusses representation in a cultural context and asks whether local representations can be instrumentalized to handle the idea of the future,
new and cultural interactions in a Turkish context, and applies the booklet titled Güzelleşen İstanbul (Beautifying Istanbul) as a visual-imaginary trajectory. By mapping various trajectories, conceptual extensions are opened to redefine the concepts of “the visionary” and “the avant-garde” in the Early Republican Period of Turkey. This article also touches upon semiotics in a cultural and national context and mainly focuses on visionary and visual representations.

**REPRESENTATION AS INTERPRETATION**

The eighth article, which is entitled “A Method Proposal for Mapping the Patterns of Originality in Design: Raymond Williams (RW) and the Keywords” proposes a method for analysing and representing the evolving and changing definitions of origin and originality, as well as the dynamic conditions that created them by bringing them together contextually, semantically, and interdisciplinary. Rather than using traditional linguistic tools to define and examine words and concepts, this study encourages the use of Raymond Williams’ inspiring work Keywords: A Vocabulary of Culture and Society (1985) to map all the interdisciplinary relations of the keywords into a network, visualize the changes in meaning, selectively bring all the data around the keyword ‘originality,’ and reveal patterns of the concepts in relation to originality. The article revolves around the keywords such as representation as interpretation and textual representation and by visualizing textual data it also touches upon visual representation as a tool for interpretation.

The final article, which is entitled “The Architectural Representation through Mapping Controversies” concentrates on the use of mapping controversies for architectural representation in order to investigate various architectural alternatives in an integral and dynamic manner that dissolves the boundaries between conventional areas of knowledge. This transdisciplinary approach goes beyond the traditional dichotomies in architecture (qualitative/quantitative, visible/invisible, nature/culture, objective/subjective, and so on) that, when considered separately, limit the possibility of emerging opportunities that may result from their collaboration. The earthquake housing reconstruction in the coast of Oaxaca is presented as a case study to demonstrate the need of creating a Map of the Local Conditions. This map has a critical role in considering significant emerging factors (human or non-human) for the development of future earthquake housing projects in the region. Through this case study, the authors emphasize the importance of representation as participation.

**NOTES**


REPRESENTATION AS EMANCIPATION
Narrative Processes in Architectural Design

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This article focuses on the pedagogical approaches to representation in architecture through an elective course titled Narrative Processes in Architectural Design, which we instruct as four lecturers in the architecture departments of various universities. Our observations and thoughts on the need for such a course are based on contemporary critiques of the education and practice of architectural design. The critical vision we have adopted questions the role of representational practices in architectural design and their uses. One of the most significant results of the rooted paradigm in the history of architecture is that the discipline has turned into object-oriented thinking and practice, which includes measurable dimensions, geometries, and materials, rather than immeasurable phenomena such as feelings, experiences and atmosphere.

Our critical vision for the role of representation in architectural design, which forms our course, aims at reintegrating everyday narratives into architectural practices through representation. Approaches of the course include three main themes; subjectivity, temporality and spatiality. The course is designed in modules, and each module relates to these three themes in distinct ways. Despite the ambiguity of subjective experiences and feelings, the course aims to reintegrate them into thinking and production. We discuss temporal constructions in two ways within the scope of the course; fragmented and linear. While addressing the theme of spatiality, another theme of the course, two main approaches are emphasized; tabula rasa and responding to the existing. Both of these approaches offer distinct possibilities for architectural practice. Our pedagogical reflection and methodology bring daily narratives back to architecture’s agenda by engaging these three themes with aspects of representation.
INTRODUCTION

In his distinguished book, *The Manhattan Transcripts*, Bernard Tschumi (1994) explains a set of concepts he uses for realizing his remarkable studies about New York City in the chapter titled *Illustrated Index*: Themes from the Manhattan Transcripts. Among various concepts such as notation, articulation and sensation, he also includes the concept “narrative” and defines it by asking, “Is there such a thing as an architectural narrative?”. One of the early architectural theorists to consider the relationship of architecture and narrative, Tschumi seeks the answer by stating, “A narrative not only presupposes a sequence but also a language. As we all know, the ‘language’ of architecture, the architecture ‘that speaks,’ is a controversial matter.” Following this, he asks another question: “If such architectural narrative corresponds to the narrative of literature, would space intersect with signs to give us a discourse?” He argues that “Spaces are qualified by actions just as actions are qualified by spaces. One does not trigger the other; they exist independently. Only when they intersect do they affect one another”. He suggests that “movement, object and event become fully interchangeable, whereby people are walls, walls dance the tango, and tangos run for office”. This speculative and relatively early argument encouraged us to think back to the question of why narrative matters in architectural design.

Thinking along with the questions of Tschumi and ideas of other theorists who focus on narrative and architecture, we have been discussing the potential advantages of narrative making in architectural design and, more specifically, in architectural education. Since the distant past, architects have been using certain representation styles and techniques to communicate with other people involved in building, such as constructors, patrons, and users. The curriculum of almost every undergraduate architecture program includes visual communication and representation classes at the very early stage of their education that usually aims to teach certain architectural drawing conventions such as plan, section and perspective. Even though these representation styles are fundamental for students to learn in representing the built environment, we find a lack of defining temporality and subjectivity when considering students’ works. We think including narrative into representation is not only vital to present the honest intentions of the design, but it also helps each student to uncover their subjective side. Inspired by Tschumi’s words, *action, movement and event*, we aimed also to think deeper about the concept of process. Similar to that approach, Tschumi’s concept of language meant to us the presence of subjectivity in the representation instead of an anonymous and homogeneous style. Considering these particular issues in representation, we designed the course titled *Narrative Processes in Architectural Design* to explore the role of “the narrator” in architectural education.

This article first looks into the historical background of narrative in architectural practice and the emergence of narrative discussions in academic circles by providing prominent examples. Then, we give insights about the course we designed and have been teaching in different universities since 2016. Engaging with distinct aims, we detail some approaches of the course that we find useful in an architectural representation, such as subjectivity, temporality and spatiality when producing a narrative. In the last instance, we argue that narrative strengthens the relationship between thinking and visualization, and therefore it represents the process in architectural design by employing subjective new approaches.

Narrative in Architecture: A Brief Historical Background

There were several radical thresholds in history when architectural practice depended on representation and, in narrative more than ever. The production of narrative in architectural practice throughout history affected how architects design and became the main focus of the practice from time to time. Especially starting from the 1960s, several architects and practices, such as Hans Hollein, Constant Nieuwenhuys, Cedric Price, Archigram and Superstudio represented their projects by producing unique narratives and demonstrated that architecture is not only an act of construction with physical elements but also a practice that can be produced on paper with narratives.

For example, Hans Hollein, with the provocative idea of ‘everything is architecture’, placed abandoned aircraft carriers from World War II in landscapes in his photomontage narratives. Driven by a politicized approach, he made a claim for using narrative in architecture in his project Aircraft Carrier City (1964). Constant proposed a new form of urbanism with his project New Babylon (1974). He produced hundreds of models and drawings and expressed his narrative culturally, sexually and politically liberated. Archigram explored the possibilities of metropolitan dynamics through temporary events, mega-structures and new forms of technology. When proposing new ways of living, such as in their projects called Plug-in City (1964), Walking City (1964) and Instant City (1968), the Archigram made narratives with temporal elements such as the display of moving cranes and floating balloons. Last, but not least, Superstudio imagined a new world order without the need...
for urban features such as roads or squares. When proposing an endless mega-structure called Supersurface (1969), the team narrated various nomadic new ways of living by adding close-up images of people who made their way of habitation on the surface. These architects and teams experimented with new modes of representing architecture when they provocatively made and narrated new worlds.

Although the aforementioned architects used narrative significantly in their projects since the 60s, the theorization of narrative in architectural design and the use of the concept “narrative” has been discussed only after the 80s in academic circles. Architects like Bernard Tschumi embraced the concept to explain the theoretical framework of their projects which were works that were mainly displayed in an exhibition or a book. Other than these architects, several researchers drew upon conceptual analysis of the narrative production. For instance, Nigel Coates’ (2012) Narrative Architecture, Sophia Psarra’s (2009) Architecture and Narrative: The Formation of Space and Cultural Meaning, and Sylvain De Bleeckere and Sevastiaan Gerards’ (2017) Narrative Architecture: A Designer’s Story, all focus on the question of narrative in architecture.

Some of these works include theoretical and historical discussions of narrative making in architecture, and some have interdisciplinary links with other fields such as literature, film making and computing. For instance, Coates (2012) looked for how narrative helps to analyse the built environment. He states that every building has a self-narrative from the beginning of its construction to its destruction. The spatial narratives that we produce consciously or unconsciously help us relate to physical spaces every day. Bleeckere and Gerards (2017) frame the question of narrative by drawing a long-term historical perspective. By relying on Lyotard’s (1984) critique of meta-narratives, the authors bring Husserl’s (1970) phenomenological idea of narrative to the surface. Husserl’s idea of the phenomenological way that connect humans with the things around them inspired the authors to think about narrative in architecture. They state that by using narrative, architectural design becomes no longer timeless and spaceless as are meta-narratives. Psarra (2009) criticizes the lack of temporal experience in conventional architectural images. By including narrative, the author argues that not only the built environment becomes less abstract but also the architect’s design process becomes visible. Therefore, architects who include narrative in their design process demonstrate the potential of buildings to be more open to human experience. These discussions helped us to frame the theoretical perspective of our course and the importance of narrative production in architectural design. Remembering another assertion of Tschumi (1976), “There is no architecture without action, no architecture without event, no architecture without program”, we find it critical to deal with narrative processes in architectural education.

A PEDAGOGICAL APPROACH TO THE REPRESENTATION IN ARCHITECTURE

The Narrative Processes in Architectural Design is an elective course that has been taught at MEF University, Kadir Has University and Istinye University by various combinations of four lecturers. Groups are composed of between 10 and 25 participants varying from second-year students to seniors. It is designed as an applied course based on representational techniques and narrative making. The course focuses on developing the “narrator” character of an architect. Regarding this approach, participants are encouraged to utilize communication tools according to their personal interests and skills to generate new ideas rather than simply preparing presentation materials for their school projects. During the course, students design visual processes and experience multiple modes of media that vary from analog to digital ones.

In order to explore the wide variety of tools, techniques and media, we designed the course on the basis of different modules. At most, four modules, concentrating on distinct tasks, were developed in an academic term.

Throughout the lifetime of the course, new modules have been designed and combined with this premises. Free-hand drawings, perspective drawings, collages, diagrams, videos, cross-sectional drawings, and data visualizations are some of the primary techniques that students practice in the course. We often support the modules with presentations of relevant tasks and weekly reviews of on-going works. Then, we exhibit every module's outcomes for the purpose of motivation of the studio environment.

All the course modules are based on three major themes; subjectivity, temporality and spatiality. This section follows these approaches and looks into the connections between them. We believe these three themes always intersect each other, since a narrative depends on a specific time and space in which various events take place. Compared to the constructive aspect of architecture, the experience of space and time becomes more significant than ever in any architectural narrative. And the term, “experience” is always articulated from a particular bodily position which
we call subjectivity. This theme invites students to regain their subjective vision and at the same time bring empirical effects into the realm of architectural representation. Firstly, we follow and detail subjectivity and give a short account of the historical process of its emergence as a phenomenon. Then, we discuss the concepts of temporality and spatiality and exemplify various modules under the relevant topics.

SUBJECTIVITY

With the impacts of the intellectual thinking of the Renaissance era, individuality emerged as a new idea. But much later, positivism and rationalism (reason) became ideologies that shook the position of the sacred, and individuality opposed the sublime position of God. However, soon the Cartesian paradigm taught that people would not trust their senses and the idea of the ‘eye of the rational mind’ arose. Thus, people no longer could trust their senses and the idea of positivism constructed its own authority different from the religious sacred that it replaced. Descartes’ ideas promoting the actual separation of intertwined and complex phenomena, such as mind-body, self-other, and time-space, had a significant role in this process. The most prominent idea of the new age of reason that emerged as a result of this intellectual history was the reification of the ‘quantifiable’. We have long lived in a world where the quantifiable is considered superior to the intangible. For the sake of quantifiable, the intangible was ignored, excluded from everyday life, and trivialized. This idea has been beneficial for capitalist dynamics because quantifiability is an instrumental concept for commodification.

Quantifiable (Tangible) / Immeasurable (Intangible)

Perceiving quantifiability as an indisputable reality is one of the situations that defines the problem. For instance, if the length of a table is 150 cm, it is 150 cm for everyone. But we often forget that this perception is actually fictional. For the sake of this ideological system to keep working, we must forget the fictionality of our perception and believe it truly. To explain the opposite of this perception, for instance, when one tries to measure the length of an indented coastline, the following problem often emerges: the length of the coastline would constantly change, the detail of the indentations increase and decrease as one approaches and moves away from the coastline. In addition, boundaries that seem perfectly clear from a distance would become blurred as we approach. So how can the boundary of the coastline be identified and what would be its length? Therefore, measurability is an ideological construct that is functional only within a certain framework accepted by everyone.

Being measurable requires that everyone who looks at any object perceives the ‘same’ thing. There is no space for scattering, distraction or different readings in the system of measurability. Of course, such perception is possible with a certain education system that would cover, shut out and trivialize different ways of seeing and personal uniqueness. On the other hand, for sure, we need measurability. We would not be able to survive in a world without this concept. However, our critical problem today is the superiority of measurability over the immeasurable. One of the most important results of this situation in the context of representation has been the transformation of the representation tools from experiential tools to controlling ones.

The superiority of the measurable over the immeasurable is directly related to what is worthy of representation and what is not, and how it would be represented in a space. This situation determines whether any architect deals with qualitative features of the space such as its atmosphere, emotion, smell and experience or quantitative features of it such as its dimensions, geometry, form and material. Between these two opposite ideologies, both the value of any subject’s experience and the means of representation being used and the way they are being used would be completely different.

The hegemony of measurability has caused objectivity to take center stage in architecture, leaving the experiences and feelings in the background.
However, subjectivity, which we cannot separate from feelings and experiences, can be described with the immeasurable rather than the measurable.

**Engaging with Digital and Analog Tools**

The emergence of digital tools in the production of representation, especially since the 90s, provided great excitement and enthusiasm. However, we have witnessed that these new tools were perceived and presented as tools that would replace the old tools and improve their ‘dysfunctionality’ by performing faster and better rather than adding new possibilities to the existing tools.

This belief has not been widely questioned or embraced during the initial 10-20 years of the progression of digital tools. However, today, we can see more clearly that the way these tools are being used and our expectations from them, remove us from various capabilities that we had before, in spite of the advantages such as the speed they provide. One of the problematic issues of digital representation tools is the very limited relationship with the body. Today, this relationship has started to be improved with digital pens, glasses and sensors that detect body movement. Another issue is that digital tools often work predictably and are designed to perform in a way that is free of ambiguity. All these criticisms do not mean that digital tools cannot be used in different ways.

However, it would be appropriate to question why and how these tools produced the culture that will transform representation tools into discipline tools.

Thinking with these critical issues on subjectivity and the role of tools, our course aims to use both digital and analog tools without separating them from each other. Thus, we propose to mix these two tools to include the engaged bodily understanding and ambiguity that analog tools offer.

**Representing Subjective Experiences: Visual Diary**

Visual Diary is one of the modules of the course that continues in the background in addition to other works of the course. (Fig. 3-4). The module’s task is to visualize each students’ situation and environment at 9 pm sharply and produce at least ten narratives in three weeks. One of the characteristics of this module is that it inevitably includes the subject in the fact of it being a diary. The module aims to place the subject’s point of view, experiences, feelings and memories at the center of the representation. Another characteristic of this module is constructing the narrative of space with the event, allowing the subject to think about the space through temporality.

![Fig. 2 – Students working on a daily exercise.](image)

![Fig. 3 – Flyers of the module titled Visual Diary.](image)

![Fig. 4 – Student works of Visual Diary (Cansu Erdem, Ceyda Pektaş, Dilan Elif Korkmaz, Sinem Öngül).](image)
We find this approach very important for any architecture student where the object-oriented perception of space is prevalent. We have seen that all this is reflected in the forms of representation and that digital and analog tools can be used by customizing them.

**TEMPORALITY**

We think it is essential to discuss the time and space perspective that we see directly related to the subjectivity issue and how we embrace it in the modules of the course. Time and space are critical concepts in architectural theory that cannot be separated from each other. When time and space are considered separately, space turns into an object. Perceiving the space in an object-like way disrupts the palpability of feelings, experiences, events and their effects on the space. This misguided representation of the space lacks the perception of subjectivity for both comprehending and imagining space. We argue that an image (object) becomes imaginative when it is thought and constructed with time, difference and movement. Therefore, we find temporality critical for narrating not only the built environment around us but also how we perceive it with our emotions. One of the primary tasks of architecture is the production of space to be inhabited by events, people and time. In architectural education, imagining space with temporal effects helps students to gain the idea that it is a process rather than that architecture is an object.

This section focuses on temporal constructions of narrative by detailing two different conceptions of time and space. We exemplify two modules of the course named Visual Diary and Post-Catastrophic Stories. Visual Diary presents the space constructed by chronological time with measurable effects.

### Fragmented Temporality: Visual Diary

The module of Visual Diary aims for students to practice visual thinking and visual note-taking in their habitual everyday life. Its importance in the question of the temporal-spatial dichotomy relates to performing the narration at the same time each day. We asked them to keep a diary of their actions and where they were, plotting details that were distantly or closely related to that moment or space. (Fig. 4-5)

Everyday life has become critical for architectural theory, especially since the 1960s. The rigid temporality of the workers’ working hours and leisure time eventually changed its form after World War II. Thereafter, spaces like streets, where mundane everyday life took place and stimulated possibilities, chances, encounters, and randomness have become an issue for modernist minds. Since then, we argue that the discipline of architecture, both as a profession and in terms of education, has paid attention to any space where there are events, people, and activities that occupy time.

Around discussions on mundane life, narrative becomes a mediator to keep time and space together while representing everyday activities. Even the days that we often assume to be much the same and ordinary, but any single moment is connected to other moments and details that we are unaware of, and overlaps with all other times. The works of the Visual Diary between 2017 and 2020 narrated different venues. However, because of the Covid-19 pandemic and several lockdowns, students narrated the different moments in the same place, in their room at 9 pm. The module encouraged students to narrate the qualitative characteristics of the space, such as atmosphere, emotion, smell, and light.

Although single frames of each students’ diary contain overlapping times and places, diaries do not attempt to narrate linear stories. They allow other people to read them freely because of their characteristic of being fragmented, independent works.
The outcomes of this module are often very subjective because they are biographical studies. However, another essential reason why they are subjective is the construction of diaries’ temporality, as Bergson puts it; “the only subjectivity is time, non-chronological time grasped in its foundation, and it is we who are internal to time, not the other way round” (Deleuze, 2001). Hereby, diaries become a representation of how we inhabit time. The movement in them is affected and subjective. In his book Cinema 2: The Time-Image, Deleuze (2001, 83) explains time through subjectivity and affection as: “Subjectivity is never ours, it is time, that is, the soul or the spirit, the virtual. The actual is always objective, but the virtual is subjective: it was initially the affect, that which we experience in time; then time itself, pure virtuality which divides itself in two as affector and affected, the affection of self by self as definition of time.”

**Linear Temporality: Post-Catastrophic Stories**

Post-Catastrophic Stories is a module in the course in which the construction of time emerges by manipulating the image and its spatial elements. The moment of an ‘event’ fictionalized in the image establishes a narrative by producing sequences of its before and after temporality. The task requires students to use a given photographic image and convert its temporality into five different images. The interval between the scenes differs according to the plot of the story of each students’ imagination. In some narratives, there are only seconds between two scenes, and in others, there are years. The essential thing is that the passage of time needs to be visualized in the image’s spatiality.

**Post-Catastrophic Stories** is a module in which collage is used as the featured representation technique. Unlike using digital tools, analog production of collages brings along new discoveries and solutions. Students usually have digital collections of images that they can easily scale and adapt while making colleges. Instead of using ready-made figure printouts, when students make hands-on
collages, the image and its spatial elements transform unexpectedly. Analog collage is helpful to include the atmosphere and feeling of the space as a unique experience with the use of different materials and textures. By employing collage technique, the works in which each student explores his/her own method become subjective. (Fig. 6,7,8).

Building stories and rethinking space and events with the theme of temporality offer a mode of world-building experience. Their works represent both the qualitative effects of time in that world reflected in the spatial changes, and the measurable time in terms of quantity since the scenes should be arranged chronologically so that the viewer can follow the flow of the story. The students narrate the worlds they build as an outsider. We have observed that this module requires a timeless meta-narrative, unlike the narration in the module of Visual Diary.

We consider both approaches of constructing temporality are essential in the course. Visual Diary is a module where students zoom in time and space and search for moments in detail, while Post-Catastrophic Stories is a module in which students change the scale of time by zooming out in time.

SPATIALITY

In this section, in which we describe the theme of spatiality in narrative production, two distinct approaches are taken. We use the term Tabula Rasa also known as Blank Slate, the well-known theory of John Locke (1979), to distinguish works starting on a blank page from ones responding to a given image. The reason we conceptualize this dual position is related to a long-standing discussion in architectural design and theory: does architectural practice establish itself on a ‘blank slate’ or is it possible to imagine it independent of the existing conditions? The discourses of the early 20th century avant-gardes were eager to construct the future by abolishing the existing forms, structures and memories of the past. For instance, the destructive language of the Futurist Manifesto (1909) and Le Corbusier’s (2014) vision of urban planning followed this idea as their visionary motive. The critical ground, which emerged in architectural thought in the 1960s, mostly conceptualized under the title of ‘postmodernism’, re-evaluated the relationship between the past and the present. For instance, Aldo Rossi’s book titled The Architecture of the City (1982) explores the city as an artifact embodying living memory. Lefebvre (1991), on the other hand, demonstrates the relationship between the production of space and the homogeneous and hierarchical form of time. The argument of this perception of time, and the concept of duration (1991) enabled us to understand that space is in interaction with events and movement. As a matter of fact, we often assume that architecture rises on empty ground, or a cleared site. However, all the built environment, streets, buildings or trees are an outcome of socio-economic, political and cultural networks. Memory of the past is also part of these networks. Therefore, we learn to evaluate space as a phenomenon that is not separate from the existing network of spatial patterns, and architectural design can contribute to this thought by creating spatial narrations.

In addition to its consequences on space, the tension between tabula rasa and responding to the existing, challenges the students’ subjectivity. We always see design as a process in which a personal style is developed by questioning the lost experiential understanding. While in the Miniatures of Daily Life module, the constructing process precedes other acts, Section Zero module compels subjectivity to constitute itself with the presence of the other.

Tabula Rasa: Miniatures of Daily Life

The module titled Miniatures of Daily Life provides the context of tabula rasa when thinking of spatial construction in representation. In this module, students were expected to represent different events taking place in public spaces on a single page. (Fig. 9). The places in question can be an utterly fictional depiction of an imaginary place or one of the actual urban areas in Istanbul, such as Taksim Square or the seaside of Moda. The blank canvas at the beginning demands all decisions of spatial construction to be made entirely by students and as similar as in paintings, the setting and the story are fictionally constructed on a page. Distinct techniques of drawing, painting and collage are involved during the process. The module focuses on whether we can ever imagine architecture as an act of world-building. Reconsidering Tschumi’s statements on narrative once again, the fact that architecture is the interaction of the space(s)-event(s) means that it is world-building, that is, by a process of narration, rather than only the action of erecting...
physical buildings, or any artifacts. Therefore, this module does not broach the problem of design including dimensions, forms, programs of structures and the design approaches or coherence of them. On the contrary, we are concerned with those issues of the interaction of all kinds of events that occur in built environments and the effects upon the sensory and psychological features of the spatial experience, such as texture, atmosphere, and temporality. We expect students to consider the reflections of movement and time in spatial narrative construction, such as the texture of the worn cobblestones on the street, the eroded grass floor, the dust lifted by the falling rain, the splash of the water when a ball touches the surface, the randomly laid beach covers on the ground, people looking out of the window. We expect the inclusion of essentials that are perhaps not precisely designed but that make up a world, a life and therefore, a narration.

On the other hand, the technique of miniature, comes into play in the representation of the world-building process that constructs the space by providing distinct perspectives. Miniature allows one to approach each part of the public space with an equivalent attitude, without creating a certain hierarchy between distances, between

Fig. 9 – Student works of Miniatures of Daily Life (Aylin Kanar, Berilnur Güngörmez, Ceyda Pektaş, Melis Zeynep İleri).
inside and outside, or between front and back. The dissolution of perspective (the representation of the whole from a single point of view) often leads to conflicting information about the space. In this sense, miniature can be an uncanny technique for representing architecture in a precisely quantifiable world. Because perspective and orthographic projection (as established architectural representation techniques) are tools by which space can be measured, thus a controlled representation becomes possible, or at least offers a consistent perception of scale even though (as in perspective) it cannot be measured. The white canvas is defined as an unreferenced and unconditional space in which architecture students have to act by excluding familiar forms of seeing and representation. The construction of miniatures provides a political arena that helps the invention of new languages that are possible by trial and error. Thinking from this Ranciereian perspective (2009), including an unfamiliar technique that architecture did not apply to the field of the sensible, is itself political.

Responding to the Existing: Section Zero

The module titled Section Zero, contrary to the Miniatures of Daily Life, focuses on two other common representational techniques of architecture. Let us describe the two aims of this module as a task of cross-sectional perspective work. First, inspired by the cuts and splits of Gordon Matta-Clark in the 1970s, we encourage students to use objective and universal methods like the section as constitutive elements of subjective speculations and narrations. Prescribing a representational tool as an actual action, triggers the metaphorical and critical power of such tools by transforming their function. Secondly, we include collage technique including the presence of the photographic image as a given starting point. Therefore, we intensify the module with the combination of two essential methods of section and perspective, as well as the use of different media of photography and drawing. This module starts with a found photographic image from various spectrums of complex urban landscapes, such as slum areas, factory campuses, transportation hubs, etc. As is the case in photographic images, these pictures include specific points of views. Students are required to make a cut on the surface of the already defined scene captured in pictures. The shot belongs to someone else, yet the cut action is made by students and therefore, let them include their fiction onto the given picture itself. (Fig. 10-11).
One of Picasso’s early collages, titled *Still-life with Chair Caning* (1912), shows the emergence of mixed-media by composing various found objects on the painting canvas, which was an original construction of narrative in the realm of art. Accordingly, as the photograph came to occupy the position of engravings widely used as illustrations to narrate stories in 19th century, photographic fragments became prevalent in collage art. Nevertheless, in Section Zero, we regard the photographic image as the canvas itself to be ripped apart and the drawing as the one merged with the ground. This is where the technical challenge of the module appears, since students must follow the perspective axes already existing in the given pictures while drawing the section in its right principles.

On the other hand, drawing a section is an introspective form of expression. Cross-sectional methods reveal what is behind or inside, so to speak, what is hidden or invisible to the eye. However, this process also means the dissolution of the ‘aura’, too. When Benjamin (2019) used that term for the phenomenon of technical reproduction, he was actually referring to a broader range of technical tools, methods and actions. For instance, scanning devices and tools such as tomography and x-ray provided people with undiscovered and specialized facts of the body. The process of reification of the body is inseparable from these developments and the reification of other components of life. In this respect, our concern is whether we can replace the quantitative aspects of section drawing with the help of narration to regain surprising forces of spatial representation. Students create unexpected events taking place in their scenes and reveal what is unmeasurable, uncapturable, inconsistent between the surface and the story behind it. They contribute to the memory of the constructed space in the picture by, not designing, but re-imaging it by making up narratives about it.

**CONCLUSION**

This article focused on the idea of narrative in architecture. We raise questions of why narrative matters in architectural design and what potential advantages of narrative making in architectural education can be.

Based on a critical argument of the architect’s narrator role, we illustrate the modules of the Narrative Processes in Architectural Design course under three themes: subjectivity, temporality, and spatiality. We elaborate on these three themes separately, but essentially they are interrelated concepts with shared outcomes. In various course modules, we embrace these themes with the dichotomies of each concept that we discuss in the article. Customizing tools by adding new possibilities is essential, rather than replacing analog tools with digital ones to embrace subjectivity in architectural designs in new ways. We pay attention to immeasurable techniques together with universal measurable ones. For instance, collage, section, and perspective bring their uncanny aspects into the narration of photographic or pictorial images. We find it essential in the modules to consider time both as instantaneous and chronological since these aspects of constructing temporality are also related to subjectivity. As a method, we develop distinct strategies to widen the discussions on representing space by starting with a white canvas or responding to an existing image.

Consequently, including narrative in design processes is vital as well as rewarding in terms of embracing the human experiences. We argue that these modules strengthen the relationship between thinking, visualization and designing in architectural education and practice. We believe that the emergence of the narrator in architecture transforms how architects comprehend the world and how they design.

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A Critical Reading on Spatial Narrative in Abstract Comics

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Bu çalışma, soyut çizgi roman üretimlerinin mekan anlatısı üzerine eleştirel bir okumadır. Soyut çizgi roman olarak tanımlanan temsil biçimi, kullandığı tekniklerle seyircisinde bir tepki yaratan anlatı dizileridir. Çalışmanın amacı, ele alınan temsil biçiminin seyircisi ile kurduğu iletişim göz önüne alınarak; seyirciyi özgürleştirme, temsili duyumsalara açık hale getiren potansiyellerini vurgulamaktır. Seyircinin temsilli iletişim kurabilmesini için, temsili temsil edilen mekanın özneye dair deneyimi ve zamansal✂️}

This study is a critical reading on the spatial narrative of abstract comics. The form of representation, which is defined as an abstract comic, is a narrative series that creates a reaction in the audience with the forms and techniques it uses. The aim of the study, considering the communication between the spectator and the representation, is to emphasize the potential that emancipated the spectator and made the representational form open to sensations. The represented space must have traces that make the subject's experience and temporality visible in order for the spectator to communicate with the representation. The experience that the space provides to the subject is thought to be lacking in traditional architectural representation because it does not have a counterpart in representation. Because the act of “experiencing” is temporal, the visibility of temporality in representation will create gaps that will include the spectator in the representation. Abstract comics have been evaluated as a form of representation that will make the spatial experience visible by making the concept of time legible with the possibilities of representation and having the potential to be used as a communication tool. The fact that the abstract comic book representations examined are ‘abstract’ transforms the form of representation into a field of experience for the spectator, providing a setting for sensations. On the other hand, the readability of time provides a participatory communication environment in which the spectator imagines what happens between the panels (singular units of sequential productions) and what might happen outside the panels. This study examines the communication that spatial narrative establishes with its spectators through representational forms defined as abstract sequential art. It is valuable in that it underlines the visibility of experience in a representation that emerges with the concepts of time and sensation, and opens the topic of temporality in architectural representation to discussion.
INTRODUCTION

The relationship between the architectural representation of space and the subject as a spectator can be explained by the spatial experience that emerges with the presence of the subject. Since the spatial experience is shaped by the experiencing subject, it is far from static. The representation of the experience must also have different expressions for each subject. This variability will cause the representation of experience to become “abstracted.” Abstraction arises not from the inexpressibility of the experience, but from the fact that it has more than one meaning. Reading the parts first in order to perceive the whole creates a situation that ensures the legibility of the representation of the experience, just as the legibility of a sentence is formed from letters to words and from words to a sentence. This technique is similar to the use of montage by W. Benjamin to have the reader solve his texts as if they were puzzles (Benjamin, 1995). To understand the whole of the narrative, the reader must piece together what he wants from thousands of small parts and include himself in the narrative while doing so. Abstract values such as “experience” must be divided into understandable and readable parts and brought together in order to be represented and visible.

Spatial experience spreads over time as a transforming action. From the moment the subject enters a space, the subject’s experience begins to form. This state of being is temporal as it indicates a process. The encounter with a work of art, as Bourriaud points out, creates a time period rather than a space. There is a period of direction, comprehension, and decision-making that extends beyond the act of “rounding off” the work by looking at it (Bourriaud, 2002, 59). As a result, while the experience is being represented, the readability of time provides intervals for including the subject in the representation. Given this relationship between subject and representation, can a form of architectural representation be composed of letters and sentences in the manner of a spoken common language and become readable? Or can it be recreated with the voice of each reader?

Architectural representation can be defined as participatory and experimental when it becomes a common space where multiple subjects communicate. The first example that comes to mind when considering the functionality of representation as a means of communication is “language.” The images that comprise the representation, like the words of a language, must correspond to human emotions. A representation method that generates new meanings in the part-whole relationship, such as word combination and sentence formation, has the potential to be used as a communication tool.

Concentrated states become sparse and ordered so as to be transferred. This process is an equivalent of trying to form sentences. There are three ways to express the concepts in the human mind. These are creating sounds, body movements and producing images. According to Jackson, any of these ways becomes a language when it creates a canonical set in itself. As sequential sounds create speech, sequential hand movements create sign language; sequential images also form a visual language (Cohn, 2007; Jackson, 2009, 6). Since sequential productions have the potential to establish their own language, they are essentially a means of communication as a method of representation (Fig. 1).

The representation of the part-whole relationship in
comics also includes narratives comprised of panels, similar to the transformation of the words into sentences. The undefined spaces created by the gaps between the panels in comics, i.e. the “gutter” in a comic’s language, are the gaps that are filled by the spectator’s imagination. Comics, as a form of sequential art, are actually paper films. However, they differ from motion pictures in which they are voiced by the reader and the story is completed by the reader outside the panel and between the panels (Jackson, 2009, 5-6). This potential allows the comic readers to interact with the comic. The narrative in the panels of “Abstract comics”, a different production form of comics, consists of abstract images together with gutters, and gains meaning with the spectator’s perceptions. The intervals at which the spectator participates in the representation will be increased as a result.

From this point of view, the “experience” can be visible as its different meanings that are achieving temporality in the eyes of the spectator. The temporality and openness to sensations of the abstract comics are evaluated as a form of representation that can transfer experience with its potential to emancipate the spectators. Within the scope of the study, the Abstract comics are discussed and investigated in terms of their ability to represent time and experience in space. They are believed to achieve this through intervals that allow the spectator to infiltrate, complete, personalize and reproduce the narrative. The motivation for exploring new representational forms of spatial experiences stems from the ability of architectural representation methods to provide a dialogue with the subject. The research focuses primarily on the potentials of the ‘abstract sequential art’ productions as a tool for conveying spatial experience. The designers’ methods for including the spectator in the representation are then examined using sample works. Each designer’s method of opening the representation to the sensations allows the spectator to re-read the representation through his or her subjectivity. Can representation become a field of experience when the architectural spatial experience is also represented as in the examined examples below?

**DIALOGUE WITH THE SPECTATOR IN ABSTRACT COMICS**

Australian photographer and painter Kym Tabulo defines the abstract sequential art as: “Abstract sequential art refers to a number of sequentially juxtaposed abstract images that focus on form and technique, which may elicit from the spectator an aesthetic response, a notional sense of narrative and/or a possible theme.” (Tabulo, 2013, 30). When sequential images are combined, they become more readable because of the new meanings they establish, and a narrative emerges in which the spectator can become involved with sensations. The spectator reads the narrative by connecting the images on the panels with their own interpretation (Fig. 2). Reading, as Bachelard puts it for poetry, is “dreams flowing along the lines” and “dreams moving along with the lines in motion.” (Bachelard, 2018, 20).

Hovering over lines or words, the eye attempts to comprehend the whole by combining the parts and filling in the gaps in his or her own mind. Reading, understanding, and interpreting indicate that the spectator is engaged with the work they encounter and is not apathetic to it. According to Renciere, the acts of reading, understanding, and interpretation, that is, associating and separating, joining and separating, indicate the spectator’s emancipation (Ranciere, 2010, 22). The emancipated spectator assumes an important role in allowing the representation to be open to reproductions.

Fig. 2 – Personal archive, 2022.
and the use of the productions examined within the scope of the study as a communication tool. The emancipated spectator’s dissociation of the layers concentrated on a single moment also defines the method of sequential art. It is necessary to allow encountering and making sense of its parts in order for a multi-layered narrative that contains a situation, event, or emotion to be intelligible for a subject other than its narrator, and for the whole to be comprehended. In sequential representations, the pieces lead the spectator to a meaningful whole.

Abstract sequential art productions contain time as they are sequential and prompt sensations as they are abstract. The common feature of abstract representations is that they contain multiple meaning possibilities rather than being meaningless. With each spectator’s own dream, they become communication tools that are re-read, voiced, and gain a new meaning (Jackson, 2009, 5). Sensation emerges in the abstract representations as a result of the images in which the interpretation is left to the spectator. The spectator recognizes the idiosyncratic one among the various meaning possibilities. When the spectator begins to think associatively, the dialogue between the representation and the spectator becomes stronger. The spectator takes on a role that gives voice to sequential production, fills in the gaps, that is, participates in it; “the displacement of the subject and the object, their transformation into each other” is proof of the emergence of sensation (Avci, 2016). When a design becomes open to sensations, it transforms into an experience area where the designer’s message is communicated to the spectator. To clarify an abstract concept like “experience,” the subject’s layers of imagination, recollections, memories, and sensations must be broken down into readable pieces. In this way, panels that are pieces of the representation of the experience, become the experience itself.

REPRESENTATION OF EXPERIENCE IN ABSTRACT COMICS THROUGH CASE STUDIES

The features that will support the dialogue with the subject are sought while looking for traces of experience in representation. As a result, the following characteristics are investigated in the samples examined:

- Having frames that have become a communication tool and convert the representation into readable pieces,
- The reciprocal relationship and continuity of the images in the frames for the representation of temporality,
- The various meanings provided by abstraction, which opens the door to sensations

The layers of the experience expand and spread with the frames, making them more uncluttered and readable. In this way, the spectator will be able to establish connections across the layers of the experience in their own subjectivity and complete the intervals (i.e. the gutters). Connections established across the frames are the expression of an event. The continuities of the whole captured by the connections express temporality. The spectator will be able to complete the gutters by establishing connections across the layers of the experience in their own subjectivity. The expression of an event is the establishment of connections across frames. The connections express temporality by capturing the continuities of the whole. The multiple meanings of the abstract images provide an increasing number of possibilities for the spectator’s relationships with each representation (Fig. 3).

Abstract comics’ production goal is to elicit an aesthetic judgment in the spectator and to create spaces that emancipate the spectator. To communicate with the spectator, each designer employs their own form of representation. In the case studies examined, representation includes movement, transformation, and time, as well as the methods of working that designers employ. As a result, the possibilities for emancipating the spectator grows. The abstract representation of the event and time allows the spectator to sense the experience. With this approach, the possibilities that emancipate the spectator provided by the representational forms have been investigated by considering the abstract comics productions of Rosaire Appel, Derik Badman, and Andrei Molotiu.

Rosaire Appel is a New York-based visual artist. She describes herself as an artist who investigates the relationships between reading, looking, and listening. Her work is primarily comprised of graphic novels, abstract comics, asemic writing, and asemic music. Appel claims that “since her language is visual, it is international”. Rosaire Appel mentions that she is more interested in possibilities than results when describing her productions. Her works, which she leaves on the verge of completion, transform into fields of experience with countless possibilities (Babcock, 2010). Although Appel’s images do not replace any object as an abstract production, they do cause sensations when they find a response in the spectator’s dreams. A running line between panels can convey spatial continuity, while the gradual disappearance of an image through the running panels can convey temporal sensibility. All of
these interpretations are based on the sensations revealed by the audience’s own subjective approaches. The situation that the artist considers valuable while creating her works is “these possibilities that multiply with the spectators”.

Appel’s work is an abstract sequential production in which she interferes with the story and the spaces by distorting and disorganizing them. In this example, Appel inserts the story line without a word, disrupting the sequential production method and interfering with the panels. All of this is done by the artist in order to broaden the scope of sequential arts (Fig. 4).

Appel describes her works as follows: “In this book, both stories and locations are disturbed - interfered with - disarranged. The result is a sequence of pages that are like rooms unhampered by customary furniture through which a non-verbal story is woven...”. She mentions in her statement that she emancipated the space and technique alongside the story in order to emancipate the narrative. It accomplishes this by deviating from tradition (Appel, 2016).

Derik Badman is a web developer from Philadelphia. By removing the subject from the focus of the comics, he demonstrates the potential of the “background” in many of his works. He reveals what he is interested in and wants to express with the abstract and poetic power of the comic. Here, it has been examined by Badman’s work titled “Flying Chief”, which distorts traditional methods in a manner similar to Appel’s emancipation of technique by destroying comic book panels. The artist
emancipates the technique in his experimental work by disrupting the subject/hero-oriented aspect of traditional comics and manga productions. In the form of a traditional comic book production, he removes the figure and its text balloons, titles, and sound effects, leaving only the backgrounds and panels (Fig. 5).

By interpreting the work and abstracting the remaining background images, Badman writes the story. Although there is no detail about the subject’s figure, some shapes in the background expressing the subject’s movement draw attention. The gaps in the panels and the background composition make the subject feel the position before it disappears. The space transformed with the subject continues to contain clues shaped by the subject’s actions even though the subject as a figure has disappeared. By removing the figure of a finished story and creating a new story that is unfinished and waiting to be completed, Badman has also abstracted the remaining images from the figure and turned the representation into a field of experience that the spectator can read in their own subjectivity. Badman’s method that opens his work to the senses is to allow the spectator to fill the void that has been created by eliminating the subject. The spectator can fill in the gaps with their imagination by determining the leading role of the narrative. Badman’s extraction method emancipates the spectator, makes the narrative open to sensations and awaits completion.

Andrei Molotiu is another designer who incorporates the spectator into the representation. Molotiu is an art history senior lecturer at Indiana University Bloomington. He wrote Fragonard’s Allegories of Love (J. Paul Getty Museum, 2007) and edited Abstract Comics: The Anthology (Fantagraphics Books, 2009). He has been involved in comics studies for over a decade. His interests include ‘eighteenth- and nineteenth-century art, critical theory and art philosophy, and the history of comics’.3

Another way to engage the spectator is to give a title to a completely abstract drawing, as Molotiu does, so that the lines can capture a commonality in each spectator. As an example, Andrei Molotiu’s “A Day by the Ocean” is examined.

The artist conveys the ocean’s stillness and movement by abstracting its movements. We can feel the ocean’s stillness or the rising waves. There is, however, no linear time between panels. What Deleuze said about time being a mental movement in space comes to mind here (Tanju, 2008, 7). Molotiu divided the confusion of each ocean state in our minds and made it readable. He renounced linear time in his abstract panels, which include reminiscences of a strong spatial narrative (Fig. 6).
representations of intersubjective common experiences have intervals that can be shaped by each spectator’s own sensations, such as feeling the ocean waves, the spectator becomes a participant in the representation. Molotiu’s drawing of the ocean is reminiscent of the familiar experience of instantaneous, hazily unfolding scenes, such as recalling a memory. It embodied the unforgettable experience of watching the waves of an ocean by combining memories of water’s instantaneous sensations.

CONCLUSION

This study focuses on the possibilities of making the representation of a space open to the spectator’s experience and investigates the visibility of temporality in narratives that are constantly restructured and interpreted through experience. The temporality of a spatial narrative is not linear but rather based on the subject’s recollections. Sequential productions that break apart concentrated moments to make them readable are used to represent this temporality. When the lack of temporality in traditional forms of architectural representation forms is supported by sequential productions, then representation turns into a field of experience in which the spectator establishes the part-whole relationship based on their own sensations and produces their own discourse. In this way, the emancipated audience can read the representation within the temporality of the representation. The panels, which will elicit memories that differ for each subject but share commonalities, have now evolved into a common language and communication tool that the audience can interpret.

The methods used by the designers in these analysed comic artworks, allow the audience to read the representation in his or her own subjectivity, open to the senses through the intervals in the representation. Appel values the countless possibilities that arise through the presence of the spectator, leaving her work unfinished. By breaking the strict rules of traditional comic technique, narrative, story, and technique are emancipated. Badman extracts the probabilities that Appel obtained by leaving them halfway. When he removes the subject figure, which is the focal point of traditional comics, the design he reinterprets becomes an experiential area awaiting completion by the spectator’s senses. Unfinished works have opened up new possibilities for the spectator. In Molotiu’s work, however, certain moments from the spectator’s recollections come together and gain temporality. All of these examples have one thing in common: they open up the designer’s narrative to new interpretations, along with allowing access for the spectator's feelings. As the spectator’s gaze moves through the panels, the representation transforms into a space of experience.

As observed in the case studies, sequential arts enable the condensed meanings of abstract concepts to attain intelligibility. Panels, which are parts of a larger whole, have become a tool for assisting in the construction of sentences that are interpreted by the spectator’s senses, such as the formation of sentences from words. The space narrative has been able to transform into a communication tool, where the experience is seen in the relationships between successive panels, emancipating the spectator at this point. This open-ended character of spatial representation subject to personal interpretations in the context of experience and temporality is inspiring in re-questioning the finished, terminated, and diminished forms of traditional architectural representation.

BIBLIOGRAPHY


NOTES


The Clock(s) of a Drawing and the Hermetic Time-Reader/Teller

Dreaming of Drawing dials and the Enigmatic Hour(s) of A Drawing

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Zamani nasıl okuruz? Kim(ler) zamanı anlatır?

THE CLOCK(S) OF A DRAWING: AN INCARNATION OF A READING MACHINE

The alluring thought of experiencing more than one sunset in a single day does not only refer to the curious wonders of the inconsistency of our unstable, mobile spatio-temporal situatedness within the universe, but perhaps also to the curious apparentness of the non-linearity of the perception of time. We encounter such a profound occasion in Roger Ackling’s Five Sunsets in One Hour (1978):2 A gentle walk on a hill triggers the horizon to accompany and move along with the walker, thus multiplying the sunset that could be experienced in a single day. While the walker doubles herself/himself as the ‘time-reader’ and marks each sunset on the paper manifesting the plurality of the sunset, her/his relationally changing situatedness paradoxically renders each sunset ‘unique’.

The historical trajectories of the act of ‘reading the time’ passes beyond looking at a ticking clock, thus also beyond a purely mathematical calculation and mechanical construct. It is also not a mere co-ordinational matter set between the world and the universe, but it also includes ‘us’ as the hermetic reader/teller/writer as an inherent part of it. Sundials and astrolabes manifest the existence of this ‘hermetic time-reader’ primarily as an engraved ‘drawing’ on earth, paper or portable plates. These ‘time-telling drawing’ (instruments) are in fact the result of an embodied reading of the universe, which in turn become ‘projective’ reading machines; in Daniel Libeskind’s terms, one of the three lessons of architecture.3 Constantly compelling interpretive narratives from the ‘reader’, these sundials could be considered in a broader framework as ‘divination’ machines, calling for variegated horoscopic narratives.

THE CELEBRATION OF READING AND ‘LINES THAT LEAVE NOTHING BEHIND’

Looking into the elegantly curving and intersecting lines of sundials that are carefully marked, engraved or incised on metal plates, earth, or stones, we immediately sense the intense memory of a series of intricate, dedicated daily surveys and observations that span over a considerably long period of time. Thus, sundials could be considered primarily as a project-ed ‘reading’ of our own spatio-temporal situatedness of the world within the universe, specifically crafted for our (kinetic or stable) particular location within the world. However, while we feast our eyes on these intricate incised marks that form a drawing, we also witness the resurrection of each line through the restless wandering shadow of the gnomon – the reference rod: The wandering shadow that resurrects each incised mark tells the time and reminds us that sundials are not a mere collection of project-ed marks on a surface: it is a project-ed reading that in turn takes the form of a project-ive reading machine-drawing, that enables us to read and divine our spatio-temporal relational situatedness within the universe. In the case of astrolabes, the scope of the reading and divination expands into a vast scope of horoscopic divinations and cosmological narratives.3 Hence, we can argue that these dials are foundationally projective drawings that celebrate the act of ‘reading’ and ‘telling’.

Sensing this powerful memory imprinted in each sunset in a single day does it cherish primarily as an inherent intermediary constituent of this hermetic book.7 Relatedly, these dials are considered to be an embodied intermediate between the celestial (also immaterial) and the earthly (also material) realms. If we were to read a considerably recent project by Fırat Erdim, Yeryüzü + Gökyüzü (2013), we would certainly confront the powerful archaic-ness of this projective embodied reading practice as a critical initiation of this ‘silent’, sober but potently ludic book of occult lines grounded on “the rituals of plane table surveying” (Fig. 1).8

At this point of our discussion, it might be perhaps important to note that as silent books of the universe, dial-drawings are not necessarily bound to be read as representative models of the universe. As Robin Evans, in his article “In Front of Lines That Leave Nothing Behind” (1984), draws our attention to the critical liberation of architectural drawings from nature and argues that the drawings become “an independently derived system of correlations”9 through Daniel Libeskind’s Chamber Works (1983) and Micromegas (1979) drawings, we may also start to question the nature of this hermetic reading and these hermetic dial-drawings.

Reading Libeskind’s Chamber
Works, Evans argues that his drawings hold no reference to the hidden realm attributed to reality located behind the paper.\textsuperscript{10} In the absence of this hidden realm that is so characteristic for perspectival drawings, the realistic approach also takes its leave from the drawing plane. Evans continues to argue that Libeskind’s lines could not be considered as the systematic constituent of a language and that the author of the drawings also cannot claim to have any authority over the meaning of lines. He writes, rather than hieroglyphs, “they are more like tea-leaves in the cup, the spilt entrails of the eviscerated dove, distributions made in such a way that they cannot be fully understood even by their author.”\textsuperscript{11}

Hence, the audience of the drawings cannot be restricted within the profession, transcribing the lines into their strictly destined three-dimensional bodies. While the fate of the drawings is not necessarily destined to be a tightly defined three-dimensional entity, the audience of the drawings shifts from the draughtsmen to an openly defined group of readers, imagining the projective embodiment of the lines. In Evans’ words, we read: “Without representing space, any of the Chamber Works can be fantasized into three dimensions, given sufficient volition in the observer, for the space is thought into them by him, not projected out of them by the draughtsman.”\textsuperscript{12} Thus, we may propose that the celebration of the act of reading is hand in hand with \textit{imaginal} entities rather than \textit{imaginary}. Differing from \textit{imaginary}, the \textit{imaginal} – a term coined by Henry Corbin– refers not to the imagined but to imagination as a cognitive faculty\textsuperscript{13} and thus designates the drawing not as an object but as a ritualistic act demonstrating certain temporalities (including the collapse of time).

Evans proposes that Libeskind’s drawings urge us to think of “the possible but unreal”\textsuperscript{14} and the “potent […] rather than what is latent.”\textsuperscript{15} Thus, we may speak of a ‘frontality’ that unfolds the potential possibilities by abolishing the secret reality located behind the paper plane.\textsuperscript{16}
POTENT AXES SET BETWEEN A ‘ME’ AND A ‘YOU’

As we see in the case of Evans’ discussion on Chamber Works and Micromegas, while drawings are critically liberated from the burden of cryptic narratives, we may propose that the absence of the hidden ‘reality’ behind the drawing plane shifts the traditional axis of architectural meaning to another possible arena related inherently with the imaginative act of reading. Peggy Deamer draws our attention to this critical shift in the context of the poet-architect John Hejduk’s autobiographical works. She argues that this critical shift does not necessarily require “the death of the author”, but also unfolds through the hermetic author (both absent and present). Peggy Deamer proposes that within this inquiry, the reader is structurally embedded in the text, and that we confront “the possibility that architecture might function not on the traditional axis of architectural meaning – building to user – but on an alternate axis of ‘me’ and ‘you’. Hejduk reminds us that this ‘you’ and this ‘me’ possess gender, age, and sexuality. Moreover, because the author of an architectural work is not ‘dead,’ and because buildings do not spring up autonomously, he intimates that one must take responsibility for all these manifestations of the self.”

This above-mentioned traditional axis of architectural meaning set between the building and the user could be interpreted in our case of sundials as a meaning set between the model of the universe and the observer. Thus, as the writer and the reader gets included within the structure of drawing, this traditional axis of meaning shifts and unfolds other critically potent arenas of meaning. In other words, as writing/reading machines, the axis of interpretation does not necessarily have to be established between the universe and us, but perhaps also between our own variegated situatednesses. Relatedly, instead of restricting sundials to a mere representation of the universe that calculate the correct time, we may think of the possibility of a ritualistic site celebrating the act of reading, imagination and encounter, whereby the meaning is set between a ‘me’ and a ‘you’ directly on the drawing plane, transforming the site of drawing into a potently polyphonic structure. It might be important to note that this ‘me’ and ‘you’ could be taken coevally in plural form: As Italo Calvino also mentions, “… in these operations the person ‘I,’ whether explicit or implicit, splits into a number of different figures: into an ‘I’ who is writing and an ‘I’ who is written, into an empirical ‘I’ who looks over the shoulder of the ‘I’ who is writing and into a mythical ‘I’ who serves as a model for the ‘I’ who is written. The ‘I’ of the writing is dissolved into writing. The so-called personality of the writer exists within the very
act of writing: it is the product and the instrument of the writing process",21 the site of drawing, could be considered as ‘a place of intrigue’ as Anne Romme discusses (Fig. 2).

**SUNDIALS AND DRAWINGDIALS**

This certain liberation of drawing from representing nature, whereby the writer and the reader is structurally embedded within the drawing, could be also detected in the most peculiar way in anamorphic drawings. As Lyle Massey notes that “anamorphism is never described as the transcription of things seen in ‘nature’."22 Anamorphic drawings, although sharing a strange proximity to perspective drawings,23 differs from perspective by being constructed between an image and an image or a surface to a surface.

In Emmanuel Maignan’s (*Perspectiva horaria*, Rome, 1648) and Jean-François Niceron’s (*La perspective curieuse*, Paris, 1651) illustrations that particularly depict how an anamorphic mural painting could be constructed, we can observe that the traditional and characteristically perspectival sequence of the eye, the picture plane and the object separated and structured by the distance24 between them, is modified: In anamorphic drawings, whereby the eye is now located on the drawing plane (not across it), the original image (to be distorted), which now becomes the object of the anamorphic set, is placed perpendicularly within the space defined by the eye and the drawing plane. Hence, the ‘object’ (which is in fact an image) is not located behind the picture plane, but within the space embodied within. What we witness as the drawing on the wall is then the distortion of the image – not the realistic representation of the object –, taking the form of a playful, labyrinthine scape of intricately curving lines.

As the construction of the anamorphic drawing ends, the original image on the wall is disassembled, leaving the viewer and the drawing plane in private. While now the viewer moves around the drawing plane, getting lost within the anamorphic scape, discovering manifold vantage points, she/he witnesses how the image changes and morphes; and at certain stationary points she/ he sees the image in the form of a phantom, rising from the drawing plane towards herself/himself. Relatedly, Massey argues that anamorphosis “reverses the direction of projection"26 from backwards to forwards. Thus, we may argue that by cancelling the sacred realm attributed to reality located behind the picture plane, anamorphosis offers a certain kind of frontality that is both latent (hermetic) and potent at the same time.

However, we should be careful not to fix the motive behind anamorphosis simply as the distorted image of an object, since distortion alone as a motivation would still confirm the order of perspective at a certain level.27 As Alberto Pérez-Gómez and Louise Pelletier also argue, rather than a mere distortion, “the wondrous mathematical ordering of seventeenth-century anamorphosis obviously fulfilled more than […] a desire to manipulate the order of things."28 The motive embedded in anamorphosis could be perhaps discussed in close proximity with the above-mentioned “independently derived system of correlations."29

As Massey also draws our attention to the obscure and unexpected contiguity between sundials and anamorphosis (based on empirical observations and theoretical foundations) and anamorphosis (belonging to the domain of geometry) in Maignan’s *Perspectiva horaria*20 a speculative and experimental discussion on anamorphosis in the trajectory of sundials seems potentially poignant to cross-read these two apparently separate realms. She writes, investigating Maignan’s treatise: “As Maignan states, these [horographic] instruments, ‘starting from a flat mirror both fixed in place and movable according to a regular principle,’ project ‘the light of the sun or the gnomonically reflected light of the moon’ and thus ‘show the various motions of the celestial realms.’ […] like the sundial, the anamorphic device creates a picture from the interruption of rays and then constructs a representation of that intersection. Like the shadow cast by the sundial, anamorphic images demonstrate man’s ability to observe and manipulate the mechanical motion of physical phenomena. [...] Anamorphosis, however, intersects visual rather than solar rays. More importantly, anamorphosis entails the projection of rays from one surface to another. In marking a trajectory from surface to surface, or representation to representation, this ‘strange perspective’ (Maignan’s term) delineates the sensation-bound, finite, and limited aspects of vision itself."31

This strange contiguity between sundials and anamorphosis urges us to ask and question the possibility of *drawingdials* – embodied correlations inbetween drawings, whereby the reader and the drawer is embedded within the structure. By working projectively and polyphonically between variegated states of drawings (with us – the drawer and the reader (latent and potent) included), and by liberating the act of drawing from any intentions of distortion or representation, *drawingdials* unfold an alternative threshold between sundials and anamorphosis. Projective rather than the projected, *drawingdials* work inbetween. As Robin Evans states, “projection operates in intervals between things. It is always transitive.”32
TEMPORALITY OF A DRAWING AND THE COLLAPSE OF TIME

Does this contemplation that extends from sundials into drawingdials not seduce us to think of the possibility of ‘a clock of a drawing’? If so, is it also not possible to speak of the enigmatic hours of a drawing? Perhaps, yes, it does and it may be possible: Drawingdials transform into their own embodied clocks – like our own body clocks – and allow us to think of the relative temporality of drawing. Meanwhile, the hours of a drawing are crystallized within the projective and embodied languages and constructions of drawing itself, as we can see quite poetically in John Hejduk's The Collapse of Time (1984).33

John Hejduk’s The Collapse of Time is a poetic constellation of manifold structures. This nomadic constellation, envisioned to be dragged from place to place and from time to time by the inhabitants of the city, could be read as a poetic mechanism consisting of mainly three constructions: The first structure is the nomadic clock tower that tranquilly collapses into its own sarcophagus. The second structure is a vertical pole that is fixed to the ground, and that with a pulley system suspends a chair occupied by an observer. Lastly, the third structure is a nomadic booth on wheels, occupied by a woman.

We read in Hejduk’s “Diary Constructions”,34 that a woman among the inhabitants of the city is invited to the booth to recite a poem called The Sleep of Adam.35 Almost as a ritualistic recitation, this reading accompanies the collapse of the tower. While we examine the drawings of the clock tower, we, unknowingly and viscerally, accept Hejduk’s invitation and read the poem silently and internally over and over again. During this internally initiated recitation, we now realize that we do not hear the mechanical ‘tick tock’s of a regular clock tower, restless telling the ‘right’ time. In the absence of these mechanical soundings, we hear, instead, our own internal voice reciting the poem, our own inner ritualistic murmurings, resurrected by the rhythm of our own breath. Thus, the viewer of the drawings transforms simultaneously and literally into a reader – a poetic subject,36 that defines the temporality of the drawing. After all, Hejduk favors the act of reading a book over any mere optical engagement with a work of art. He writes:

“The distance between the reader and the page is considerably smaller than the distance between the observer and the painting. Also, the time spent before a painting is considerably less than the time spent in reading a book. While the subject/object matter in painting is in front of one in a single frame, a book presents a text usually over many pages, that is, through many passages. [...] Paintings are rarely held and even more rarely felt with the fingers. A considerable compression of space takes place with the book. A span of time has passed in reading a book. The thought of the reader is required to pass more time with the object ‘book’ and the duration of thought is extended. A book is less aloof and is more intimate, while a painting keeps a distance. A book’s scope is vaster, not necessarily better, just longer in its duration. [...] The pigment has an instantaneity, the text delays. Books take time and give time. [...] With text it is necessary that we speak. We can read a passage aloud or we can read it silently. Breath is necessary for both acts. When we read silently, we speak internally, with a sound in which the volume has been reduced to barely audible. [...]”37

Thus, we can propose that in The Collapse of Time, the temporality of drawing is now embodied as the duration of the ritualistic reading of the poetic subject. However, the temporality of the drawing is not only defined through this literal act of reading. In conjunction to this ritualistic recitation, the collapse of time is also embodied through a rather obscure kinetic projective plot set between the other two structures: between the collapsing clock tower and the observer descending along the pole, gazing across the frontal face of the tower. Relatedly, Hejduk notes three projective moments that define the collapse of time: 90 degrees, that is, “spatial, elevational, flat time”, 45 degrees, that is, “angular, isometric time”, and 0 degrees, that is “horizontal, perspective time”.38 Rather than just signifying the angular position of the tower, these three projective moments define the changing situatedness of the observer in relation to the rotating surface of the tower.

At the beginning – that is at the ‘spatial, elevational, flat time’ – the observer gazes into the frontal surface of the tower, standing directly across it. However, this condition slowly changes as both the tower and observer descend. At the ‘horizontal, perspective time’, the surface of the tower becomes fully horizontal, whereby the eye of the observer and the surface align perfectly on the same plane as if in an anamorphic construction. This peculiar and special moment marks “the condition of the world disappearing from view,” if we were to apply Rosalind Krauss’s statement, that she makes while discussing Hans Holbein’s The Ambassadors (1533).39 Within this critical framework, we can argue that the vocabulary and the possibilities of perspective are rather speculatively challenged than confirmed in The Collapse of Time.40 Thus, we may also propose that the ritualistic reading initiates and celebrates a certain rejection of a sole optical construct, and calls for an opacity that “blanks out time.”41
THE CLOCK(S) OF A DRAWING AS NON-INSTRUMENTS, EXPANDING THE VOCABULARY

In order to explore the curious spatio-temporal, embodied practice of divination of a drawing through the act of drawing, and also in order to unfold ‘us’ – ‘the drawer’ – as the integral ‘hermetic reader’ in the drawing, we decided to work on and ask ourselves this question of “the Clock(s) of a Drawing” in our elective course Drawing Constructions in the fall semester 2021-2022 (fig. 3). Our project “The Clock(s) of a Drawing” started firstly as

Fig. 3 – The initial poster of “The Clock(s) of A Drawing and DrawingDials”, and of the guest lectures. ©DrawingConstructions.
a series of embodied readings of various selected drawings or drawing fragments through variegated projective methods. In due course, “the projective cast”\(^42\) of drawing demonstrated itself not as a static construct (nor as a three-dimensional transcription, nor as a translation of the drawing), but as a ritualistic and poetic act of imaginative reading – as drawingdials. These projective drawingdials, with the ‘hermetic drawers’ as a latent and potent part of them, are constantly re-read and re-drawn, transforming themselves into enigmatic drawing-instruments of their own temporalities. These drawingdials embody the memory of reading that span over the whole semester, and become a compilation of anachronic durations of various rituals of hermetic readings. In each student’s work, we encounter the occult lines and traces of their own hermetic book of hours of drawings. Thus, these drawingdials manifest themselves as their own embodied clocks – or rather non-instruments.

Also challenging and expanding the contemporary vocabulary of analogue drawing instruments (that has diminished considerably with the rise of digital devices), by an experimental set of various materials such as flickering candle lights, tweezers, mirrors, manifold light sources, candle wax, strings, chains, various liquids, oils, gels, and cloths…, we intentionally avoided using papers and pens. Expanding this vocabulary even more through the integration of camera, screen, and sound…etc, the performative and ephemeral character of these embodied clocks is even more emphasized.\(^43\) These drawingdials transform thus into poetic and cinematographic acts of reading (fig. 4 - 9).

These ludic and performative drawingdials initiate and set at the same time various ephemeral, labyrinthine polyphonic conversations (fig. 10). Thus, our ritualistic gathering becomes a celebration of “a plurality of independent and unmerged voices and consciousness.”\(^44\) At this stage, ‘polyphony’ emerges as one of the key concepts: Not necessarily referring to the inclusion of a variety of sounds (the sound of the drawing, the sound of the instruments, the sound of dialogues…), the emphasis on polyphony is made essentially through the absence of any hierarchy or of any urge to merge voices into a unified happening or temporality.
Fig. 6 – Work by Ayhan Arfaaoglu (Fall 2021-2022). ©DrawingConstructions.

Fig. 7 – Work by Sena Arslan (Fall 2021-2022). ©DrawingConstructions.

Fig. 8 – Works by Ayesha Khanani, Öykü Duru Bilgen, Yaşar Emir Özbekbaci, Buket Pamuk and Aliaa Hatem Esmat Bahi (on the right) (Fall 2021-2022). ©DrawingConstructions
Who tell(s) the time? Whose voice(s) do we hear? Or rather, who tell(s) a drawing?

Our project “The Clock(s) of a Drawing and the DrawingDials” unfolds as an experimental drawing project in search for polyphonic temporalities embodied within the act of drawing with the drawer/reader as an inseparable part of it.

This experimental quest calls for variegated states of undecipherable incarnation of a hermetic reading/drawing as “an enigma in person” rather than “the representation of an enigma”.

Hereby, perhaps we may thus discuss the critical urgency of our own unfixed and inherently polyphonic situatedness and question the criticality of the act of drawing.

DrawingConstructions is an elective course initiated and instructed by Bahar Avanoğlu at the Faculty of Architecture, Istanbul Bilgi University since 2017.

DrawingConstructions participants:


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ROOB, 2015. p.11.
ERDIM, 2013.

22 "The Metaphorical House” is an artistic research project by BERNSTORFF AAGAARD, FLARUP, HORNEMANN, MENGEL, PIND, ROMME and ZEUTHEN LESENÉCAL at KADK, 2020-2021.

24 Baltrusaitis (1977. p.1) notes anamorphosis is “the most absurd side of perspective”.
29 See endnote 9.
34 HEJDUK, 1987.
45 The short video presenting critical excerpts from “The Clock(s) of a Drawing and the DrawingDials” has been awarded the Intricacy Prize at Archishorts by A+DFF (April 2022). DRAWINGCONSTRUCTIONS, Bahar AVANOĞLU, Canan IŞIK, İpek AVANOĞLU, Manuel J. PEREZ III (ed.). Available at: <https://vimeo.com/704311151>
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Visualizing Complexity in Extreme Architecture

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Architecture deals with the design of spaces for human activities, providing comfort to its occupants, within a myriad of environmental conditions. When placed in extreme environments, architecture must be responsive and turn these adverse conditions into a comfort space for human occupation. The Extreme Architecture Unit at the Department of Architecture, in Yasar University, is a conceptual umbrella under which students are invited to develop architectural projects meeting the technical demands of designing buildings for extreme conditions. While confronted with the evidence of the nature of such extreme demands, students are requested to develop an extreme scenario, which is indeed the storyline wherein all design elements are rooted. In this sense, a visual narrative is the key instrument to code the projects’ syntax and to explain the logic by which each particular project can be understood. However, the unit demands the use of rather technical arguments to sustain a project that is responsive to extreme conditions, thus close to being developed through a scientific method. But then, how can visualizations express individual approaches to the otherwise obvious solution to a technical problem? How can visualizations maintain uniqueness while expressing the project’s response to the technical demands? To answer both questions, we must embrace the inherent complexity of extreme environments. The use of visualizations allows students to deal with such complexity from their own perspective, expressed in the language of those representations. In this essay, the authors attempt to provide answers to these questions by critically revising two projects developed in the unit.
A SOURCE OF DESIGN COMPLEXITY

Architecture deals with the design of spaces for human activities, within a myriad of environmental conditions. From a physical point of view, one outcome of architecture is a construction whose goal is to provide comfort to its occupants. The amount of work, or energy, involved in providing this comfort is closely related to how far are the comfort conditions from the environmental conditions, which are usually measured in terms of temperature, daylight, ventilation, acoustics, and so on. All these conditions display average values that define what we could call ‘normal’ environmental conditions, and to which architecture responds in a similar fashion, i.e. with technology and construction-related knowledge that entail the design of an average building or construction. Obviously, these normal conditions are highly dependent on specific locations; for example, in terms of temperature, what it could be considered cold for a place, may be considered warm in another. The obvious point here, in the definition of so-called normal architecture, is that the conditions designers provide to the occupants of these spaces, are setting up comfort levels within environmental conditions, to which humans - in one way or another - could adapt without threatening their very existence. However, how does architecture respond when the environmental conditions do pose a threat to life? To attempt a response, we must first address the concept of extreme environmental conditions, which is encapsulated in the idea that all environmental conditions are extreme as long as humans cannot live or even stay within them, without resorting to life-support equipment or outfits. This is the case of extreme cold environments, such the Artic, or extreme hot environments, like deserts. But also, conditions created by human-made disasters, such as nuclear radiation, droughts, or rising sea level. Consequently, architecture that must be responsive to these extreme conditions, must first equip itself with a set of technical knowledge - the goal of which is to support a design that can turn these adverse conditions into a comfort space for human conditions. Thus, how can this architecture that is responsive to extreme environmental conditions be defined?

The Extreme Architecture Unit is part of the Graduation studio at the Department of Architecture, Yasar University, in Izmir, Turkey. The main goal of the unit is a conceptual umbrella under which students are invited to develop architectural projects meeting the technical demands of designing buildings for extreme conditions. The unit encourages design explorations within a wide spectrum of extreme environmental conditions, including deserts, space exploration, post-disasters, social inequalities, and so on. While confronted with the evidence of the nature of such extreme demands, students are requested to develop an extreme scenario that justifies what seems a contradiction in itself: why anyone would live under these conditions? And the answer is meant to support, primarily, the arguments needed to define the users-function relationship (e.g. researchers-facilities for exploration, or astronauts-habitat) and the particular technical demands over the design (e.g. the role of the building envelope or structural challenges). Nevertheless, when we considered the different projects developed in the unit during the last semesters, we realized that the extreme scenario is indeed the storyline wherein all design elements are rooted.

VISUALIZING COMPLEXITY

The realm of these explorations is the digital environment, thus the visualizations represents an immaterial world, where rather than bounded by physical laws, the visualized objects acquire value as cognitive tools because of their semantic value. Referring to digital models in cultural heritage (Pietroni and Ferdani, 2021), explain that the ‘content’ of such digital models is not just a mere reproduction of a physical entity, but ‘a communicative and cognitive unity, endowed with form and meaning.’ Such an approach is valid beyond the limits of cultural heritage and applicable to any digital model used in a design process, because it is in this dynamic process where the designer experiences and simulates possible scenarios, which ultimately leads to meaning and understanding, and thus to acquiring knowledge. Hence the importance of experimenting with the virtual model. Visualization tools are not only useful to enhance students’ understanding of somewhat complex theoretical subjects but also promote self-learning by experience and interaction. For example, they “include dynamic demonstration of theoretical engineering models allowing students to manipulate, experiment, and translate theories into real-world applications.” (Haque, 2003). Visualizations can be used to cover the entire design process, from the initial design concepts to the final stages of fabrication and building construction. Moreover, 3D models can be used by design teams for coordination and also to convey design ideas to clients and stakeholders (Bouchlaghem et al., 2005). Although a 3D design process enhances data integration, visualization, and interaction, the use of 3D models in the context of coordination and discussion of the work associated to build what the model
represents, remains a challenge for design teams because these digital models are difficult to print (Tory and Staub-French, 2008). The main disadvantages of 3D models are the often-large file size, their inherent complexity that makes them unsuitable for a larger non-specialized audience, and that the potential of using structured information is lost due to the use of non-architectural applications to produce the design outcomes (Boeykens, Santana Quintero and Neuckermans, 2008).

The main role of digital visualization in Architecture is representing relationships beyond the geometrical and establishing “relationships between analysis and visualization to the structure of abstraction” (Koutamanis, 2000). In their study, Cao, Kahlon and Fujii (2021), remind us of the key role of design interpretations during the design process, bridging the gap between reality and designers’ imagination. Design interpretations are inherently ambiguous and hence, their value as both tools and framework of design explorations. In this sense, a visual narrative is the key instrument to code the projects’ syntax and to explain the logic by which each particular project can be understood. And herein lies one first apparent contradiction. The unit demands the use of rather technical arguments to sustain a project responsive to extreme conditions, thus close to being developed through a scientific method. Then, how can visualizations express individual approaches to the otherwise obvious solution to a technical problem? Whereas it is possible that visualizations allow the uniqueness to appear in the design, as they bring in aesthetic or artistic perspectives, in this case the technical dimension of the projects are also to be expressed. Thus, how can visualizations maintain uniqueness while expressing the project’s response to the technical demands?

To answer both questions, we must embrace the inherent complexity of extreme environments. In all scenarios, narratives, and visualizations, there is one common aspect: complexity. The use of visualizations allows students to deal with such complexity from their own perspective, expressed by the language of those representations. In the following sections, two projects developed in the unit will answer these questions.

**DESIGNING FOR MARS**

Why going to Mars? Planet Mars represents the hope for a better future for humanity and an opportunity to avoid repeating the mistakes made on Earth, polluted and in countdown to extinction. For this reason, a pioneering research centre is proposed for colonization and habitation on Mars. The Lava tubes located southwest of Mount Olympus, were selected as location. Lava tubes are important because they protect from radiation and sandstorms, and because they provide access to underground dry ice. This extreme scenario is completed with the use of a superconducting substance, able to produce magnetism when the air temperature is -120 Celsius degrees. In architectural terms, the complexity is addressed by revolving around three aspects: material of the project, the 3D printing-based structures, and the verticality which converts mechanical to static energy. The project comprises three types of spaces: flying and fixed research units, and research centre. Flying research units have the ability to ‘fly’ thanks to the superconductor properties and provide quick and easy access to conduct research at any point on Mars. The main crew accommodation units are located close to the Martian surface, and include all living areas; they are located inside the lava tubes to be protected from external factors. The construction of the first structure will be built using 3D printer technology before the astronauts reach Mars. Aluminium and dry ice will be used as main building materials. The 3D printed structure will be vertical to avoid dealing with the complex forms of the Martian landscape. Vehicles with wheels will not work here, so the design is not based on the use of the land, but on the floating elements and the advantages of the Martian atmosphere.

All this complexity is expressed through the use of simple visualizations. Because the Martian elements are unknown and their behaviour is therefore unknown to humans, their use in the design needs to be easily understood. Consequently, the building shapes are simple and organized around three types: the flying elements based on the superconductivity on Mars, which allows them to float in the Martian atmosphere. The shape of these elements is shown with simple geometries; the ones with the spheres represent one-person capsules for searching & exploring the unknown Martian landscape. The shape of the research centre appears complex in opposition to the overall simplified forms. The reason is that this complex shape can create new structures and new stations, so its complex shape represents the complexity of organisms. The capsules’ forms are spheres and circles, which can be created by the 3D printers. These simple geometries are supported by vertical structures, which are very tall. The vertical shapes give the feeling of ‘height’ compared to the small shapes, defining the border of the building areas. Because the main idea is showing the visuals with the simplest geometries, the research center and the building design uses only tubes, because a hierarchy is implied in the organization based on simplicity. This is for avoiding a crowded and huge building, so only one of the buildings uses this complex shape.
DEALING WITH UNCERTAINTY IN REPRESENTATION

The Martian landscape is an uncharted territory. The absence of real photos of the area where the project was located, made it difficult for realistic visuals and required the use of abstraction. This proposal deals with the complexity of the Martian context by increasing the intelligibility of the axonometric image (Fig. 1), drawing it as simple as possible. Since the form of the project responds to the 3D vertical printing logic of the structure, the best technique to show the resulting architecture is the axonometric drawing technique. The building type and mass are thus defined by and through the axonometric, which is the output of the modeling software. The uncertainties of the Martian environment, on the contrary, are just hand drawings, added later through the use of shadows, textures and selected colours. The choice was thus drawing the axonometric in a cartoon style, blending the fictional aspects of what is imagined to be or happen, with the abstractions used to represent both the conceptual ideas and the location of the project. These abstractions are represented primarily by non-scaled drawings. However, cartoons are usually images depicting bright colours, which would contradict the overall simplification of the building drawing, where the cartoon technique covers up the need for detailing and joints. For this reason, pastel tones are used to visualize the complexity of the project. Colour choices define materiality. Blue represents the building envelope made of dry ice and yellow represents the 3D printed structure. The yellow-white texture indicates the surface and atmosphere of Mars. The clouds and surface layers look like a rusty paper texture, matching the land surfaces. And this kind of form expresses the yet unknown Martian underground. Grey indicates the crest of a crater and its darkness. Since the project was located inside a crater, part of the surface is cut off in the drawings, so that the interior can be shown. Finally, the astronaut is placed as the key element of the visual narrative: who will use this building? The astronaut is the reason for the structure to be designed that way. The human figure entails life, and thus it is the first element of the project that attracts attention, while simultaneously staying in both surface and underground layers, breaking the dimensions of the drawing.

The section drawing technique is chosen to express the dynamic of the structure and the life inside the project. The section drawing (Fig. 2) answers the question of how life on Mars would be? However, unlike the axonometric drawing, the section follows the conventional rules of technical drawing, yet is based on using two specific tools: a range of pastel tones and lines of different geometries. The colour scheme defines the use of each material.
Brown colours indicate the crater where the project is located. Thick and sharp brushed style is used to represent abstract and functional visualizations. In this case it is used to express the irregularity of the crater’s form. In the section, the structure is indicated in grey for a better fit with the idea of being a technical drawing. Attached to this structure, blue is chosen to represent the materials used to build the flying units’ structures. Gray is for the structure and the superconductivity elements. The gray lines in the background represent the superconductivity between the linear structures, emphasizing their heights. Thin straight lines were used in the background to emphasize the heights and verticality of the slender superconducting structures. Since the goal of the section is to show human life on Mars, the circulation, the elevator and the underground areas are highlighted in here. The circulation in the section helps to explain the connection between the research units and the research centres in particular. At the same time, the circulation logic in the project was explained by showing the elevator between the research centre and the flying research units. Due to the complexity of the project, two further drawing decisions are set up to emphasize the key aspects: a strong horizontal line connecting the two visuals (above and under) — thus connecting the external life with the inner living space —, and using pop-up circles to provide further information of the designed areas. These close-up images give insights into the way people will live in the Martian environment.

The accommodation units located inside the crater symbolize the hope for all humanity (Fig. 3). The uniqueness of the designers’ approach is expressed by depicting the cave as dark and somewhat scary; conveying feelings of insecurity in the background. However, the
structure and all design that is made by humans come from the light, which represents hope, a new life and a new beginning. The scary cave emphasizes the contrast between the bright layers and the background, representing what is still undiscovered and untouched.

From the surface the light comes in, thus the structure is very bright; hope is depicted by showing the survival units in white. Visually then, the accommodation units are highlighted and the emphasis is put on the feeling of hope. Life on Mars is indicated by placing the astronaut figure in the centre of the image.

The astronaut represents humankind. No longer on Earth but somewhere else on Mars. This visual technique is not a cartoon but a sort of rendering, which we can call an abstract render. Some bright brush touches show the contrast between the dark background and the brightness, revealing the feeling of hope and a new beginning.

EXTREME TRANSPARENCY IN THE NORTH SEA

A white background provides an adequate framework to highlight the scale of the oil refinery complex and the complexity of its structural design (Fig. 4). While the original contextual chaos is depicted in simple black and white, the colour will be used in further stages of the project to express a new complexity of both interior and exterior design. The use of drawings meant to devise a way to explore how intricate and compact the features of the existing structures were. The intricacy of the structural components was one of the key references in forming the idea of uniqueness in the design. In the early phases of the design process, sketches are used to identify those key design aspects that lay the foundation of what will be developed as an architectural project. Such key aspects are often complex compositions that, through the design process, fostered an architecture in harmony with this complexity. However, since the distinctive lines were clashing with the black lines of the background, a further simplification of the design was required. Gradually, the lines’ thickness and colour contrast with the external elements and, thus combined, highlighted specific features against the deconstructed blank design canvas.

Transparency and depth slowly began to play a role in the developing of the project and the expression of its technical features (Fig. 5). To achieve a full sense of integrity, the complexity of the parametric design is integrated using transparency in a way that the even the supporting elements are interlaced with the aesthetic features of the proposal. The drawing, thus, turns itself into an illusion, a jumble: it provides a distinct perception by generating the sense of depth in this project, while simultaneously, grabbing attention by displaying a graphic language, which is close to a hand drawing. The simplified features intend to encourage the observers to figure out by themselves.

Fig. 4 - Oil Rigs Representations (Kaan Çetin).
the mystery of the inside box, which was lacking details and transparency. During the design process, the density and intricacy of the project’s features, have resulted in unusual intersections. Simultaneously, along with the simplified diagram descriptions, the focus shifted to specific design concerns, which required to solve the overall confusion. The design components were put in focus by the use of sketches and colours, yet the resulting jumble began to decay along with the many foci.

The integration of sections and plans, which diverge with colours and the use of supporting detail drawings, had to be defined without scaling them or even adhering to any exact technical features of the oil refinery complex. Yet the intensity of the technical language of these drawings should not be underestimated. Along with the technical representations in the plan drawings (Figure 6), the colours and line choices, integrated in this context, play a significant role to convey the designer’s intentions. The combination of a colourless, abstract, and translucent background generated by the facade and shell structure, in contrast with the aesthetic concerns and optimized structural system details, allows the designer to gradually forge a unique impression of the design solution, in a technical sense.

Fig. 6 - Plans (Kaan Çetin).
DISSECTING COMPLEXITY

The specifics of the intricate structural system, the extreme environmental conditions in which the project is located, and the current design of the oil refinery become the design substrate to which the architect is confronted. To display the resulting complexity, therefore, the design is deconstructed and thus, the parts that are intended to draw attention, exposed (Fig. 7). The deck, floors, structure, envelopes, and building systems structural systems have all been separated in an exploded diagram. The division helps to differentiate between the specifics of the intricate combination and the design’s features. The inherent chaos inside the black box is separated into layers, using colour codes to highlight the contrast between the selected elements and the blank background. The intended visualization, somehow combines the visions, providing not only the exploded diagram, but also those from the plan layouts and systems sections. This singular image is, thus, based on minimal features to emphasize a design narrative where the
complex aspects of the structure have disappeared.

Drawing techniques, such as system sections, based on accepted technical format provide integrity to the design; sketching over the drawings provide a better fit with the design intentions. A balance in the use of these drawing tools promotes design integrity and depicts a sense of harmony in the composition (Fig. 8). The basic scale-free sketch drawings reinforce the narrative of complexity in the design, without overcrowding the image with definitions but with design possibilities. This is achieved by drawing attention to the sense of void placed in the middle of the depicted section. While the position of the sketch drawings in the section have been carefully selected, the major setback is the possibility that the aimed visual complexity made the model complicated to read. The overlaying details might become progressively hazy, resulting in a confusing image. To circumvent this, without compromising design complexity, transparency and shading methods are employed to alter the composition. The result is a section full of design possibilities. Framed, coloured, transparent features, as well as contour lines, maintain the project’s integrity when viewed from a distance; and carefully placed sketch drawings that explain the design’s intention, help to focus on the details. This visual duality allows bringing together two distinct options at the same time, in clear reference to the sense of complexity.

**REPRESENTATION AS THE PROJECT ITSELF**

Following the design decisions derived from the initial analysis, case studies of structural forms that will ensure structural integrity, plan boundaries, and circulation within them, are bounded by the process of integrating visual design decisions into each other. These studies are not developed in a sequential order, but rather as a coordinated task. Their goal is to make the architect’s and designer’s perceptions aware of the extreme conditions in their projects, by experiencing the design values at every stage of the architectural project, from technical decisions in visualization design aesthetics to the mixture of representation techniques. In this regard, the section provided insights into the complex nature of the projects, unveiling new possibilities and horizons for explorations. As Lewis, Tsutumaki, and Lewis (2016, p.6) explained:

“... architectural section is key to architectural innovation. Given the environmental and material challenges that frame architectural practice in the twenty-first century, the section provides a rich and underexplored opportunity for inventively reimagining the intersection of structural, thermal, and functional forces. Moreover, the section is the site where space, form, and material intersect with human experience, establishing most clearly the relationship of the body to the building as well as the interplay between architecture and its context”

The final project as visually exposed, is a design product resulting from the use of visual coding and visualization tools, that are embodied within the architectural principles and realities. The design’s abstractions and interpretation were combined with architectural drawings and structural technical solutions to create a form resembling technical drawings. In retrospect, one questions, as a reflection, if the representation of the project could not go beyond the mere description of what it attempts to show, and rather to extend the nature and logic of the representation to the point of becoming the project itself. From this perspective, building in a place of such a different reality, for example, might question the intrinsic nature of that difference, e.g. the lack of gravity, and thus moving away from describing reality to designing one where spaces are indeed very different from ours on Earth. This is the moment when representation takes commands of the project and thus reaffirming that indeed “architectural drawings are easily able to transcend any reference to reality” (Cook, 2014).

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Drawing Spatial Movement

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In a world increasingly understood in terms of process and flow the only constant could be said to be movement. Yet our modes of designing and drawing architecture can sometimes seem almost resolutely static. A desire to encase our movement within design is nothing new however. Eisenstein’s analysis of the Acropolis reveals its presence as experienced in the 5th century, and the landscape gardens of the picturesque were designed to unfurl in advance of their promenading viewers. But if we are to engage our architecture in our unassailable entwinement with a world made of process we need new tools. We think through our drawings, but conventional techniques do not readily open up or enter into conversation around movement, process or our place in time. The vital role our drawing conventions play as exacting translators of design to construction demand precision communication that holds no place for ambiguity or change. Yet as incubators for speculative futures this language of representation offers little space or scope to engage time. Might we therefore identify new forms of canvas, new languages, within which to incubate design ambitions; complementary drawing techniques within which we might think through in the language of our world, movement?

The Moving Through masters course at the Bergen School of Architecture began to ask these questions, opening up an exploration of what it means to move through space, unpicking the implications for design. Over the short course highly speculative experimental work began to pose potential steps forwards.
“Yet life, Bergson insisted, is not contained in things. It is movement itself, wherein every organism emerges as a peculiar disturbance that interrupts the linear flow, binding it into the forms we see. So well does it feign immobility, however, that we are readily deceived into treating each as a thing rather than as a process, forgetting that the very permanence of its form is only the outline of a movement.” It would be wrong, then, to compare the living organism to an object, for ‘the organism that lives is a thing that endures’. Like a growing root or fibre, it creates itself endlessly, trailing its history behind it as the past presses against the present” Tim Ingold1

Bergson’s position is increasingly echoed by scientific understanding, which reveals our world as a folded mercurial place of constant flux, a composite of events engaged in a continual performance. The notion that anything is static, quantum physicist Carlo Rovelli relates5, is merely an illusionary construct of our own problematic minds. A mountain is not a fixed object but a process of gradual change, as is the chair we sit on as we read this, or our very bodies; all are processes merely sheltered in fantasies of fixed form. We, the mountains, our chair and everything else we see are companions on a journey through time. We are all unfurling narratives built of past, present and constructed predicted futures. One might argue movement is the only constant. Designing for and with movement therefore appears fundamental to enable our designs to be woven into these flows. Yet our contemporary modes of designing and drawing can seem limited in their ability to discuss movement.

An ambition to encase our movement in design however is nothing new. One of the most notable cases of overt design for the moving subject is the landscape gardens of the Picturesque of the 18th and early 19th centuries. As transport became more widely accessible, walking transitioned from the lowest form of locomotion into a luxury pastime and for first time became “an end in itself”.3 The landscape became an extension of the parlour; a place for the promenade, to see and be seen. The Picturesque English landscape gardens of this period were precisely fashioned to operate at walking pace or at the speed of a carriage ride. Whole villages were relocated, lakes dug and woodland positioned so panoramas would unfurl in seamless timed sequences involving narratives to linger in the minds of fashionable visitors. Steenbergen and Reh 4 engaged in a process of drawn analysis of some of these landscapes in order to uncover and reclaim the design tools employed. Chasing these ambitions, however, also began to identify drawings tools capable of discussing movement, as these were fundamental to capturing these temporal landscapes.

Design for the moving subject also appears identifiable in the fifth century BC in the layout of the Acropolis. Sergei Eisenstein drew on Auguste Choisy’s analysis as a jumping off point for his conjecture on parallels within the site to cinematic framing. Eisenstein read the site as a montage sequence of juxtaposing cinematic film shots, focused on four “successive picturesque shots”. He concluded: “It is hard to imagine a stricter, more elegant, and more triumphant construct than this sequence.” These shots, Eisenstein surmised, are embedded within a time framework that positions them relative to the pace of human movement. He notes the “length of these montage sequences is entirely in step with the rhythm of the building itself; the distance from point to point is long, and the time taken to move from one to the other is of a length in keeping with solemnity.” The very nature of our movement appears encased at the heart of the design. Elements seem configured to emerge into view, posing to the viewer in the most advantageous way as they walk across the site. Obstruct, glimpse, reveal, conceal; a narrative of past and present allied with the constructed intrigue of a half glimpsed future.

The Acropolis is not unique, both Eisenstein and Tschumi note similar ideas of sequences at play in Catholic cathedrals and churches for example 7. Tschumi discussed the stages of the cross as a sequences of pause points within a spatial construct8. Mies Van der Rohe’s Barcelona Pavilion is another example he offers, noting two sequences, one for vision and one for bodily movement, offering the visitor a multitude of “readings” 11. For him, sequences are all set within a “time sequence” and his discussion of this returns us to the allusion of the timed nature of the cinematic. ...“all sequences are cumulative. Their ‘frames’ derive significance from juxtaposition. They establish memory – of the preceding frame, of the course of events. To experience and to follow an architectural sequence is to reflect upon events...”9. He discusses “transformational sequences [that] tend to rely on the use of devices, or rules of transformation, such as compression, rotation, insertion, and transference. They can also display particular sets of variations, multiplications, fusions, repetitions, inversions, substitutions, metamorphoses, anamorphoses, dissolutions”10.

Such examples make allusions to the cinematic and the construction of stage sets engaged in preconceived, orchestrated sequences choreographing actors’ movement. The clear parallels drawn to cinematic space in Eisenstein’s writing are perhaps revealing? The human experience of movement through space seems understood to be equally shared by a camera, rather
than as entwined processes. An encompassing of what it means to move through space - in terms of our fuller perception of that experience - seems less engaged. When interrogated, its complexities and inherent indeterminacy emerge; border zones of perception, spatial vagueness. These design methods feel removed from the messy organic whole of our entwinement with place. Tim Ingold notes “We perceive, in short, not from a fixed point but along what Gibson calls a ‘path of observation’, a continuous itinerary of movement (Gibson 1979: 195–197). But if perception is thus a function of movement, then what we perceive must, at least in part, depend on how we move.” 12 We are implicated bodily, our perception intimately interrelated with the very nature of our movement and the landscape we move through.

How might we therefore begin to engage these complexities of the moving subject? We must return to process. An architect, does not make buildings, Perez-Gomez states, the architect makes “the mediating artifacts that make buildings possible” 13; i.e., the drawing, which Jonathan Hill describes as a “transitional object” 14. The drawing is the world in which design emerges, we literally think through our drawings. The manner of drawing can therefore be highly influential. The form of our drawings, Hill writes, affects how we think and thereby what we do, whether consciously or not 15. It is therefore vital, he continues, that these tools are appropriate for our aims 16. Ingold points to the drawing as the natural tool for capturing the world as process; “...the task of life is never finished, and that the world never ceases its worlding, does not mean that lives are half-completed or that the world we inhabit is half-built.... It is rather a holism that is anti-compositional, fluid, processual and improvisatory. And its key descriptive practice is drawing.” 17 Yet architectural drawing conventions can appear resolutely static, challenged in relation to process or movement through space and time. So why are they so apparently unhelpful?

Architectural drawings are not an end in themselves, their primary task one might argue is to precisely represent something beyond themselves. A key role is for them to act as a precision carrier of information for translation into material through construction. These drawings are not places to discuss ambiguity, indeterminacy or vagueness. As architects however we also use these drawing methods to house and nurture embryonic design, working through them to speculate on alternative potential futures. If those futures are to engage with process, movement, and time then such conventional drawings start to feel uncomfortable and restrictive. Enquiry into the foundations of our orthographic traditions in architectural representation reveal the ontological ghosts that inhabit our drawings. As Perez-Gomez says “The descriptive set of projections we take for granted operate in a geometrized, homogenous space that was construed as the ‘real’ space of human action during the nineteenth century” 18. Suspended in the drawing construction is a vision of a static world other to us clouded by shadows of dreams of ideal platonic solids and timeless realms. Such drawing tools seem a particularly inappropriate basis for evolving design born of movement.

Might we therefore need another mode of drawing, a complementary tool to these precision tools for construction; a canvas capable of responding to movement and our presence within which to design? Might we evolve a time rich canvas that starts to speak of, and to our world in its own language of movement and process. Such a nurturing home might begin to unveil new avenues for designing with and into our world. Hill writes: “some of the most innovative architectural developments have arisen not from speculation in building, but through the translation of particular qualities of the drawing to the building.” 19

The Moving Through master course at the Bergen School of Architecture set out to pose these questions with tutors Charlotte Erkrath, Sarah Stevens, Kasper Magnussen and Matthew Turner. During the Spring of 2020 the course began an exploration of our experience of movement through urban environments, drawing on experimental methods to reengage our embodiment as active participants in the generation of lived space.

Careful deconstruction of our experience revealed complex constructional geometries that enabled specific spatial experiences; their capacity to play with size and scale, enhance perspective or surprise with unexpected choreographies of views. Our engagement with space under these terms led to the development of new methods and tools through which bodily and time-based spatial notions could be recorded or drawn out. The work spanned across digital and analogue drawing methods, recording devices, as well as intuitive and artistic strategies. Explorative and searching research approaches were evolved utilising unconventional architectural tools evolving modes of representation which might speak of movement.

The following student projects exemplify some of the different approaches explored: Spatial Fields at Different Speeds discusses perception and field of view in terms of speed of movement, A Montage of Space deconstructs the idea of the privileged view of the landscape gardens of the Picturesque, Local Perspective explores motion in static drawing. Landmarks explores strategies of
orientation when moving through the city, and Motu Embodied Perception evolves a drawing method to both investigate and enable design with motion blur. These explorations are starting points on a journey of engagement with the challenges and potentials inherent in designing for and with spatial movement.

**SPATIAL FIELDS AT DIFFERENT SPEEDS**

This project began with a reflection on experiencing the landscape whilst travelling at speed on a train. A 7-seconds film shot from the train was analysed to understand the experience and determined a split of foreground, mid-range, and distant views. A spatial collage was used to construct the spatial reality of this perception, where the foreground stretches far wider than the background.

Exploration of this phenomenon when moving by foot or on the light rail through a cityscape furthered understanding. Depth of field and detail. A focus on depth of field, these layers and the detail within these, appears to make it possible to understand one's own speed. The farther we see, the wider the actual range we can see due to the field of vision expanding with the distance. Things appear to shrink when we are farther away from them. Therefore the visually perceived length of the foreground is more extensive than its actual length and the opposite is the case with the background. The works begins to hint at tools that may enable these ideas to be engaged within in a design process.
A MONTAGE OF SPACE

In a motion picture series of images are arranged to suggest new ideas or interpretations, this is also possible within a choreographed movement through space. The work explores how we might begin to engage the linked phenomena of perception, montage, sequence and parallax within the design process.

The research began with a walk through Bergen in Nygardsparken. A long sloping hill with a bench resting in the middle could be seen on approach, yet this perception was soon revealed to be false as previously hidden elements unveiled themselves as progress was made further along the path. This began an exploration of the notion of the privileged view, and highlighted the potential variance between the reality of a space and what we think we are seeing. Multiple realities may therefore exist in one place, but we only see one at a time dependent on position. A fixation on the privileged view however can shut down the potential this holds however, as Eisenstein writes it can become “an obstacle blocking in the imagination of the reader the infinite potentiality of other possible views.”

The aim of the project was to evolve drawings capable of representing space through the eye of the mobile observer, with the ambition that these might inform the design process. Collaged perspectival drawings begin to reveal space seen from the perspective of movement. As a design tool these may act to reveal opportunities, discover hidden spaces, or encourage movement through intriguing the observer. It begins to open up a complex world of multiple perspectives. The park itself acts as a hidden or secluded green space within the city. Why not go further, shattering the privileged view and uncovering spaces which only appear through movement?

Fig. 7 - Map of the situation(a-position/b,c,d,e,f-direction of view).

Fig. 8 - Image stills.

Fig. 9 - Direction of the movement.

Fig. 10 - Variations of views; full, balanced, privileged, symmetrical, oblique.

Fig. 11 - Depth speed collage investigation in the city.

Fig. 12 - Mapped exploration of movement distortion drawn from photo collage.

Fig. 13 - Experimentation to uncover new spaces through movement distortion.
LANDMARKS

This project explores the experience of landmarks when navigating the city. The work began with a walk along a serpentine path leading uphill towards the mountain Fløyen in Bergen. Photographs were taken at every four steps when walking downhill towards the town creating a sequence of stills. These images were then collaged to layer this time based experience into a single image of a continuous urban fabric. The image therefore includes all views experienced along the way. The information contained within the collage was then drawn out through the mapping of visual cones, revealing specific visual anchor points, landmarks, that enable orientation within the view.

A subsequent study applied this approach to the Fløyen light rail station, taking this as such a landmark. An exploration of the views from several perspectives, pointed to the fact that architectural objects do not present themselves to us in their entirety, but rather as fragments.
LOCAL PERSPECTIVE

In Bergen, especially when walking in Sandviken, it is hard to see the ocean in its entirety, with the only view points alleyways between houses. When we move however we see a far wider ranging view than that first suggested by the width of the alley. This range also continuously changes with our movement. A series of collages uncover this reality. A series of photographs were taken while moving from the left side to the right side of the alley. The opening of the alley controls our perception of the view. This can even lead to perceptions of movement in the view itself yet this effect disappears when the frame of the alley increases in size or becomes particularly narrow. The project begins to draw parallels to the traditions of Chinese scrolls where perspective does not necessarily correspond to one viewpoint and different parts of life are drawn into a composition of local perspectives.

MOTU EMBODIED PERCEPTION

This project aimed to explore the nature of in-motu [being in motion] perception and its importance in our formation of place and atmosphere. What started by trying to understand the visual perception of space grew into an understanding that, in-motu, the clarity of this perception isn't of consistent quality. The work combined the way that our attention focuses in and out of spatial clarity while we are in movement with the radial nature of our optical focus.

A series of 3D scans were taken at eye level whilst walking a goat track between Breistølsveien and Fjellsiden Nord. Their overlaying uncovered both unique and typical features of the journeys. The edges of the vignettes smoothed out as the scanner projected and approximated geometries. This appeared analogous to the nature of the radial focus in our vision and the experience of coming in and out of engagement with the specificities of the place when walking through the forest.

The work opened up an understanding of the form of space as blotchy vignettes of detail formed out of implied fields of atmosphere. What also became apparent was that these moments of clarity were constantly varying dependant on ever-changing temporal physical, environmental, social, and psycho-personal conditions. Perception of space in-motu was revealed as less concrete than suggested by a traditional spatial survey, with only moments of actual spatial clarity or focus. The method was then deployed for the site survey of a design project site at Festingen, Bergen. The drawings studied the rhythm of focus and blur in the walk, identifying view shafts illustrating limited reading of the wider plane. These findings were informed the initial design moves, opening up a new territory for exploration.
Fig. 25.

- Similar average path geometries upwards and similar downwards
- Similar path during some of the most gentle terrain
- More elongated path on the ascent possibly due to the longer time spent scanning during a slower upward process
- More pronounced curves—especially through the slower initial rock ascent to the foot bridge
- Gaps in information due to danger of scan in downwards trajectory over terrain

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<th>Upward Plan 2</th>
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Clear skies, low sun

Fig. 26.

- Combined upwards surveys
- Combined downwards surveys
NOTES

3. Tim Ingold, Being Alive, Routledge, Abingdon, 2011, p.38
12. Tim Ingold, Being Alive, Routledge, Abingdon, 2011, p.46

References

Visionary Representation as an Anomaly

Indeterminate Trajectories in Early Republican Turkey’s Art and Architecture Environment

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Bu çalışma sanat-tasarım-mimarlık kuramı literatüründe çeşitli yaklaşımlar, üretimler, aktörler ve söylemler üzerinden ele alınan eleştirel-yaratıcı vizyoner/avangard tavrın Türkiye bağlamını tartışmayı hedefler. Gelecek ve yeni fikrin, olası kültürler arası etkileşimin, hangi yerel temsiller üzerinden okunabileceğini araştırır. Bu kapsamlı önerme dahilinde, yukarıdan aşağı bir yaklaşım yerine bir takım varsayımlar/sezgiler üzerinden kurulan “kararsız izleklerin” tartışmanın odağındaki kavramlara ve bağlama dair potansiyel ilişkileri ve etkileşimleri bir araya getirecek olan, üst ölçekte vizyonerlik tanımının kendisi, temsil ve eleştirinin rolü ile birlikte özelde Türkiye bağlamına ilişkin açılımlar, tarifler ve tartışmalar aç anonymously for the purposes of understanding or thinking process. Here, the trajectories formed by the relationship between “the visionary” and “the avant-garde” are deciphered and their conceptual extensions are discussed. In this respect, the Early Republican Period of Turkey, contemporaneous with the modernist avant-garde in Europe, defines a temporal trajectory for the discussion, while the propagandistic booklet Güzelleşen İstanbul (Beautifying Istanbul) presents a visual-imaginary trajectory.
INTRODUCTION: INDETERMINATE TRAJECTORIES

In the mainstream literature of art and architecture theory, traces of visionary approaches can be observed through various thoughts, schools, actors, productions, and discourses. It is possible to say that this creative-critical approach which takes the “future” as a design input has a long history, even if it intensifies or fades in some specific times. From Boullée’s monumental structures to Constant’s New Babylon, from Piranesi’s inspirational drawings to Russian Constructivists’ provocative paintings, all these show prospective and visionary approaches (see Collins, 1968; Goodman, 2008; Spiller, 2008; Betsky, 2008; Witzgall and Stakemeir, 2017; Gadanho, 2017). However, within this fragmented continuity in time, it can be seen that visionary situations, activities, or designs related to the Turkish context do not easily find a place, and are often left out of mainstream theoretical discussions. Although this paper doesn’t make a claim to position the Turkish context within the aforementioned framework, it pursues traces of visionary approaches in Turkish art and architecture. This paper aims to decipher both the alternative methods and instruments for pursuing a creative-critical visionary approach in the Turkish context from a bottom-up perspective. The questions such as “can we talk about the visionary-being in the art and architecture environment of Turkey”, “how this approach or tendency can be described”, and “which local representations can be instrumentalized to handle the idea of the future, new and cultural interaction” emerges as guiding questions for the research.

As a methodology, this research is based on a set of connected assumptions conceptualized as “indeterminate trajectories”, and paths, networks, extensions arising from these trajectories. To find a way within the larger research question, the proposed method of “indeterminate trajectories” makes open-ended discussions possible rather than a top-down approach. It seems to be a convenient method to infiltrate/deconstruct claims such as “defining the visionary in the art and architecture environment of Turkey” or “positioning the Turkish context within the mainstream discussions” by reconstructing the scale of the research within the scope of this paper.

De Certau (1984) states that readers of the text or walkers of the city produce “indeterminate trajectories” that do not coincide with the predetermined setting of the text or the city. Both the reader and the walker create their own narratives and methods of experience. Indeterminate trajectories that allow various associations, encounters, and anomalies also provide the production of new meanings and critical knowledge. This paper also adopts this concept in a similar sense. The trajectories described in this paper also strengthen the potential/possible expansion, and open-ended character of the research as well as providing descriptions of the concepts in question, such as “the visionary”, “the role of representation and criticism” or “Turkish artistic and architectural context”.

As a reflection of the bottom-up methodology, first of all, the relationship - or the potential of equivalence - with the concept of “avant-garde” has been examined in order to provide an opening to the concept of the visionary. With this assumption and an examination of “visionary is avant-garde”, the Early Republican period emerges as a temporal trajectory to discuss the visionary/avant-garde tendencies in the Turkish context. Then, with speculations on the power of visual representations as the channel where visionary approaches are most visible, the temporal trajectory deviates to a visual/imaginary trajectory focussing on Güzelleşen Istanbul ( Beautifying Istanbul) booklet published in the 1940s. The content and the methodology of research are designed as a whole, and conceptual extensions opened up by the trajectories are mapped (Fig. 1).

This paper forms a part of a larger research or thinking process. Here, the trajectories formed by the relationship between “the visionary” and “the avant-garde” are deciphered and their conceptual extensions are discussed. Different from the “visionary-avant-garde” relationship or “visionary is avant-garde” assumption, it is also possible to establish different indeterminate trajectories and
alternative meaning frameworks based on alternative conceptual sets such as visionary-utopian, visionary-experimental, visionary-innovative.

**HYPOTHESIS: VISIONARY - AVANT-GARDE**

Although the concept of “visionary” in the literature of art and architecture theory is frequently used as an adjective describing the pioneering and prospective approaches that started in the 1900s and flourished with the practices after the 1960s, the content of the concept itself is less discussed. On the other hand, “avant-garde”, which is another characterization of similar practices, is a concept with broad definitions. It is widely discussed and comprehensive theoretical frameworks have been produced. The fact that the concepts of visionary and avant-garde are used together in the definition of futurists, surrealists, dadaists, or Russian constructivists at the beginning of the 20th century, as well as the followers of movements such as Situationism, Fluxus, and Pop Art after the 1960s, it might be possible to draw a general conceptual framework to define the visionary through the avant-garde concept.

According to the literary critic Bürger’s (1984) definition, the avant-garde is a pioneering art movement that defends the autonomy of art and has a critical attitude towards authority. Bürger (1984) also asserts that the lifespan of the avant-garde is limited to the period between the two world wars. Avant-garde is described as a kind of art movement; thus, his rigid conceptualization is found problematic in that it imposes an “absolute beginning” and adopts a “finiteness”, despite establishing a comprehensive definition. In this respect, one of the harshest critics of Bürger’s definition of the avant-garde is Hal Foster. Defining the avant-garde as a shared expression of artistic and political forms, Foster (2009) proposes to “develop Bürger’s theory by multiplying it with its ambiguities, and especially implying the temporal change between the historical and the new avant-garde with a complex ‘projection-reconstruction’ relationship”. Foster reconstructs the definition of the avant-garde by making it more universal and elaborating its content. As defined by Foster, the avant-garde appears as an approach or tendency rather than a movement. Considering that the concept of “the visionary” was used by many to describe the practices of architects such as Bouléé or Ledoux in the 18th century, or even for the Egyptian pyramids, it becomes possible to establish a stronger relationship between the definition of “Foster’s avant-garde” and “the visionary”.

Considering the conceptual closeness established with the avant-garde, it would not be wrong to describe “the visionary” as including a pioneering role, a prospective and progressive character, an urge to produce the new, an inspiring power, a critical attitude, making use of representation. In this context, the assumption of “the visionary is avant-garde” or “the avant-garde is the visionary” is instrumentalized to question the Turkish context in a temporal dimension with the association of the Early Republican period.

**(TEMPORAL) TRAJECTORY: EARLY REPUBLICAN TURKEY**

In the context of Turkey, it would not be wrong to say that the first decades following the establishment of the Republic defined the period in which a critical view of the past was most intense, where innovative approaches and reformations were embraced, pioneering activities, actors and productions were appreciated, and hopeful visions of the future were strengthened. Therefore, the Early Republican Period, with the cultural-political climate it created, emerges as a temporal trajectory in which the visionary-avant-garde discussion can be directed. The establishment of the Republic created a disjunction in Turkish art and architecture, as it did in all social and cultural fields, and set the ground for a period in which every reminder of the old (together with the old state structure) was rejected and new ones proposed. It can also be argued that the “ideal” of the Republic to create a new civilization/ideology necessitated being “visionary” in a sense. Accordingly, various visionary groups and design approaches, which were also supported and promoted by the government emerged, because art and architecture have the power to transform and create areas/spaces in which society is directly involved.

On the other hand, the 1920s and 30s, immediately following the establishment of the republic, coincided with the period in which the modernist avant-garde movement in Europe matured and experienced its golden age. While a “government-supported” change/transformation project and criticism were being put forward in the new regime in Turkey, the avant-gardes in Europe opposed all kinds of authority, rejected power and declared the autonomy of art. As Bozdoğan (2001) emphasizes, “Given the nature of the relationship between modernism and the state under the unique circumstances of Early Republican Turkey, the extent to which young Turkish artists and architects constituted an ‘avant-garde’ is a contentious issue (…) The avant-garde had exalted the creativity of the freethinking individual, not that of the conformist. It had embraced the abstract and the universal
in art, not the figurative and the local. Such a celebration of art as an autonomous, individualistic, often unpopular creative act was anathema to the republican belief in art as an expression of national ideals” (Bozdogan, 2001). As an illustration of this, in his articles published in RPP’s magazine Ülkü (Ideal), leading art critic Ali Sami Boyar criticized the motto of the avant-garde movement, “art for art”, and expressed the dubious attitude of the republic toward the avant-garde in general. Boyar (1934), emphasizing the need for a national art, writes that “We need artworks that will manifest our national epics, determine our national honor, and engrave our revolution to the history”.

Like many other artist groups of the 1930s, Group D painters, led by artists such as Abidin Dino and Nurullah Berk, sided with the RPP’s cultural program and exhibited their formal and abstract experiments, featuring common folkloric and nationalist themes of the period, in the Revolution and Arts exhibition organized by the government (Bozdogan, 2001).

Similarly, the tendency of young architects to secure their cultural-elite status and professional character by conforming to dominant political ideologies turned into an anti-avant-garde attitude. This attitude seems to have prevented the emergence of an organic avant-garde movement among Turkish architects (Baydar Nalbantoğlu, 1989). Therefore, there seems to be an intellectual opposition to the avant-garde movement. On the other hand, it was possible to observe that the cubist attitude became dominant in Turkish painting, where the geometrical arrangements of the Russian constructivists and the use of colors were emulated, techniques such as montage and collage were applied, and the paper space was diversified. Moreover, it became possible to read the spatial characteristics of the modernist avant-garde in civil and institutional Turkish architecture. Bozdoğan (2001) affirms this view by asserting that “In the favourable ‘revolutionary’ climate of the Kemalist revolution, the references that Turkish artists, architects, and intellectuals made to technology, industry, and the ‘machine age’ often did evoke the aesthetic and theoretical premises of the modernist avant-garde”.

Although the cultural-political climate of the Early Republic rejected the concept of avant-garde, which it originally claimed to diverge from, it can be observed that the artists and architects of the Republican period adopted and even internalized the language used by the avant-garde in terms of representation. It can be said that these pioneering artistic productions of Turkish artists and architects intersect, resemble, and share in many points with the avant-garde art and architecture that they were supposedly opposed to (Fig. 2). A critical question emerges, “does visual representation create an anomaly with its position above culture and ideologies?”.

ANOMALY: VISUAL REPRESENTATION

According to Patt (2010), images are unreliable productions built on slippery ground, but they are just as strong and open to interaction. They are fragmentary and require interaction. They are achronic, even live, die, transform, change direction. They stimulate multiple trajectories, not a singular path. Images can simultaneously process both predefined and constantly reorganized information structures (Patt, 2010).

The representational language and the images used by the Early Republican artists and architects seem to reflect certain interactions and movements in the visual/imaginary cultural environment executed by the avant-garde approach. As a cultural production in which the new, desires, and dreams are revealed (even if its intellectual foundations seem to be opposed), representation creates a kind of anomaly in the context in question and diverts the discussion from a temporal
trajectory to an imaginary/visual one. So, what makes it meaningful to discuss the artistic-architectural practices of the Republic together with its contemporary avant-garde approaches in this context? On what basis can the claim to produce an “ideal” or “vision” be made?

**(VISUAL/IMAGINARY) TRAJECTORY: GÜZELLEŞEN ISTANBUL (BEAUTIFYING ISTANBUL)**

It is possible to find traces of the avant-garde representational language in many visual representations produced in the Early Republican period. From artistic paintings to periodicals and propagandistic booklets, cubist, fauvist, or constructivist aesthetics became prominent. The paintings of artists such as Nurullah Berk or Fikret Mualla, cultural magazines like Yeni Adam (The New Man), and propagandistic magazines like La Turquie Kémaliste can be given as examples (Fig. 3). Within the scope of this paper, the emphasis on the contradictory nature of “the government-supported visionary/avant-garde” makes it plausible to focus on propagandistic publications as anomalous visual representations. The booklet titled Güzelleşen Istanbul (Beautifying Istanbul) can be scrutinized as a lesser-known propagandistic publication to decipher the relationship between Early Republican visual representational language and the visionary-avant-garde; it constitutes the visual/imaginary trajectory for the research.

Published in 1943 by Abidin Daver, Safa Günay, Mazhar Nazım Resmor, Güzelleşen İstanbul presents a broad perspective on urban scale operations carried out during the President İsmet İnönü’s period. While it played a part in legitimizing the controversial urban/architectural projects, it is also highly interesting as a form of visual representation in terms of using relatively new and visionary representational tools and approaches adopted by the avant-gardes in Europe; such as montage, collage, diagraming, mapping, comparative photography and so on (Fig. 4). In addition, the fact that Resmor - who designed the graphics of the booklet - received an art degree in Paris during the feverish period of the avant-garde movement (such as Group D painters who
were practitioners of the visionary attitude in Turkish art), makes this publication a focus of discussion.

Despite the fact that Güzelleşen İstanbul is designed as a propaganda booklet (with frequent bold expressions of respect to the president), the widespread use of representation techniques used by the avant-garde/visionary artists opposing the authority, once again reveals the ambiguous-contradictory situation that has been highlighted throughout this research. The role of representation as a binding and collaboration between opposite intellectual poles in producing “the new” and “envisioning the future” should be emphasized.

Following the trajectory that Güzelleşen İstanbul established in terms of representation through its visual and graphic productions makes different encounters possible and strengthens the argument of this discussion about “being visionary” and the “role of criticism and representation”. In this regard, techniques such as the use of paper space, montage, collage, diagraming, mapping, and comparative photography evoke the new in its context and reveal a critical view, for the visual/imaginary trajectory.

ENCOUNTER.1: PAPER SPACE

Güzelleşen İstanbul, with its aim of political propaganda, aimed to create a holistic imagination for the reader about the situation that is wanted to be told, as well as the aim of expressing the content clearly. For this reason, it is possible to say that the page layout/paper space was established by assembling different narrative forms, and different sources related to the plot, which were brought together to capture a holistic image. Photos, drawings, collages, and blocks of text are juxtaposed, overlaid, and sometimes combined with a hand drawing. In the background or in the parts where the paper space is bare, line sequences or colored backgrounds are used to complete the narrative graphically. The text/announcement from a newspaper is presented with the image of the newspaper itself. In the background of the text where the newly opened roads are mentioned, a long road is depicted as a blur.

The hybridization of textual and visually produced narratives and their transformation into a holistic narrative highlights the visionary attitude as strategies that increase the reader’s “imaginary/imaginative experience” (Fig. 5).

ENCOUNTER.2: MONTAGE/COLLAGE

Collages and montages produced analogously using different photographs appear as the shortcut technique frequently used in the booklet to give an image of the envisaged beautifying of Istanbul. In the Early Republican Period, the “cleaning” of the dilapidated buildings around the monuments and the “revitalization” of the monuments are common motives of urban discourses.
Containing two different elements, such as dilapidated buildings and monuments, are separated, collaged, and an abstract representation of the new image is created by cutting these two characters apart or removing one of them completely. The building group cut from an old photograph is combined with a “modern” building produced with a drawing, and the urban image of the near future is manifested with the title “Istanbul tomorrow” attached to this combination.

Representational operations such as cutting, subtracting, separating, and combining relate to urban operations at a metaphorical level and reveal the imaginary experience of the “new” (Fig. 6).

**ENCOUNTER.3: DIAGRAMMING/MAPPING**

Marking and indicating some specific situations in groups of photographs or drawings with hand-drawn arrows and lines are the common diagrammatical techniques which support the narrative content. Sometimes in an aerial photograph, for example, places that are planned to be demolished or rebuilt are marked, colored, and associated with another image placed nearby using an arrow or line. Some spatial relations that are not yet visible are made intelligible by this means and a conceptual planning/mapping of the spaces targeted to be produced is made.

The visionary role of diagrammatic representation, at the point of discussing the near future over the present situation, is made evident among the pages (Fig. 7).

**ENCOUNTER.4: MODELLING/RENDERING**

As timeless playmakers of the narrative in architecture, visuals and models are representations that reflect the projections of architects/planners trying to establish the clearest image of the near future together with the “ideal” life in it, is also used in Güzelleşen İstanbul. Models are
sources of pride and success for “government leaders” as ‘semi-built’ projects, and photos taken around the models of a project that may never be realized are published full-page. Similarly, such renderings take the reader into the image of the future by conveying the details of the project such as its atmosphere, color, texture, and so on (Fig. 8).

**ENCOUNTER.5: FIGURES/PAINTINGS**

Architectural drawings depicting the future projects, supplementary figures, sketches, and paintings of the narrative are also included in Güzelleşen İstanbul (Fig. 9). These images, which at first glance obviously emulate avant-garde styles such as cubism or fauvism, create a wide range of representation techniques in the booklet. The drawings are juxtaposed with avant-garde productions, not only in terms of technique but also in terms of content and vision. As a reflection of the changing political regime in Turkey, the targeted social change, desired daily life, strong social structure, new individual roles, and ideal body are manifested through these figures and sketches arrayed between the pages. New spaces bringing about a new society and the individual.

**ENCOUNTER.6: COMPARATIVE PHOTOGRAPHY**

Places that have been “transformed”, “cleaned” or “revitalized” in the recent past are narrated with comparative photographs in Güzelleşen İstanbul, which conveys the state of Istanbul’s gradual “beautification” in line with its title. A photograph showing the dilapidated buildings in front of the New Mosque and a wide perspective photograph of the proposed emptied square are placed side by side and the transition from the old to the new is highlighted by an arrow. The elimination of a building group that is claimed to make pedestrian access difficult is also expressed with the same technique. These comparisons, presented under the title “yesterday and today”, occupy a considerable space in the booklet.
Sense of reality and credibility created by the power of photography combined with the dramatic contrast in the presentation of the old and the new are the founding strategies of the “critical view” represented in Güzelleşen İstanbul (Fig. 10).

EVALUATION: ARGUMENTS, DEFINITIONS, ASSOCIATIONS

In this paper, two interrelated trajectories - temporal and visual-imaginary - arising from the original conceptual relationship outlined between the avant-garde and the visionary, have been discussed in the Turkish context using Güzelleşen İstanbul to pursue the traces and modes of visionary-being. Possible extensions and potential interactions of the discussion are alluded to in this paper, with some concepts such as representation language, critical view, experience, spatiality, the new, and so on. Following the first hypothesis established on the visionary-avant-garde relationship and two trajectories that arose, some arguments become prominent for the visionary-being in the Turkish context.

Güzelleşen İstanbul showed that the prospective activities and projects are represented with both the visionary-avant-garde vocabulary of techniques/methods and content. Considering the discourses of Turkish artists or politicians, it can be seen that this is far from being of explicit political interest, but rather a cultural interaction or influence. The avant-garde visual language was still representing the new in Turkey decades after it was born in Europe and the Soviet Union. So much so that, while those avant-garde artists were rejecting authority, the Republic of Turkey instrumentalized their visual language and representation techniques almost as a governmental policy to promote the new regime and socio-cultural environment in propagandistic publications. At this point, the visionary representation emerges as an anomaly that re-defines the opposition of poles by negotiating them. This shows that predetermined conceptual, temporal, and cultural frameworks or meta-narratives may not be functional or sufficient to reveal alternative intercultural networks.

Lastly, it should be emphasized that representation is an important component of visionary-being in terms of its prospective quality and relationship with an idea of the future. Visionary representation comes to the fore in putting the alternative against the rejected, the old government regime in the context of the Republic of Turkey. It should also be stated that the critical view is a driving force in visionary-being, because the claim of rejection contains an intellectual opposition, conflict, and criticism in itself. The visionary attitude is not completely independent of the socio-cultural and ideological context. It defines its existence through the situation that it frequently rejects/revises, at the same time as it exists with its negative. In this context, it can be claimed that the past has a founding role in the visionary issue as much as the idea of the future.

The open-ended structure of the research allows the establishment of different trajectories that allows us to expand and extend the definitions of the visionary. By this means, it is aimed to create multi-dimensional arguments where the meanings of some concepts are clarified and re-established. The main suggestion of the research is the establishment of a pluralistic discussion environment enriched by increasing the range of potential associations.

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WORKS CITED:


NOTES

1Founded by M. K. Atatürk, Republican People’s Party (RPP) is the founding political party of Republic of Turkey.
REPRESENTATION AS INTERPRETATION
‘Raymond Williams and the ‘Keywords’

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Originality is a relatively modern and controversial concept in design. Although it has been widely used in English since the end of the 18th century, its root ‘origin’ is an old word that has been in the language since the 14th century. Etymologically deriving from the root word ‘origin, originem’ (lt.) -source, rise, birth-, origin has an intrinsic retrospective meaning. ‘Original,’ on the other hand, keeps this retrospective meaning of source but also takes on additional definitions as ‘new, unique and authentic’ over time. Deriving from this secondary meaning of the original, the concept of ‘originality’ has described an idealized innovation and source of artistic expression. It has been theorized to signify value in creative industries. The fact that the word original can be attributed with different and opposing meanings; changes the way we deal with originality and related concepts in design, art, and aesthetics, making them open to discussion. Even though the definitions within the framework of the concept of originality take place in different discoursive areas, they create changing conditions and transform accordingly. Traces of these conditions and transformations show themselves on the meanings and definitions of words and form the hidden patterns of ‘originality’. It is a challenge to visually represent these changes that occur in language and are reflected in our ways of thinking. This paper proposes a method to analyze and represent the evolving and changing definitions of all these concepts and the dynamic conditions that create them by bringing them together contextually, semantically, and interdisciplinary. Unlike traditional linguistic tools of defining and examining words and concepts, this study encourages the use of Raymond Williams’ (1985) inspiring work ‘Keywords: A Vocabulary of Culture and Society’ to map all the interdisciplinary relations of the keywords into a network, to visualize the changes in meaning, to selectively bring all the data around the keyword ‘originality’ and to reveal the patterns of the concepts of and around originality.
INTRODUCTION

In recent social and intellectual architectural environments, one much-debated issue over design is ‘similarity beyond inspiration’. Through national and international scale projects, ‘source hunting’ is carried out over the resemblances, and the originality or authenticity of the designs under discussion. These discussions are not solely based on architectural form; the design approach, representation techniques, and material choices can also be subject to similar investigation. Any kind of imitation, resemblance, similarity, or copying is seen as opposed to originality, authenticity, or innovation. This situation is often seen as an ethical problem in architectural and creative environments. In architectural education and other practical areas of architecture, architects are expected to make a brand new design with their individual creative skills and imagination, and not repeat themselves. Today, while industrial producers try to perfect the copying processes and techniques, the copy is often seen as a devalued version of the original in the creative industries. However, in the past, copying was the only mode of production, not seen as the opposite of originality, and had a relatively positive attribute.

The history of western architecture is based on imitation, reproduction, remaking, adaptation, or replication of already existing notions of models, typologies, archetypes, or copies. In some cases, this can be the literal adaptation of entire buildings, while in other circumstances, it can be fragments of construction techniques or details. For example, in the historical canon of architecture, Villa Capra (Rotunda), designed by Andrea Palladio (in 1567), is an example of an architectural reference, which is both the result and the source of copying.

Inspired from the Classical Roman period and composed of many references from the Pantheon, it still inspires many residential buildings today (The Penguin Dictionary of Architecture and Landscape Architecture, 1998). Similarly, the classical Greek building, Parthenon, is still replicated worldwide for different purposes. On the other hand, the building built in China in 1994 as a replica of the Ronchamp chapel, designed by Le Corbusier and completed in 1954, can be demolished and destroyed, but not copied due to copyright issues. Legally, copyrights protect buildings for approximately 75 years, so nowadays, we will be able to replicate the early decades of the modern era legally, but this will still be problematic.

Historically speaking, copying was how art or architecture became a language and was disseminated. But, nowadays, even the idea of the copy is such an anathema that it seems to signify the death of many things we value within the core of architecture, such as authorship, identity, authenticity, and invention (Jacob, 2014, 87). Emerging as a reflection of the semantic change of the concepts around originality and copy in different periods, this issue has become a subject of discussion in ethics and aesthetics. These concepts have been loaded with varying meanings regarding the spirit of the age and have been handled in various ways in art and design-related creative fields. Therefore, it is essential to embrace all these concepts together with their changing meanings and understand the conditions of changes in their definitions to discuss them today. Every word/concept we use in our daily life has a semantic history. Words are not static; the changes and transformations hidden in their past include contextual information about the current uses of these words. Therefore, it is crucial to analyse the contextual histories of these words and the different critical debates around them. In this regard, this study proposes a method to reveal and uncover the conditions that affect change in the meanings of originality and related concepts.

The history of transformation and the idealization of originality depends on some qualitative and quantitative changes. Traditionally, in production models, we see that the ultimate goal of any production is the transference from generation to generation; therefore, transferring the norms and rules is rather more important than their source or origin. There is a normative system of actions and patterns for the designers or artists, and these systems allow them not to start from scratch for any given situation (Tanyeli, 1997, 63-70). In the pre-modern period, originality was not considered an ideal, and copying existing patterns was common and acceptable. For this reason, in the traditional sense, ‘copying’ as a technique of reproduction and transference is loaded with different and opposed meanings from its modern definitions.

Similarly, in Samuel Johnson’s (1755) famous ‘Dictionary of the English Language’, one of the meanings of the word original is ‘first copy’, meaning that it still has no meaning of the origin as we understood it today. Until the end of the 18th century, the positive connotations of ‘copy’ such as abundance, resourcefulness, and wealth continues. Later on, as originality becomes an ideal, the copy downgrades to a less valuable version of the original. This is a result of some qualitative and quantitative transformations in society that happened in the past.

The starting point of modern thought concerning the creator and the object created occurred in two stages (Moulin, 2014, 444). The first stage results from a qualitative transformation that
The originality of things becomes controversial. The value of things that can be easily copied and those that cannot be copied or transferred (such as authenticity) starts to differ. This differentiation shows itself intellectually in our modern mindsets. With the industrial revolution and the change in economic conditions, the rise of capitalism and mechanization brought counter-reactions in two fields: the Romantics and the genius produce newness and uniqueness in their original arts, and the designers create original copies within mass-produced designs.

To sum up, it can be said that the discussions around originality occur mainly in two areas of discursive. Originality is addressed as an ideal in aesthetic discourse, especially in the arts, design, and other creative fields. Whereas, in the economic discourse, the concept of originality is considered a value. Although these two discourse fields seem relationally disconnected as they handle the idea of originality in different contexts, they intrinsically bring productive conditions to each other. So, to better understand the notion of originality, we should consider it both from the aesthetic and economic angles. As the conditions change over time, both the product and its producer's change meanings. Said (1991, 134) mentions that changes associated with the ideals of originality form a dominant pattern, and the frameworks of this pattern are determined psychologically, economically, and intellectually. Foucault (1969) thinks it is crucial to analyse the conditions under which a word changes its meaning to what it signifies to us today. Therefore, it is essential to resolve how, when, and under what conditions these changes in definitions occurred and how the originality patterns were formed. This study proposes a method that will visually uncover these patterns and allow a relational textual reading through the concepts.

This study aims principally to research words and texts to reveal the patterns of originality. As briefly discussed above, many related and opposite concepts and terms should be considered on the axis of originality. To better understand the way we think about originality today, we should dig into the structure of the interlocking web of words, both from the aesthetic and economic fields. There are different approaches and linguistic methods to studying such words; concepts, their history, semantic changes, and origins. As an alternative conceptual reading method, Raymond Williams’ Keywords: A Vocabulary of Culture and Society will be used in this study. In the words of Ben Highmore, ‘within Cultural Studies, it is the work of Raymond Williams (RW) that is most associated with the analysis of a carefully chosen, interlocking vocabulary through which historical transitions can be glimpsed and a changing society mapped via a dynamic history of shifting meanings within this vocabulary’ (Highmore, 2021, 2). His way of choosing the words, constructing a system intuitively and relationally, and drawing attention to the changing conditions of social and cultural events that also transform the words’ definitions makes it unique. It offers the opportunity to adapt this system into a representative structure. The very first reason to select and analyse Williams’ work as the content of this study, was that originality is also a keyword in his structural vocabulary.

RW’s study will be used to read conceptual relationships from different discourses, and the mental mapping he proposed will be turned into a theoretical and textual representation method. Firstly, this article will briefly explain some linguistic tools and structures we use when analysing and researching words. Then, it will continue with evaluating
and interpreting RW's structural approach to keywords. After mapping the interdisciplinary relations of the keywords into a network, it will selectively bring all the data around the paths of 'originality'. This study will outline a method to visualize the changes in definitions that allow seeing all the words and concepts together. It will end with a proposal that will broaden the content by adding two additional vocabularies that will articulate RW's study and extend the mappings and paths to do meaningful readings. This project aims neither to glorify originality nor advocate copy or plagiarism but to outline a way to discuss and redefine our understanding of the subject from a broader perspective.

‘WORDS’ AND ‘KEYWORDS’

There are various traditional linguistic tools (dictionaries, encyclopedias, lexicons, etc.) to analyse and study words, concepts, and their meanings. The way these tools deal with words structurally and the narratives they represent differ. Etymology is the branch of linguistics that examines the origins of words, when and how they emerged into the language, and their transformations in phonetics and meaning. Dictionaries consist of individual expressions of a language and their different definitions; however, no semantic relationship is established. Encyclopedias are sources of information listed alphabetically and referenced for informational purposes. Yet, they do not have to include every word or concept in the language, nor do they provide different meanings like dictionaries. Still, they contain more detailed and organized information about the words in their content. Thesauruses are indexes of synonyms and antonyms for general use or specific areas and collections of controlled vocabularies for a broader use of words rather than explanatory purposes. Vocabularies are collections or lists of words with brief explanations of their meanings. Lexicons are vocabularies of a language, or vocabularies created by bringing together selected concepts under a particular subject or theme. Still, these concepts are not constructed with other concepts from different fields. Glossaries contain the words used in a specific area of knowledge and their descriptive definitions, so their primary purpose is to be illustrative and explanatory.

Terminologies include special and technical terms used in any field and their meanings. So all these linguistic tools serve different purposes while defining and analysing words or phrases and can be used accordingly. Structurally, they represent different contents and provide diverse forms of knowledge (Fig. 1). This paper proposes using RW's Vocabulary of Culture and Society, as an alternative approach to analyse the words in-depth, map the semantic relations between words, and visually represent the histories of the concepts that will correspondingly reveal the patterns.

As mentioned above, vocabularies are collections of words or concepts within a language or brought together under specific themes. Raymond Williams, one of the founders of Cultural Studies, starts by analysing a single keyword – culture - and later constructs a vocabulary with 130 others in his inspirational book Keywords: A Vocabulary of Culture and Society. His choice of these keywords, his method of bringing them together, and the conceptual construction of the vocabulary, differentiate it from other dictionaries, encyclopedias, or any linguistic tools, and

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**Fig. 1 - Different Linguistic Tools on Words and Their Structurally Distinct Representations of Information.**
distinguish Williams’ way of analysing the concepts together. Unlike traditional methods of associating the keywords, Williams combines and benefits from different linguistic tools within his Vocabulary of Culture and Society and makes his approach categorically distinctive, hybrid and inspiring.

So, Williams collects not words but ‘keywords’ in his vocabulary of Culture and Society. First of all, if we look at what the concept of ‘keywords’ means, we come across two meanings according to the Oxford English Dictionary (OED) (URL: https://www.lexico.com/definition/keyword):

- A word or concept of great significance.
- A word that acts as the key to a cipher or code.

Hence, we might say that Williams selects keywords that are significantly important to decipher the Vocabulary of Culture and Society. Still, Williams is not the originator to work on ‘keywords’. One of the first studies on keywords is Michel Breal’s (1897) Essai de Sémantique (Semantics: Studies in the Science of Meanings), where the concept of semantics was first used as a term. Further examples of other works precedent to Williams are I.A. Richards’ (1923) The Meaning of Meaning, William Empson’s (1951) The Structure of Complex Words, and C.S.Lewis (1960) Studies in Words (Durant, 2006, 5-6). Similarly, J.R.Firth (1935) analyzes sociologically essential words in her Technique of Semantics, showing how contextual studies can characterize a culture (Bondi, 2010, 2). Apart from the English language, linguistic studies of essential keywords for social and intellectual history continued throughout Europe. Examples of such studies on the use of Schlüsselwörter (=keywords) in the German language during the 1900s were Sclagwortforschung (= studies on phrases), Brisante Wörter (= controversial words), and Begriffsgeschichte (= history of concepts). There are similar studies in the French language as well. In the 1950s, Georges Matoré spoke of the importance of mots clés (=keywords) and argued that lexicography is a sociological discipline. Emile Benveniste, Lucien Febvre, and Michel Foucault also work on their favorite keywords such as civilization, labor, madness, and author (Bondi, 2010, 23).

‘RAYMOND WILLIAMS’ (RW) AND THE ‘KEYWORDS’

The word ‘keyword’ itself enters the vocabulary in the middle of the 19th century. Its preliminary uses were mainly associated with science, knowledge, and encryption subjects. Although keywords were studied in different ways in different languages, it was first promoted to philosophical significance by Raymond Williams (Patterson, 2005, 66). Criticizing T.S. Eliot’s work Notes Towards the Definition of Culture (1948), Williams reconsidered the concept of ‘culture’ and its definitions and published his essay ‘Idea Of Culture’ in 1953. In the preface to his following book Culture and Society: 1780-1950 (1958), he mentions discovering that the idea of ‘culture’ and the general modern uses of this word entered British intellectual life during the Industrial Revolution, and with his work, he tries to show how and why this happened (Williams, 1983, 30).

Williams starts his vocabulary with 110 keywords in the first edition (1976) and adds 21 new keywords to the second edition (1983). With these keywords, he aims to show that some critical social, cultural, and historical processes occur in the development of language and that the problems of meaning and relationship complement each other (Williams, 1983, 30). These important words, create different interactions, and their relationally changing meanings reflect not only a historical but also a social process. Ward comments on Keywords in his monograph that “The words are seen to be quietly energized, and to move, if very slowly and gently, through history, not having constant meanings, still less ‘correct’ ones, but yet not arbitrary either, for they have a logical and understandable continuity which, even with internal surprises, can be traced” (Elridge, 1981, 13). Williams adds new meanings to all these concepts by reuniting some vague conceptual terms (such as creativity, culture, society, individual, originality) and material facts (such as education, media, drama, and literature) with social and historical relationships. Williams put forward the theory that language itself is causative and that active meanings and values in language have formative
social effects (Patterson, 2005, 67). Hence, it is challenging and an alternative way to trace these changes through his keywords and vocabulary and try to represent this structure of Williams’ ‘brain map’ visually.

The keywords Williams chose are ‘single and powerful’ words on their own, but above all, they are words with complex histories (Higgins, 1999, 69). As mentioned before, Williams uses various linguistic tools to define these powerful keywords. Bondi and Scott (2010, 23-24) summarize four characteristic features of the keywords: (1) First, Williams identifies words intuitively based on his extensive scholarship. He then uses the OED as empirical evidence that his keywords have undergone historical shifts in meaning, leading to complex layers of meanings in contemporary English. (2) Second, only some of his keywords are in widespread use (e.g., country, expert, family, genius), whereas many are from intellectual discourse. (3) Third, Williams assumes that keywords do not just label but help create conceptual categories. He talks of “significant, indicative words in certain forms of thought” (Williams 1983: 15). Work on keywords necessarily implies a constructivist perspective. (4) Fourth, Williams’ particular interest is a Marxist-socialist analysis of the social order.

To methodize Williams’ structural approach to these powerful and characteristic keywords and represent his way of building a vocabulary, we first need to resolve the critical element of his study: a keyword. He thinks that even though every word is a part of a more systematic social process of language, it can still be useful to pick out certain words of an especially problematic kind and consider their internal developments and structures (Williams, 1983, 22). If we analyse the construction of a keyword entry, we can outline it in the following order: First, each keyword is listed alphabetically. Generally, it starts with an opening line that characterizes the keyword with an adjective – such as ‘one of the most difficult words’, ‘a very curious word’, ‘a very complicated word’- then continue with an etymological background. The origin of the keyword is introduced, and its derivatives are included throughout the text within their historical occurrence. The main body of an entry is highly descriptive, and the primary source is the OED (Oxford New English Dictionary on Historical Principles). Williams uses OED because, firstly, he finds it primarily philological and etymological, so it is much better on range and variation than connection and interaction.

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Fig. 2 - Structure and Analysis of a Single Keyword Entry – ‘Originality’ (pg.230-231) from Keywords, A Vocabulary of Culture and Society (1983).
Secondly, for anyone who works on the structures and developments of meaning in English words, he thinks that it has an extraordinary advantage because it is not so purely scholarly or free of active social and political values (Williams, 1983, 18-19). He also includes a thesaurus description of the words (similar meanings, synonyms, and antonyms). While historically pointing out the changes in definitions of the words, he supports them with quotes from significant people. He mentions the keywords' current and various uses in different areas and shows how the meanings of the keywords can evolve in time. Finally, he recommends a relational reading with other keywords forming a semantic and complex structure within his vocabulary. This relational mapping enriches the meaningful readings of the entries from an individual narrative into a contextual network (Fig. 2).

As seen in Figure 2, his way of narrating a keyword is a hybrid structure of different linguistic tools. Another critical aspect of Williams’ vocabulary is that he does not collect concepts from one field or two complementary fields. He collects and connects keywords from different epistemological areas so that their interactions are generally unexpected and genuine. Williams’s guide in selecting words appears to have been that each keyword should be a complex, culturally defining word that serves as a record of historical argument and a resource through which we organize discussion and shape future action. Each keyword, Williams says, at some time virtually forced itself on him in the course of an argument it was being used to promote or rebut. Hence, it is a vocabulary rather than a dictionary. By calling Keywords a ‘vocabulary of culture and society’, Williams also ensured that the book is suspended somewhere between a general vocabulary of words concerned with culture and society and a more specialized vocabulary of words that had shown themselves to be important in the tradition of writers discussed in Culture and Society (Durant, 2008, 3).

Williams is interested in words that have the effect of shaping our understanding and provide material that can be analyzed and shift our way of thinking. For this reason, he made choices from both general and technical fields (such as political, philosophical, and aesthetic) with different contexts regarding its value and consequences (Durant, 2008, 5). Figure 3 below shows the various fields of the keywords and their
distribution. These divisions are not strict, and we can always subdivide and specialize these areas, yet it indicates that Williams brings words from different vocabularies and tries to connect them meaningfully. He describes its vocabulary as "significantly not the specialized vocabulary of a specialized discipline, but a general vocabulary ranging from strong, difficult, and persuasive words in everyday usage to words which, beginning in particular specialized contexts, have become quite common in descriptions of wider areas of thought and experience." (Williams, 1983, 14).

The importance of his work for this article is that ‘originality’ was also a ‘keyword’ in his vocabulary, meaning that he found originality as another powerful keyword, having many layers of contextual meaning to be uncovered. This study aims to understand the idealization and valuation narratives of originality from a broader perspective. Thus, we can benefit from the cultural, contextual, and relational readings he made to understand the concept of ‘originality’ differently. Therefore, Williams’ narrative is an alternative method to look at ‘originality’ as a ‘keyword’, not only from the frameworks of dictionaries or encyclopedic narratives but also through Williams’ hybrid structure. It will also allow us to see and fictionalize ‘originality’ not from a specialized perspective but also from a more profound and unexpected dimension. The next chapter will visually analyse and methodize his vocabulary structure and bring together all the relational keywords within his ‘brain map’ around the concept of originality, using it as an alternative source of semantic representation.

**‘KEYWORDS’ AND THE RELATIONAL NETWORK**

Even though ‘keywords’ are intellectually selected words essential for Culture and Society, they are not sufficient individually to describe the whole. For this reason, Williams presents a conceptual network by constructing the interdependent relations of these keywords. He also mentions that these relations become more complex the more he considers (Williams, 1983, 13). These social links, constantly changing and articulated and systematized by Williams, enable us to understand the ties that bind both the past and the present. In this way, by attaching more general and specific concepts from different disciplines and constructing their relations, he brings them together in an

Raymond Williams (1976)

*Keywords, A Vocabulary of Culture & Society*

**RW**

<table>
<thead>
<tr>
<th>Aesthetic</th>
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*Fig. 4 - Williams’ Vocabulary and the relational network between his keywords.*
interdisciplinary study.

Williams has built up a vocabulary with the *keywords* he chooses in the fields of culture and society. Still, he does not include all the words in these epistemological areas and does not explain them all. His way of approaching these keywords one by one and bringing them together is unique. He thinks even though the words do not stand on their own, since they are the elements of the social process of language, they depend on complex and variable systematic properties of language itself (Williams, 1983, 22). Accordingly, Williams created systematic internal relations through words in his book. Therefore, the meaning of each word alone becomes deeper when read together with other words that Williams systematically describes with relational connections. As seen in Figure 4 below, we can see the keywords of his vocabulary, illustrate the semantic relationships that he suggested and visualize them in a circular network.

Eldridge (1994, 41) suggests that these connections meant several things:

- Identifying relations between words and their changing usage;
- Connecting usage with context;
- Connecting past usage and variations with recent usages;
- Making intellectual connections across disciplines since it was the problem, not the discipline which mattered;
- Making analytical connections between discrete parts of social life through reflection on common vocabulary;
- Recognizing the connection between specialist vocabularies and the general language of discourse.

Williams’ essential *keywords* in culture and society are complex and controversial. Although they may seem incomprehensible at first, they become more reasonable with Williams’ compilation. The interaction between these *keywords* chosen from different fields of thought and discussion can address different purposes. In this sense, to better understand a keyword, we need to read it in its complex relationship with other keywords. To manage that, Williams connects his 131 *keywords* with 630 relational strings. Besides his structure for individual keywords, how he connects all the keywords into a network also tells us a narrative. Mapping this network and following the paths Williams built within will allow us to de-fragment all the content around specific keywords and interpret these narratives relationally.

‘KEYWORDS’ AND THE PATHS

Williams says that the *keywords* are patterns themselves. He thinks that any valuable analysis of culture begins with the discovery of patterns of a characteristic kind. Sometimes it
can be the discovery of similarities in concepts that have been treated as separate activities, or sometimes we discover unexpected discontinuities that a more general cultural analysis is concerned with (Williams, 1963). In this way, we can reveal their relationship to other patterns. His relational network also helps to show another pattern hidden in-between the keywords that will deepen their meaningful readings. Searching for the target keyword in the network and following the paths provide the opportunity to bring related keywords and their fragmented patterns together intertextually. While the small-scale shifts in the use of the words cause the meaning to change, this change can be observed as a pattern (Durant, 2006, 20). By analysing 20th-century intellectual culture through words, language and ideologies, Williams tried to obtain evidence about how culture could be expressed as lexical patterns (Bondi, Scott, 2010, 43).

Combining the histories of words with their current meanings, Williams also changes the reader’s relationship with language. This describes semantic processes in the history of language and helps develop new ways of thinking. In this manner, the vocabulary consists of patterns on the keyword scale and multiple paths regarding the relational network. Therefore, it can be a generative linguistic tool considering both keywords as individuals and the vocabularies as collections. It is possible to expose paths with different focus keywords, analyse them structurally, and combine all the fragments with other target keywords.

In Figure 5A, we can see possible paths created with varying focus keywords. These different paths show the infinite and generative possibilities to zoom in and comprehend the keywords from another perspective. In Figure 5B, we see originality as the focus keyword. This selection helps us diminish the vocabulary into an index regarding Williams’s ‘brain map’. This index shows us the affinitive concepts we need to consider to better understand the concept of originality.

‘KEYWORDS’ AND SEMANTIC ANALYSIS

How a ‘keyword’ content is handled by Williams and how it...
relates to other concepts, have been discussed in previous chapters. It has been mentioned that with additional vocabularies, new connections were defined through the extended relational mapping, forming new paths. These paths allow us to generate numerous links between focus and target keywords. When we narrow down this expansive network of relations and focus on 'originality,' we can obtain a selected network of strings and a reduced index of keywords (Fig. 5B). Therefore, every new point the network of relations extends offers new possibilities for creating a meaningful scope. To transform this relational and contextual index into a semantic pattern, it is necessary to return to each keyword again. To do this, we need to look at the ‘keywords’ in the ‘originality’ index semantically and do a content reading that can identify the patterns Williams mentioned. Going back to a ‘keyword’ entry, we can see that Williams uses several linguistic tools to pinpoint each keyword. These pinpoints can underline a date when the meaning of the keyword changed, the dates when new definitions were added, the various usages of the word in different periods, or important points of view with multiple quotations. Therefore, placing them historically on the same timeline makes it possible to make semantic inferences from each input. In Figure 6 below, a semantic reading is shown, and all the fragments of pinpoints are highlighted.

These highlighted pinpoints are the turning points of the definition of the words. They are the pieces of evidence that Williams found through his research. Using many linguistic tools, he tries to highlight his findings. He takes his narrative beyond two pages. While telling the history of a word, he encourages us to go further in his structure with his relational strings. He tells us his narrative and wants us to follow his storyline. So if we collect all the evidence from the narrowed index, semantically read and de-fragment the pinpoints of each keyword of the index and turn them into a timeline, we start building up the pattern and the narrative of originality (Fig. 7). We can understand how and when these words changed, transformed each other, and shifted our mindset.
A METHOD PROPOSAL OF MAPPING THE PATTERNS OF ORIGINALITY IN DESIGN  E. KARA VATANSEVER; N. PAKER KAHVECIOĞLU

Fig. 7 - Patterns of Originality Index, and the Defragmented Narratives
(In Progress of Making: The Pattern and the Narratives are developed within the index)
NEW ‘KEYWORDS’ AND EXTENDED RELATIONAL NETWORK

While the list of ‘keywords’ seems to be fixed with the date of its publication, this list is never set nor final. Every word has a history, and history is not static. As social life changes, words keep up with it. While some words lose importance in describing the social order, we sometimes need new words. In this sense, Williams’ vocabulary is not a collection of fixed keywords; instead, it is a living body of words that have the ability to adapt to socially changing and shifting history. It has been used in other studies at different times with the way it approaches keywords. Williams is not the originator for the studies of keywords or vocabularies, as mentioned earlier. Still, it can be said that his way of selecting keywords, using hybrid linguistic tools, and the structural network within his vocabulary is unique.

As his study is a model for understanding socially changing words, it is not a coincidence that his work preceded other studies.

Two other vocabularies are created with different keywords that take Raymond Williams’ study as a model. The first study using the Williams model is New Keywords: A Revised Vocabulary of Culture and Society edited by Tony Bennett in 2005. Bennett revised many of Williams’ keywords, preserving some old relationships and defining new ones, also added new words to the vocabulary. The second study using the Williams model is Keywords for Today: A 21st Century Vocabulary edited by Colin MacCabe and Holly Yanacek in 2018. MacCabe and Yanacek also proposed a new vocabulary.
within Williams’ *vocabulary* into a relational mapping. With the help of the two subsequent studies, it is possible to articulate, extend and update Williams’ network.

The *keywords* in each new vocabulary can be added to the existing words in the network, preserving their relationships defined by the three authors. Thus, an extensive network of relations can be created with the current and added *keywords*. This enables us to stretch out the paths and make new connections.

Figure 8A above shows the overall network with all the three *Vocabularies* and their connections, Figure 9A shows the relational paths and Figure 9B shows the extended Index for the keyword ‘*originality*’, with the revised, updated, and profound connections with other keywords.

The Keywords study, which Raymond Williams has brought together and compiled over 20 years, is a fundamental study. As a foundational analysis for Cultural Studies, it gives us many possibilities to observe and analyse words in an intellectual environment. It is an unfinished study because it is a growing collection of living keywords that help to describe our culture and society. It is generative to discover all the possible relationships and intertextual connections. It is timeless yet contemporary because we will always need words, use words, and adapt words according to the shifting realities of our society. These paths and patterns will continue to expand with new studies as we adapt to the culture’s new order, allowing us to follow these paths and reveal possible readings of these patterns.
Fig. 9A: Relational Paths of Keyword 'Originality'
This research proposes Raymond Williams’ book *Keywords: A Vocabulary of Culture & Society* as its primary source for researching keywords and their historical patterns. It was chosen because Williams approaches keywords as the deciphering tools for culture and society. He shows an alternative way of combining many linguistic tools to describe his selected concepts from different areas of discourse. He builds a relational structure to indicate that all these concepts are related and intertwined in the vocabulary of culture and society, set within an intellectual and critical perspective. Collecting quantitative changes that have occurred in cultural, social, and intellectual life and not only in art and aesthetics but also in the economic fields. Like many words, the concept of originality has a history of changes, and to better understand what it means today, this study proposes a method that will narrate its history. This narration also includes research on other concepts that have the effect of altering or transforming originality. In this sense, the concepts that shift and reconstruct each other form a pattern, and it is critical to uncover these patterns and represent them visually.

CONCLUSION

This paper chases the idea of originality. The history of the concept of originality is a narrative that we need to uncover to understand how we approach it today. Originality is a relatively modern concept, yet it has too many controversies. From the perspectives of art and design, it is considered in the sense of being a novel and perhaps an ideal way in relation to creative expressions. Deriving from a root word with a static and retrospective meaning, originality takes on opposite meanings making it a controversial concept. This transformation results from many qualitative and quantitative changes that have occurred in cultural, social, and intellectual life and not only in art and aesthetics but also in the economic fields. Like many words, the concept of originality has a history of changes, and to better understand what it means today, this study proposes a method that will narrate its history. This narration also includes research on other concepts that have the effect of altering or transforming originality. In this sense, the concepts that shift and reconstruct each other form a pattern, and it is critical to uncover these patterns and represent them visually.

This research proposes Raymond Williams’ book *Keywords: A Vocabulary of Culture & Society* as its primary source for researching keywords and their historical patterns. It was chosen because Williams approaches keywords as the deciphering tools for culture and society. He shows an alternative way of combining many linguistic tools to describe his selected concepts from different areas of discourse. He builds a relational structure to indicate that all these concepts are related and intertwined in the vocabulary of culture and society, set within an intellectual and critical perspective. Collecting
the fragments of information throughout the intertwined structure of Williams' vocabulary and defragmenting it in an abstract way to show its possible and numerous outcomes, this study can only suggest another perspective to benefit from these keywords that will also shift our mindsets around them. In this manner, it tries to reveal the patterns of keywords by visualizing Williams' textual research into a visual narrative. Although this narrative is realized around the concept of originality, it is generatively adaptable to other concepts as well. The study ends with an extended version of Williams' vocabulary, showing that this vocabulary can diversify, update and expand with descendant vocabularies inspired by Williams. As with all the history of concepts, it is never final nor fixed. As these paths extend, we will find new ways of connecting and understanding the concepts and their transforming history reflected in our ways of thinking today.

One perspective is built on a myth of originality, a common idea of original being that there is a genius behind the work of art who is free from all the cultural and social conventions and contextual or intellectual conversations. This mythification appears as a continuum in history. Throughout history, the prevailing forces in architectural ideologies try to “naturalize” the cultural constructs of architecture to justify and rationalize it through mythification(Silvetti, 2000, 275). So, exposing these mythical constructions means cracking and resolving the meaningful readings that lie hidden in them.

The second perspective is that architecture emerges from a discourse that builds on itself and its techniques; its resources are everywhere. Jorge Silvetti (2000) mentions in The Beauty of the Shadows that the idea that architecture is a language built upon itself, with the ability to transform itself through form, its materials, comment, and ‘criticism from within’. We refer to, allude, interpret, comment, criticize, remake, revise, collect, and curate existing projects.

We use different forms of copying to transform our ideas into a language of architecture. Sometimes the copy itself can be an original as an Ise Grand Shrine. In some cases, the unbuilt works can greatly influence, such as OMA’s Parc de La Villette or Loos’s Baker House. Sometimes an anonymous work can be subject to originality. All we need is to find a fertile way to unveil the beauty of the shadows.

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**NOTES**

1 RW studies words in English and uses OED as his primary resource. Even though these words and concepts may differ in other languages, this study will continue to develop a structure in the English language.
Re-visiting representations of ‘nature’ and city through the Long Walls zone

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Τα Μακρά Τείχη της κλασικής αρχαιότητας, συνδέοντας την Αθήνα με τον Πειραιά, επέδειξαν μια σημαντική αλλαγή όσον αφορά την αναπαράσταση του μέσα και του έξω. Η υπονοούμενη αντίθεση “μέσα / έξω” διερευνάται σε σχέση με τις έννοιες “φύση” και “πόλη». Μπορούμε να διαβάσουμε τη ζώνη των Μακρών Τειχών σε συσχετισμό με την Αριστοτελική θεώρηση της “πόλης ως φύσης”; Το “παλίμψηστο υποδομών” είναι αναμφισβήτητα η δομή που αντιπροσωπεύει την ιδιομορφία της ζώνης των Μακρών Τειχών σήμερα. Η ζώνη των Μακρών Τειχών κατά τη διάρκεια της κλασικής αρχαιότητας και από τους νεωτερικούς χρόνους έως σήμερα, υπήρξε ένας επιμήκης χώρος που αντιπροσώπευε την κινητικότητα, μεταξύ Αθήνας και Πειραιά. Ιστορικά, ο χαρακτήρας της περιοχής έχει υποστεί αξιοσημείωτες αλλαγές: από τύποις αστικής περιοχή στην αρχαιότητα, μετατράπηκε σε αγροτικό και κατά τον 19ο και 20ό αιώνα σε ιστορική βιομηχανική ραχοκοκαλία μεταξύ Αθηνών και Πειραιά. Σήμερα θα μπορούσε να χαρακτηριστεί αντίστοιχα ως ζώνη αποβιομηχανίσματος. Η κατανόηση της περιοχής ως παλίμψηστο θέτει υπό αίρεση την τάση για μαζική ομοιογενή αστική εξάπλωση. Το παλίμψηστο αποκαλύπτεται ως εγγενής αξία του εδάφους της ζώνης των Μακρών Τειχών, που δομεί την παρουσία ιστορικών χαρακτηριστικών, και αυξάνει την αίσθηση μεταφυσικότητας. Για την κατανόηση της περιοχής ως παλίμψηστο θέτει υπό αίρεση την τάση για μαζική ομοιογενή αστική εξάπλωση. Το παλίμψηστο αποκαλύπτεται ως εγγενής αξία του εδάφους της ζώνης των Μακρών Τειχών, που δομεί την παρουσία ιστορικών χαρακτηριστικών, και αυξάνει την αίσθηση μεταφυσικότητας. Για την κατανόηση της περιοχής ως παλίμψηστο θέτει υπό αίρεση την τάση για μαζική ομοιογενή αστική εξάπλωση. Το παλίμψηστο αποκαλύπτεται ως εγγενής αξία του εδάφους της ζώνης των Μακρών Τειχών, που δομεί την παρουσία ιστορικών χαρακτηριστικών, και αυξάνει την αίσθηση μεταφυσικότητας.
INTRODUCTION-
ARCHAEOLOGICAL BACKGROUND: A SCHEME IMPOSED ON THE LANDSCAPE

The Northern Long Wall, built during the first half of the 5th c. BCE linked Athens with the Piraeus peninsula. It was ‘cloned’ during the 2nd half of the same century, and thus the ‘Middle’ or ‘Southern’ Long Wall was built. I’m using the word ‘clone’ as the two elongated structures were parallel along most of their course and of almost equal length. Before the formation of the Middle Long Wall, another Long Wall, namely the Phaleric Long Wall, formed an oblique pair with the Northern Long Wall; the Phaleric Wall linked Athens to the port of Phaleron, the importance of which gradually faded. (Conwell, 2008). Still, the adjective ‘Middle’ Long Wall reflects the original spatial distribution, as it was built between the initial oblique pair (Fig. 1A). What emerges from the enigmatic emergence of the Middle Long Wall, as a parallel structure to the Northern Long Wall, is a ‘device’: is it extreme anthropogenic transformation, or a ‘cunning counsel’, of goddess Athena? This ‘device’-aka ‘metis’ - attributed to a deep-rooted and fortified place, locus of the mythical Cecrops’ city or “whatever within his border Cecrops contains” (Herodotus via Dougherty, 2014) the property of a naval node. The aspiration to expand Athens’ topological importance without displacing it, was pursued through the Long Walls. Athenians aimed to render Athens a coastal city while keeping its diachronic position in the topography. The rich palimpsest of mythological, architectural, and political traces deployed in the landscape around the Athenian Acropolis was thus bound to Piraeus peninsula, which comprised 3 fortified new ports located in 3 gulfs.

What has been attributed repeatedly to the pair of Long Walls connecting Athens and Piraeus during classical antiquity (5cBCE), is that they formed an elongated defensive corridor. Indeed, whilst the surface of the protected area was about 1.5km2, its length was beyond 30 times its width, and this analogy could partially justify the use of the term ‘corridor’. However, for architects a corridor is usually considered as an in-between space, a connective space, the materialization of a link; therefore, I was surprised to discover that the double Long Walls fortifications protected a bond: more than the specific area which lied between them, they were meant to render the link between two significant urban poles ‘unbreakable’. What attracted my interest to the parallel Long Walls is that today, the course of this corridor can still be discerned in aerial views and satellite photos, even whilst the Long Walls remnants are still mostly buried under the urban surface. This article investigates the persistence of this ‘device’s traces in time, since its traces are still structuring the city’s surface today.

SPATIAL REPRESENTATIONS IN THE LONG WALLS ZONE: MOBILITY AND ACCESSIBILITY, OPEN VS CLOSED, INFRASTRUCTURAL PALIMPSEST (STATE OF THE ART)

Linking the Long Walls to Mobility

Can a gigantic, elongated and static structure such as the Long Walls represent fluid and immaterial qualities such as ‘autonomy’ or mobility? If yes, what is the “tare” that the massive fortification leaves behind as a connotation? According to Dougherty, the decision to connect Athens with Piraeus through the Long Walls “radically transformed the Athenian civic experience on many levels from the material to the imaginary” (Dougherty, 2014). More than the defensive function usually attributed to the Long Walls, I shall argue that they represented an ideal urban dipole, which combined and juxtaposed a historic nucleus with a new naval node. By protecting the bond between these two discrete facets of urbanity, the values protected by the Long Walls were both material and immaterial.

‘Autonomy’ during war and during peace, understood as the possibility of a city-state to forge its own decisions, was a fundamental democratic value. The protection of this ‘autonomy’ was directly relevant to the
Further evolution of classical Athens' nautical supremacy in the Mediterranean: for the flourishing of trade and commerce, for deploying economic and strategic alliances, for strengthening its war fleet. Was 'autonomy' protected by the Long Walls fortifications? The theoretical and imaginary dimension of 'autonomy' is also to be considered, in relation to the perpetually evolving discourse and quest for the ideal polity that flourished during that time in Athens. However, an investigation of the Mediterranean landscape's micro-ecology, reveals that instead of 'autonomy', the Athens-Piraeus dipole bound by the Long Walls, represented a complicated network. This network consisted of transporting raw materials, their 'consumption' and processing, the making and export of artifacts; it made possible the mobility linked to central markets and markets overseas, and the mobility of taxes. These networks of interdependencies flourished while protected by the Long Walls, as we may find in a contemporaneous speech of Pericles; "while the magnitude of our city draws the produce of the world into our harbor, so that to the Athenian the fruits of other countries are as familiar a luxury as those of his own. " (Thucydides, trans. Crawley, 1950). The fruits and goods of other countries travelled across the Mediterranean to Athens's port. The artifacts handcrafted in Athens would reach via Piraeus various Mediterranean loci. The Long Walls supported the resilience of this flux.

The study of the urban ecology of classical Athens, has brought us today to a different reading: did the Long Walls exhibit Athens's non-autonomy, in terms of material resources? The non-autonomy of Athens during the 5th c BCE is obvious: the total population of Athens (c.a. 250,000 including slaves and non-citizens) exceeded what the plain of Attica could support; as proven by the diaspora of Athenian silver coins around the Mediterranean, an indication of how much grain needed to be imported from the island of Euboea, North Africa, and the Black Sea (Tainer, 2019, 88-89). The flow of goods to and from Piraeus and Athens, for sure left imprints in the landscapes of the places which were at the other end of the network, closer or further away; these should have been further studied if the aim was to grasp fully the role of the Long Walls in the urban metabolism of the Athens-Piraeus dipole during the classical period.

Linking the Long Walls to Accessibility

Before the 5c BCE a vast marshland, Halipeden, set apart the Piraeus peninsula from the rest of the Attic plain, hindering access from inland (Goiran et al., 2011); the peninsula was scarcely inhabited, with only scattered settlements linked to fishing activities. To reach the Piraeus peninsula, the Northern Long Wall forced its way into that marshland. Within the marshes, its foundation was reinforced laterally with the construction of artificial embankments made using blocks of stone and massive quantities of broken stones (Plutarch via Conwell, 2008:6). This lateral reinforcement of the Northern Long Wall could be also understood as some sort of land-forming structure, a robust link between the peninsula and firm land. In this way, the Northern Long Wall's construction may have contributed to the institution of accessibility towards the peninsula and thus contributed to Piraeus's further urbanization after 460BCE. Reaching the gate of the circuit wall of Piraeus at the Northern foot of the Northern Long Wall, the major transport artery joining Athens to Piraeus was referred to as the 'Hamaxitos' road (Xenophon via Conwell, 2018) It was the main 'Extra Muris' road between the urban dipole, and remained in regular use when the Middle Long Wall was completed; furthermore its function persisted diachronically.

Representations of Open and Closed Schemes, Imposed by the Long Walls

Another question which arises in terms of what is being represented, is whether the scheme that the parallel Long Walls imposed on the Attic plain's rural landscape, was an open scheme or an enclosed scheme. Arguably it was both.

To begin with, the construction of the Long Walls was an imposed scheme which had interrupted the rhythm of life on the plain, “for the straight sections of the structures obviously ignored the borders of individual farm plots, and they probably turned some roads into dead ends” (Conwell, 2008). As Frazer reported, the sayings of Aristides: “By the completion of the Middle Long Wall from Athens to Munychia the capital and its port were converted into one vast fortress, a day's journey in circumference (Aristides Or. Xiii), without a single break in the circuit wall except at the gates and the mouths of the harbours.” (Aristides via Frazer 1, 1898).

These descriptions form the impression of a closed scheme, which could be represented as a single-circumference fort which included two 'urban poles': Piraeus and Athens (Fig. 1B). Indeed, this scheme functioned as an enclosure and shelter for refugees from all over the Attic plain, during multiple invasions against Athenians in the periods 435-425 and 403-404. (Conwell, 2008)

Much more interesting - in architectural and political terms - is the representation of another essential facet of the Athens-Piraeus di-pole relationship. We refer to the representation of democratic ideals and the theoretical/philosophical quest for an ideal polity, discussed in classical Athens; such ideals were
reflected by a political philosopher and planner, Hippodamus in the first urban plan of Piraeus. If we consider the classical urban fabric of Piraeus as a materialised reflection of a democratic social structure, could that reflection be understood as a representation of the mobility of the democratic ideals between classical Athens and Piraeus? It is unlikely that ideals needed any fortified corridor to flow unhindered between the two urban poles, notwithstanding that Piraeus was urbanised after it was walled. The Long Walls zone in this respect connected an old organic urban nucleus with a newly designed rectilinear urban fabric.

Based on the way Aristotle describes Hippodamus’ innovation as ‘the division of cities’ and ‘distribution of urban ground’, it becomes clear that an ideological concept for society was implicated in planning Piraeus (Mazza, 2009). The innovation lies in the representation of a democratic social concept through urban planning, and the aim to materialise that plan. Therefore, Piraeus was not a replica of Athens. Piraeus was panned to represent the new urban concept. The new city was addressed to 3 classes of society whose activities expanded beyond the fort-walls: craftsmen-artisans, farmers, warriors. The craftsmen were producing exportable goods, the fleet warriors’ practice was directed towards the sea, whilst the farmers cultivated the rural soils of Attica. This last feature could be considered as a characteristic of an open system. The Long Walls could be represented thus as the opening of an old, fortified nucleus towards the Mediterranean (Fig. 1C).

Neoteric Facets of Mobility: The Long Walls zone’s Infrastructural Palimpsest

The dipole-fort was challenged many times in antiquity and the demolition of the Long Walls occurred repeatedly, followed by their reconstruction. However, the ‘enclosed-and-open’ scheme introduced by the Long Walls’ begun to deteriorate in the 3rd c BCE, when ‘no sea-power exercised the sort of control in the Aegean that would have justified their restoration’9. Ultimately, only their foundations remained after Sulla’s total demolition of the Long Walls superstructure, and the reuse of that material for the siege of Piraeus. (Conwell, 2008). Its glorious gigantic mass had completely deteriorated since the 1st c BCE. In the 19th century, the scheme once imposed on the rural landscape of the Attic plain by the classic Long Walls, was no longer prominent. Yet, what survived as a partially erased scheme, became in the 19th century an organic part of the daily life: shaping the mobility and property limits around it.

Since the 19th c the parallel Long Walls foundations have been buried below the two major transport axes linking Athens, the modern Greek capital, to its major port, Piraeus. Thus, a substantial infrastructural palimpsest was constituted. The Athens-Piraeus Avenue, and the first trainline of the Greek republic, were respectively built above the Northern and Southern Long Walls (Fig. 2). The term ‘infrastructural palimpsest’, coined by Bernardo Secchi (Secchi, 2012) is, according to my argumentation, the prominent conceptual representation of the Long Walls zone today. Duplicating, on the contemporary city surface, the fortification axes of classical antiquity, the functional transport infrastructure of the modern Greek capital gave again substance to the dipole Athens-Piraeus, in a peculiar neoteric way. Within and along the Long Walls zone, industrial complexes flourished during the 19th-20th century. Yet the paradox about this admirable spatial distribution, is that it has not been the result of a symbolic act, which aimed to represent a revival of the Athens-Piraeus classical urban dipole.

The enigma of the Long Walls’ infrastructural palimpsest formation, has not yet attracted enough attention. The story begins with the urban plans of Athens and Piraeus; commissioned by the early Greek state, both were designed as
two distinct urban centers, by a prominent duo of architects/urban planners: Kleanthes and Schaubert. Commissioned in 1832, the first urban plan of Athens was meant to create a symbolic representation: “a new plan, of equal value to the ancient glory and majesty of that city, and worthy of their contemporary era.” (Bastea, 2008). According to the urban plan the duo devised for Athens, the capital's new centre was placed 'Extra Muris', yet was bound by a node of three central axes to the ‘ancient city's glory’. These three axes formed the symbolic, geometrical centre of the neoteric city. (Biris, 2005/Sariyiannis, 2000, Bastea 2008). Two of them emanated from significant monumental loci of the classical city: the ancient city stadium and the foot of Acropolis hill. While the third, Western axis, extended from their intersection, heading towards the urban periphery, and Piraeus. Did this axis represent the Athens-Piraeus 'revival' of the ancient Long Walls axes. A similar incidence occurred 35 years later, as the first trainline linking Athens and Piraeus overlapped along most of its course with the Southern Long Wall's axis (Fig. 2, Fig. 3). A second, parallel infrastructural palimpsest was then created; simultaneously the Long Walls zone was re-created. Evidently, the tracing of the modern transport infrastructure based on the ancient foundations, can be understood as a geometry imposed by the enduring practical dimension of the landscape. Almost 'accidentally' landscape imposed its diachronic function. The double infrastructural palimpsest coincidence is not a mere product of neoclassical design: rather a product of ‘common sense’, or a ‘common device’, acknowledging the power of a deeply rooted habit. It must be highlighted that both transport axes - Piraeus Avenue and the train line- are still functional today, based above the parallel Long Walls foundations.

have gone beyond the practical, theoretical facets; the latter was commissioned to make the initial plan of Athens more rational, more grounded to the existing reality of the area during that epoch, more consistent in respect to the historic and practical dimension of the landscape. (Batsea pp 1669); according to Batsea, the colonial dimension of the urban plan of Neoclassical Athens was emanating mainly from the initial Kleanthes and Schaubert plan: represented by the clear geometric design, which was imposed on the topography. Whilst Klenze, in theoretical terms, could be perceived as an advocate of a more organic geometry, of a 'southern' city, with smaller public squares and main axes that followed the topography (Batsea, 2008).
MATERIALS AND METHODS: EXPERIENTIAL MAPPING AT THE LONG WALLS ZONE

The approach followed in the present research has been based on a methodology which considers experiential mapping as a tool for triggering a mutual relationship between an entangled observer and landscape (Kouzoupi, 2018). It is based on a concept of mapping that follows the orchid-and-wasp analogy (Deleuze & Guattari, 1987), where the map is an interface or a representation of the relationship between intruder [wasp and observer] and intruded [orchid and landscape]. Mapping is approached therefore as a representation of the way we get entangled with urban spatiotemporal manifolds. In situ spatiotemporal experiences are considered as multifaceted, intrinsic to the appreciation of the site. The maps-representations of the Long Walls zone presented in chapters (3 and 4) have been the result of an oscillation between in situ experience, and its diachronic and contemporary representations, such as philosophical and scientific views, historic maps and plans of archaeological findings, historic and present aerial views, archive material.

Disjuncture VS Bonding: infrastructure representations within the Long Walls zone

The Long Walls used to cut through the Attic plain during classical times, to unite the two cities into a dipole. They imposed new tracks of mobility and interrupted many pre-existing ones belonging to the rural network. Thus, they created a quasi-urban corridor, interrupting the agricultural fields and the fertile riverbanks of the Kephessos and Ilissos rivers. They were defining an innovative - for that era - articulation between natural landscape elements and urbanity. Their straight linear shape was not curved or interrupted by any landscape feature, such as the two rivers, or the Halipedon marsh. Their urban-planned form ran straight through any kind of ground, unaffected by the landscape. This complex legacy, of imposing infrastructures which segment the landscape and leave no space for interaction between ‘natural’ and ‘artificial’, consists of a practice we still have to deal with, both architects and landscape architects.

Of course, the ‘Extra Muris’ Attic plain continued to encompass predominantly fields, from antiquity till the first half of the 20th century C.E. However, the Long Wall strip’s accessibility, attracted a great deal of the industrial complexes settled between Athens and Piraeus in the 19th and 20th century CE. So, the Athens-Piraeus industrial ‘strip’, accessible thanks to the urban transport lines, ran among the fields of the surrounding rural landscape for many decades. It functioned as an attractor for industrial complexes and developed a distinct architectural identity which is still visible (Vatavali, Belavilas, 2007): This industrial strip somehow interrupted the rural properties of the plain that surrounded it.

The infrastructural transport...
The palimpsest ground of the Long Walls zone

It is evident that during recent years, most of the fields around Athens and Piraeus have been thoroughly affected, by the pressure of urban sprawl. The Long Walls zone, at present part of Athens-Piraeus’ rust belt, is not an exception. Yet, the urban sprawl loses its chaotic geometry when confined into a rectilinear planned zone, like the Long Walls zone. Precisely, the parallel axes of the Long Walls infrastructural palimpsest are still amazingly present in the aerial and satellite views of the area. The perpendicularity of the urban matrix along most of the zone accentuates its influence within the urban tissue (5). This perpendicularity can be understood as the articulation of this urban matrix to the Long Walls parallel axes. Referring to another article by Bernardo Secchi, which investigates the construction of the urban ground, it becomes clear that the Long Walls zone presents an idiosyncratic complexity regarding articulation of spaces: private and public, archaeological-historical and contemporary, infrastructural and collective. Therefore, the Long Walls zone could not be considered as urban periphery, since “What connotes the historical city, and in an opposite sense also the periphery, is the great articulation of the spaces.” (Secchi, 1986). To focus on the historicity of the ground’s materiality, which bears the palimpsest traces, is a way of deciphering the zone’s history, as an oscillation between urban and rural.

The proposed reading here of the Long Walls zone does not seek to highlight the ruins of classic antiquity as a static, dominant monument. Since we read the industrial monuments as part of the area’s ground complexity, their re-integration to the contemporary urban tissue is also of extreme importance.
Following Secchi’s description, this zone should be read in relation to society and its general movement: “In palimpsests of infrastructure we can recognize a long history of general movement of the society, its economy and culture” (Secchi, 2012). Along their c.a. 6 km of length, both Long Walls tracks are being excavated in rescue excavations, by archaeologists14; the excavated sites have enabled the approximate delineation of the course of the Long Walls (Petritaki), 2003) The Long Walls foundations are visible in the city’s surface only at a few sites today; often, after the excavations there follows a survey of the findings and re-covering of the unearthed site: especially when the Long Walls are located below transport infrastructure. Even when the archaeological traces are covered and safeguarded beneath the ground, a dystopic, isotropic repetition, reminding ‘no-stop-city’ as anticipated by Archizoom15, threatens the zone’s surface. Contemporary urban sprawl, by propagating surface homogeneity, risks to cover and conceal the Long Wall zone’s meaningful ground.

**REPRESENTATION AS SYNTHESIS: CONTINUITY AND DISCONTINUITY WITHIN THE LONG WALLS ZONE (RESULTS)**

**Entangling Representations with time: Resetting ‘Inside’ & ‘Outside’**

Among the places which I identified - by in situ and archive/ bibliographic research - as being extremely rich in palimpsest traces, within the Long Walls zone, is an area in Tavros district. It is an area where the Northern Long Wall intrudes upon a neighbourhood, inhabited mainly by refugees since the 1920’s (Myoza, 2020). There, the infrastructural palimpsest’s social dimension is pronounced, as the archaeological traces lay below public spaces and social housing blocks. I realised that a specific social housing complex was probably built above the intersection of the Northern Long Wall with the historic traces of Sygrou prison. (Fig. 6,A,B). The Southern Long Wall almost intersects with the underground derived riverbed of Ilios in the vicinity (Fig. 6A). In this area manifold landscape qualities intersect, setting and resetting the notions of ‘inside’ and outside.

The notion of outside can bear a double meaning: exclusion or confinement. By investigating the notion of outside in that area’s palimpsest, we follow a time-respective approach. At the lower level of the palimpsest (c.a. -3 to -4 m, below urban surface) we should find the parallel Long Walls traces. In classical antiquity, when functional, they contributed to a concept of outside synonymous with a vast, open, rural landscape. Furthermore, outside of the Long Walls could mean off the structured urban space, and apart from the system of relations the polity and its connections intertwined across the Mediterranean. Outside during siege could mean beyond the city’s protected limits, and an exposure to lethal danger. When invading armies attacked Athens, the inhabitants of the rural Attic plain would seek refuge within the Long Walls zone. This refuge represented a shelter, thus inside, but in terms of everyday life, for sure enclosed - especially farmers – away from their usual activity, outside their quotidian life (Aristophanous, Aharnai). Closer to the surface, yet still underground (c.a. -1m below urban surface) lies a part of the Sygrou prison’s foundations traces; it was constructed in the late 1880’s, placed on the far-side (rural side) of the old Ilios riverbed, and close to the river’s intersection with the train line linking Athens to Piraeus (1869).

The Ilios river was diverted in early 1900’s, and its constructed riverbed almost intersected with the Southern Long Wall, in the prison’s vicinity. When the prison operated, in the 19th-20th c., the prison circumference wall created an enclosed space which is considered as outside, since it is exclusion from society. Up to the mid’ 1940’s, both criminal and political inmates were occasionally confined in Sygrou prison, for sure during the period leading up to the civil war. Multiple linear infrastructural elements, used to segment space around the prison: ‘natural landscape infrastructure (Stockman, 2013) like the initial riverbed, and anthropogenic infrastructure like the neoteric trainline - still operating as a surface metro line - and the train bridges the diverted riverbed.

The concept of inside can be interpreted in relation to the Long Walls zone, as synonym with the notions of shelter, enclosure, and inclusion. The parallel Long Walls forged in classical times the notion of inside bearing geo-political connotations: inside the urban dipole, inside the fortified and protected zone, inside the network of relations of the urban dipole. Of course, the Long Walls zone during classic antiquity was also used as a linear receptacle for refugees, during attacks and states of siege. When in siege, inhabitants dispersed into small rural settlements of the Attic plain ephemerally settled among the parallel Long Wall structures. (Conwell, 2008) Due to the fact the Athenians were under siege for many months during numerous years, and remained enclosed within the urban dipole and the Long Wall, an infectious disease decimated the city’s population, which brought about a negative aspect of the notion of inside. During neoteric and modern times, as the industrial belt between Athens and Piraeus was associated to the Long Walls zone, the character of the zone was modified into a place
of labour and production. The notion of inside thus acquires in this respect, both a new spatial and a social meaning. The train line and Piraeus Avenue made the zone accessible, for workers, for engineers and manufacturers, for transporters of raw materials and products. The decision to convert the district of Tavros to a receptacle for refugees in the 1920’s, created synergy with the proximity to the industrial production sites. Moreover, a rare piece of history can be retrieved in the area of Tavros, where the prison Sygrou buildings were located. After the prison ceased to operate, the

Fig. 6A - As shown a part of the Northern Long Wall was covered by the curvilinear building of Sygrou prison [1887-1950’s] and since 1960 by the social housing complex.

Fig. 6B - Synchronic representation of the palimpsest involving the Northern Long Wall, the former position of the Sygrou prison, and a social housing complex. / (6A&6B) Collage of historic and contemporary photos & aerial views, by the author.
buildings were transformed by political refugees and economic immigrants spontaneously into shelters, for a period of a few years. They collectively stated their claims and achieved their relocation to apartments of the new social housing complex (Fig. 6B) which was built in the place of the demolished prison building, in 1960 (Myofa, 2020).

That social housing complex today, is a material trace of this amazing social history and the immaterial palimpsest of this area, the social importance of which is exquisite. Among the inhabitants today, there are still people who have lived part of this remarkable history. Inside in that case takes the complex meaning of a twofold metamorphosis: a hostile enclosure (prison) was transformed into a set of provisional shelters, and then into a house complex, essentially homes.

I realised that within this area the palimpsest traces could play a role of connectivity, repairing the urban tissue, now fragmented by linear infrastructures. The majority of the significant historic traces are latent in the area's substratum: both Ilissos riverbeds are at present covered, the Long Walls reach the surface only at a few areas, and Sygrou prison's material traces are also underground. Of course, the layers of significant social history should not be disregarded: they survive within the area's oral history, as embodied and immaterial traces.

**Mapping to Represent continuity within the Long Walls Zone**

The workshop “Designing Co-existence with the Long Walls on the surface of the city” (13-25 / 9/2021), was realised in the framework of my Postdoctoral Research; I coordinated it under the auspices of the Department of Architecture UTH, and was hosted by the School of Architecture NTUA. This workshop was triggered by the realization of the disconnect between contemporary urban functions (city life) and the Long Walls, and my findings on the exceptionally rich archaeological, historical and social palimpsest of the focus area, Tavros (Fig.7).

The learning objectives of this workshop were the following:

- To raise the awareness of young participants about the rich palimpsest of the Long Wall zone and in particular the focus area.

- To cultivate the importance of inclusiveness in reading and in highlighting the palimpsest of the place, the different historical
periods, the ancient and the modern history of the place.

- To integrate the experience of space, in reading and highlighting the palimpsest through empirical mapping, and the search for reinterpretations of public space from the traces left or narrated by the inhabitants of the area.

The four teams of students and young architects which took part in the design workshop, were primarily asked to focus on their own subjective mapping of the investigated area. Among the theoretical concepts represented, two are presented here:

- The antithesis of ‘inside<>outside’ (Fig. 8) as it appears among the traces of the Long Walls and the trace of Sygrou prison’s circumference, can stand as a base for the further development of a proposal that seeks to unearth and exhibit simultaneously different phases of the area’s palimpsest by the tool of digging at different depths.

- Selected layers of the area’s palimpsest (Fig. 9) were presented one on the top of the other from the oldest [bottom] to the contemporary (top): Ilissos’ historically alternating riverbed, the Long Walls construction - 5th c. BCE, the trainline and Sygrou prison construction - second half of 19th c. CE, the diverting of the Ilissos’ riverbed and building of social housing complexes - 20th c. CE, the area at present. It becomes clear that the Long Walls zone initially had been a insert into a rural landscape, while today it is a strip of the urban landscape.

DISCUSSION AND CONCLUSIONS: REPRESENTATIONS OF ‘CITY’ AND ‘NATURE’ AND THE LONG WALLS ZONE

It is appealing to suppose that the landscape-image of an open-
yet-secluded city-node, separated from its agricultural and ‘natural’ environment, and inclusive to a vast network of overseas relations, was a way to represent ‘autonomy’ in classical antiquity. In our contemporary view, the emphatically pronounced bond between Athens and Piraeus exhibits rather dependence on the network of over-seas trade. Now outdated, yet once possibly exemplary, this concept of ‘autonomous Athens’ could have functioned as a pre-representation of the Aristotelian understanding of the ‘autonomous polis’ or polity or city-state\(^1\) : “Hence every city-state exists by nature, inasmuch as the first partnerships so exist; for the city-state (πόλις) is the end \(τέλος\) of other partnerships, and nature is an end \(τέλος\), since that which each thing is when its growth is completed \(τέλεσθείση\) we speak of as being the nature of each thing, [...] Again, the object for which a thing exists, its end, is its chief good. From these things therefore, it is clear that the city-state is a natural growth \(των \ φύσει \ η \ πόλις \ εστί\), and that man is by nature a political animal, [...] ” (Aristotle, 1959:9). Aristotle argues that the polity ‘is a natural growth’, dismantling completely the ‘modern’ yet now obsolete reading of the antithesis ‘city vs nature’ which has been dominant in the 20th century. Aristotle presents the urban-and-political context and environment of the polity as the natural environment for political animals, namely citizens, in this case, men; if urbanity is the ‘nature’ of Anthropos, according to Aristotle, what would be a representation of the ‘urban nature’ in those terms if not an anthropocentric situation? Any strictly anthropocentric ecosystem is dystopic, especially if looked at under the lens of the Anthropocene.

The western theoretical approaches that fuelled an inconsistent antithesis between ‘nature’ and ‘civilisation’ or ‘culture’ for centuries, stand in the opposite way to how Aristotle defined polity as ‘nature’. In the context of modernity, the signifier/term ‘nature’ was contrasted with ‘urbanity’ which was again treated as the epitome of civilisation, perceived this time as distinct from nature (Ritter, 2004:np). The dystopic environments potentially produced by the prevalence of this antithesis have been effectively represented in the 20th c. by art/architecture (i.e. “The Continuous Monument’, 1969, by Superstudio\(^1\)) and literature masterpieces such as the novel ‘We’ by Sergei Zamiatin. Zamiatin immaterially constructs a dystopic totalitarian urban environment, enclosed, and separated from ‘nature’ a Wall made of green glass. (Zamiatin, 1917/20169 This Green Glass Wall represents the bi-pole urban<->natural, and materializes it as a practically unbreakable, uncrossable boundary. It creates an analogy using material of immaterial massive Walls that segment our perception and the continuity of our inhabited space, like the walls of fortifications.

The projection of Zamiatin’s understanding of segmentation to the ancient polis/city, its reading as a distinct, secluded anthropocentric structure and aimed solely for humans - disregarding the conviviality with other forms of life - fauna, flora -, could be argued to represent a structure anticipating the Anthropocene; yet we should not forget that this is an anachronistic perspective which we cast on the classical Long Walls from our present standpoint. The segregation between natural dynamics and urbanity could ideally collapse from within, in the Long Walls zone. Thriving derelict industrial complexes, and also areas where one can see their ancient, excavated foundations among weeds are such manifestations. It seems ‘Nature’ today has invited itself as an evolving process within the Long Walls zone, inverting the meaning of seclusion\(^1\).

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PERTITAKI Maria/ ΠΕΡΤΙΤΑΚΗ Μαρία. Προσάρτηση ανασυνέθεσης του αρχαιολογικού τοπίου στην ευρύτερη περιοχή Πειραιά βάσει των νέων αρχαιολογικών τοπίων στην ευρύτερη περιοχή Πειραιά, based on the new archaeological function, in the plain, of the diachronic function, in the plain, of the transformation of Piraeus Street. In: Το Τέλος των Γιγάντων. Βιομηχανική Κληρονομιά και Μετασχηματίσμοι των Πολιτισμικών Πολιτισμικών Κληρονομικών Συναθρόντων ΤΙΣΣΗ. Voles 22-25 November 2007


Sterling B., 2009, Do Good Fences Make Good Neighbors? What History Teaches Us about Strategic Barriers and International Security. Georgetown University Press, Washington D.C., pp. 36-37 The Northern Long Wall was ca. 5.94 km long -and built between 462-458 BCE-, the Southern Long Wall 5.98 km long -and built between 446-431-, they were parallel along most of their course, and the in between distance was ca. 183m [Conwell, 2008: 4].


James George Frazer is referring to the “Middle Long Wall” in his commentary on Pausanias.


The term ‘neoteric’ is used instead of the terms ‘modern’ or ‘early modern’, taking under account that, anticipating the ‘modern’, the ‘early modern’ period is attributed ambivalently; the term ‘early modern’ is usually known as a period between 1400-1800 CE, either refers to the period 1800-1914 CE [Goldstone, 1998]. The term ‘neoteric’ stems from the ancient Greek verb ‘εποχείτω, and is interpreted as “to attempt changes, innovation”[Liddell-Scott, 2007] and is used in this article to refer to the period of drastic changes in the new Greek state which followed the Ottoman occupation, that is after 1832.

Cowell, 2008: 191


Also testified by the map by F. Adlhohen, [1837]

Spín in his 17th century map had noted two paths/roads, under the name “Chemin du Port Lion” and “rue du Pirée ou Makri Teich”; his testimony could be an indication of the diachronic function, in the plain, of the Hamaxitos ancient road Von Attica, , first published in Berlin 1904. Athens: Melissa 2008.

A long list of industrial buildings along the Athens-Piraeus Avenue [88 buildings] are considered as monuments, and are protected by law since 1995.

At present the Ephorate of Antiquities of Piraeus and Islands is responsible for the ‘Long Walls monument’ along most of its course.

Archizoom Associati , No-Stop City, 1971, project d'Andrea Branzi, video 9min, FRAC -centra Val De Loire.

Aristotle, Politics

https://www.moma.org/collection/works/3934

Sandra Bartoli [lecture, 13.1.2022] highlighted the quest for the outbursts of ‘urban nature’ as a tendency within cities which were practically secluded, like West Berlin during the cold war; referring to Wolfram Kunick's mapping of flora societies, which had invaded an enclosed derelict space within the no man's land, [Bartoli et al. 2019]
The Architectural Representation through Mapping Controversies

Analysis of the local condition

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Actualmente gran parte del entorno construido a nuestro alrededor es igual en cualquier lugar. En la arquitectura, a través de modelos estandarizados, se pretende decir a las personas cómo deben vivir, creyendo en el determinismo de los proyectos; sin embargo, la realidad cotidiana es todo lo contrario, es inestable y cambiante. Ante ello, son necesarias las herramientas de representación que nos permitan visualizar esta complejidad.

El objetivo de este artículo es reflexionar en torno a la representación arquitectónica a través del Mapeo de Controversias con el fin de explorar las alternativas existentes en una visión integral y dinámica de temas propios de la arquitectura, ponderando la disolución de fronteras entre disciplinas del conocimiento. Se trata de un abordaje alternativo de las relaciones tradicionalmente clasificadas como dicotomías en la arquitectura (cualitativo/quantitativo, visible/ no visible, naturaleza/ cultura, objetivo/subjetivo, etc.), que desde su naturaleza aislada no permiten visualizar las oportunidades emergentes de su interrelación.

Para mostrar las posibilidades de esta herramienta de representación, se contextualiza un caso estudio en particular: La Reconstrucción de Vivienda por Sismo en la Región de la Costa de Oaxaca; el cual se desarrolla al sur de México entre los estados de Guerrero y Oaxaca (Véase fig. 5). Desde esta perspectiva se pretende hacer análisis integral de la condición local de la vivienda de reconstrucción para así mostrar las cualidades emergentes significativas (humanas o no humanas) que surgen de esta interrelación hacia proyectos de reconstrucción futuros en esta región sísmica. De manera específica se plantea la elaboración de un Mapa de la Condición Local como parte de la etapa de investigación en el desarrollo de proyectos arquitectónicos. Este mapeo abierto, libre y alterno según el caso en cuestión; es una oportunidad hacia la humanización del espacio desde la representación arquitectónica.

A big part of the environment built around us is practically the same wherever you go. Architecture pretends to tell people how to live through standardized design models, thus believing in some sort of design determinism, however, everyday life is very different from that, it is unstable and ever-changing. Consequently, it is necessary to have representation tools that allow us to envision this complexity.

The aim of this article is to reflect on architectural representation through Mapping Controversies in order to explore different architectural alternatives in an integral and dynamic way that dissolves the boundaries between conventional areas of knowledge. This transdisciplinary approach moves beyond the traditional relations that have been classified as dichotomies in architecture (qualitative/quantitative, visible/ invisible, nature/culture, objective/subjective, etc.) and which, considered in an isolated manner, limit the possibility of emerging opportunities that might result from their collaboration.

In order to show the possibilities of this representation tool, a particular case study is presented: The Earthquake Housing Reconstruction in the Coast of Oaxaca which took place in the south of Mexico, in the intersection of the Guerrero and Oaxaca states (see fig.5). From this perspective, the making of an integral analysis of the local condition on the housing reconstruction in the region is proposed in order to expose the significant emerging qualities (human or non-human) that arise from this mapping towards future reconstruction projects in this seismic region. Specifically, the elaboration of a Map of the Local Condition is proposed as part of the research stage in the development of architectural projects. This open, free and alternative mapping according to each case in question is an opportunity for humanized space from architectural representation.
INTRODUCTION

The lack of a wide and integrating vision in the different areas of human knowledge has resulted in multiple problems, to which architecture is no exception. Throughout history knowledge has been separated into different fields so that it can be studied. Nevertheless, the problem does not lie there, but in believing that the different areas of knowledge are in fact separated from one another, thus focusing only in one specific and single area: “In certain accidents and specific places, in some ‘areas of interest’ of this political academic geography traced by the disciplines and their specialties on the landscape of knowledge.” (Martín Juez, 2002, p.130)

In architecture the main representation techniques have relied on a fragmented perception of reality, which have a complex origin related to a lack of an encompassing vision that sees things in an integral and interrelated manner. In philosophical terms, according to Hans-Georg Gadamer: “It is the task of philosophy to discover what is common even in what is different. According to Plato, the task of the philosophical dialectician is «to learn to see things together in respect of the one».” (Gadamer,1986, p.12) This is why buildings are represented as isolated from ordinary life, local culture, different lifestyles and even the worldview of their inhabitants. For Josep Maria Montaner currently “the mechanistic world still intends to place the instrumental criteria above the human and cultural ones, even if it comes with a look, it increases inequity as well as the risks.” (Montaner, 2014, p.12)

From this perspective, buildings have come to be considered as autonomous and, even in some cases, the interest lies only in their symbolic value and the efficiency of the technology involved in their construction. For architect Kenneth Frampton the problem is an architectural production based only on the perfectioning of technology, where the possibility of creating significant forms is extremely limited. (Frampton, 2002, p.78)

Now, by giving meaning to a building’s symbols according to preestablished parameters such as architectural style, the historical period in which it was created or the concept that the designing architect seeks to portray, etc., a predefined, stable and static condition is affirmed: “When a building is tackled through a subtle procedure of sign interpretation, we engage in a search for reciprocal relationships between signified and sign. A building appears to have an independent constant form that is separated from a distinct meaning.” (Yaneva, 2012, p.20) However, buildings are more complex than a symbolizing regimen.

Nowadays, in the second decade of the 21st century, the architectural knowledge to this date needs to rethink reality based on the new data. It needs to overcome the disciplinary rigidity so that it can enhance more versatile and adaptable mechanisms that can transform it. [...] Architecture moves forward and evolves as an interdisciplinary knowledge and not as a closed and self-sufficient discipline. (Montaner, 2014, p.8)

The responsibility of representing buildings in a simple and static manner goes back in history and it has very complex roots; from the renaissance representation techniques to the current computer assisted drawing that, even if it has managed to create a more collaborative design among different disciplines, it still limits the integration of qualitative interpretations to their performance measures.

For architect Juhani Pallasmaa, in the last thirty years the predominant architecture points to a visual, showy and collectible image (Pallasmaa, 2014, p.34). It is a type of architecture represented through photography (without people) that turns it into a static and unnatural art, ready for architectural speech (a posteriori). These conditions contradict the complexity of a spatial human interaction: “The judgement of environmental character is a complex multi-sensory fusion of countless factors which are immediately and synthetically grasped as an overall atmosphere, ambience, feeling or mood.” (Pallasmaa, 2014, p.230)

From a philosophical perspective representation can be understood as the intentional presentation of an object, be it intellectual or sensorial, belonging to internal or external senses. [...] Representation in its strict psychological definition [...] is an ‘update’ of sensorial information in virtue not of immediate and exciting perceptions, but of ‘vestiges’ of previous perceptions. [...] All representations derive from the material provided by the external senses, at least in their latest elements, and the other way around, in the creation of a world image of perception the immediate information of the senses can be combined with the one of representations [...] (Brugger, 1975, p.453)

From what has been analyzed so far, it is easy to say that architecture as a discipline constantly needs representation tools that embrace an everyday life encounter with the inhabitants of a particular area to the envisioning of these encounters in time. However, this complexity has not been successfully portrayed with the current representation techniques. This shows the need of incorporating emerging representation tools that help envision these inherent processes. The questions that follow are how
can we represent the complexity of processes in architecture without using the dichotomic categories of the discipline such as qualitative/quantitative, technology/humanities, tangible/intangible, nature/culture, visible/invisible? How can we represent the existing possibilities in the encompassing perception of problems in architecture?

The answer to these questions is explored through the methodological mapping of controversies developed by the sociologist of scientific knowledge and anthropologist of architecture Albena Yaneva. She has used the theoretical bases of systemic thinking, actor-network theory (ANT) and the Science and Technology Studies (STS) to represent the complexity of processes in architecture. Bruno Latour and Michel Callon, among others, developed the ANT decades ago.

AN INTEGRAL VISION

A systemic vision of architecture implies the creation of its own language. The term architectural (Yaneva, 2012, p.108), has a less stable, undefined, dynamic and implicit concept within that takes place in action. Its nature is complex and interrelated in a way that it represents the combination of technological elements with complex human beings in a susceptible natural environment and a peculiar cultural system that is not linear and stable only temporarily (Martín Juez, 2002, p.32). This definition represents an opportunity of understanding architectural space as a process.

For Albena Yaneva and sociologist Bruno Latour: “The problem with buildings is that they look desperately static. It seems almost impossible to grasp them as movement, as flight, as a series of transformations” (Latour, Yaneva, 2008, p.80). Both authors exemplify this concept with the flight of a bird. Fig. 1 shows a series of photograms that help study the mechanical foundations of the flight of a pelican, while in fig.2 the pelican remains static and does not show anything related to the essential activity of the pelican, that is, flying. So that if we were to stick to the representation of fig. 2 we would not have an approximated close understanding of its reality. Based on this it can be asserted that representation mediates our perception of the world, which is why the use of tools that can allow us to unfold reality for a better understanding is paramount.

MAPPING CONTROVERSIES AS A REPRESENTATION TOOL IN ARCHITECTURE

Mapping controversies is a research strategy that allows us to tackle architectural subjects without drawing borders between disciplines. It also gives the opportunity not to focus the representation solely on a unilateral creation of symbols, rather it allows exploring the building and/or the problems...
as a series of transformations, passages and experiences.

The word controversy comes from the Latin *controversia* and refers to an opposition between two or more people towards something and the ability to turn this situation around.

Controversies, as seen here, are complex phenomena. Design controversies involve all kinds of actors. Not only are there human beings and human groups but there are also natural and technical, individuals and institutions: beams and dreamers, engineers and protesting students, politicians and roof shells. Controversy displays the design and the social in a very dynamic way; design precedents and communities, political protests and design concerns. The actors never appear alone but in a network. The social and the cultural are to be found as architectural practices unfold, as design happens; they are not outside, far away or beyond architectural objects and processes. (Yaneva, 2012, p.60)

One of the most relevant contributions of this theory is the use of the term ‘actor’ to refer to autonomous entities that play an important role in the development of processes, be they humans or non-human. This characteristic allows us to trace multiple variables and their relations within the processes: costs, budgets, suppliers, architectural styles, constructive systems, construction material, engineers, lifestyles, worldviews, collectives, protests, visual representations, etc. It is an ethnographical work that can begin with a spark of curiosity: the beholding of an event, a human or non-human actor or even a predictive event that allows the possibility of exploring the object of study from different perspectives that are all documented and interpreted throughout the mapping of the information.

This proposal for the developing of mapping controversies is not linear. It can start at any point depending on the case, along with any necessary repetitions to explore the existing possibilities in the interaction and their representation. And carried out in such a way that, if it is possible to continue, to quantify and visualize the dynamics of the controversy, what happens in the intersections where previously invisible concepts arise can be described, consequently incorporating aspects seldom taken into account in architecture. Fig. 3 shows how this research methodology can have multiple starting points, which go from the curiosity while observing an event, its documenting, to the particular interpretation of a phenomenon and the visualization of emerging aspects in the form of a map. It is not a rigid methodology; on the contrary, it shapes itself in its definition while displaying previously concealed actors.

The development of mapping controversies in architecture is constantly changing. From this point of view, the architect is not just a technician, but also a humanist, an interpreter of the architectural as a process.

A building is not a static entity composed of symbols, but a flow of trajectories. Architecture is
made up of the dramas of design and construction. It is composed of forces and events; of different materials and textures; of the discordant voices of its makers; of qualities and substances; of passers-by' noises; and of accidents. A building is not a form but a map of all of these flowing trajectories. It is not a stable materiality, but a fabric changing according to different speeds. It is not a milieu of activities, but a navigational platform. (Yaneva, 2012, p.20)

The London 2012 Olympic Stadium Controversy

Alberna Yaneva exemplifies the use of the mapping of controversies in the design, planning and construction of the stadium built for the London Olympic Games of 2012 (see Actor Diagram on fig. 4). She started tracing the action guidelines for the documenting and mapping with the debate that took place in the media concerning the design, the functioning and the future of the stadium once the Olympic games had come to an end. This information was supplemented with the gathering of information on the actors, their affiliations, roles, responsibilities, opinions and dates of participation in the debate with reference to the media’s attention as well as the initial and end dates of their participation. Through this representation, the actors involved became known, such as the architects, institutions, users, clients, costs, existing buildings, diagrams, drafts, models, among others. In the case of the individual human actors, there is more information about their institutional affiliations, dates of appointment and main interests. As for the non-human actors and institutions, different information is gathered, such as whether they are from the public or private domain, the type of financing, the interest in the project, etc., so that, when necessary, the declarations are provided with real quotes in order to represent the main point of view or the interests of an actor in the controversy.

Using the generic term ‘actors’ we designate all beings enrolled in the controversy, human and non-human. We identify relevant online sources and map the actors’ relationships through various ‘actorial diagrams’ […]. To identify the actors, we read online sources and ask ourselves if the presence or absence of an actor makes any difference.” (Yaneva, 2012, p.90)

For the representation of the stadium’s design and construction stages in time, stages in the history of the project were selected and were seen as nodes and explained through interactive diagrams that show text and schematical representations of the relations among the main actors. The diagrams focus on particular intersections of the trajectories and concerns of different actors.
The dynamic of the controversy is captured in a series of stories that can be told when unravelling each node of the diagram.

THE CONTROVERSY AND ITS SPATIAL POSSIBILITIES: EARTHQUAKE HOUSING RECONSTRUCTION IN THE COAST OF OAXACA

What kind of inquiry on architecture can start from a simple sparkle of curiosity, followed by a quick Google search and, eventually, by a thorough library investigation? An inquiry, that gradually engages in a retrospective analysis of the recent debates surrounding a building’s design. (Yaneva, 2012, p.68)

The housing reconstruction in Mexico is controversial and shocking in itself because of its own complexity. In this section, the specific reconstruction of the Costa Chica region is tackled. This area is located at the intersection of the states of Guerrero and Oaxaca in the South of Mexico. The reconstruction took place in 2013 as part of the governmental program created to deal with the damages caused by the 7.5 Richter scale earthquake on 20 March 2012. This earthquake was felt in Mexico City and other areas of the country, and it significantly affected the buildings located in the epicenter, which is the area of the field study presented here: Costa Chica (see its geographical location in fig.5). Around 37,500 houses were structurally affected by this earthquake, which is why it is considered one of the most intense earthquakes that has taken place in the history of Mexico.4

An earthquake does not just affect the buildings of the area, it is also a traumatic and disturbing event for the people that experience it since it happens suddenly and interrupts everyday life (Žižek 2014, p.16). It is an event that mobilizes a great amount of people who seek to reorganize their lives (and their housing) in a solidarity way according to the possibilities and within their means. On March 20th, 2012 the federal government declared a state of emergency for 19 districts in the state of Guerrero and 28 in the state of Oaxaca. Thus, the housing reconstruction project was a reaction to this declaration and it implied repairing and reconstructing over 40 thousand structures that were affected by the earthquake and its aftershocks. Now, this undertaking cannot be explained by just taking into account the qualitative data.

Controversy mapping aims to provide an answer to the following questions: what aspects influence the housing reconstruction design, whether from a local or a prefabricated perspective (which is also part of the governmental reconstruction program)? How do people live in their rebuilt home? What is the current usage of the reconstructed housing? How did the everyday life needs of their inhabitants impact upon their reconstruction? How can we make a cartography of the changing dynamic of the everyday relations of the actors involved? In order to answer these questions, a Map of the Local Condition of the study case was created (see fig. 6) which was based on observation, documents, and interpreted information about field work carried out during the investigation of the reconstruction of housing by the earthquake in the Costa Chica Region. Based on the obtained information, an attempt to acknowledge key processes is made that remain invisible for the traditional architectural area analysis.

The aim of mapping is to explore the spatial experience of the inhabitants of a specific area while acknowledging both human and non-human actors, their importance and their interrelations. This approach involves the perspectives and concerns of the actors, in such a way that their voices are the ones that are heard, instead of the researcher’s preconceptions: “The purpose of the cartography is not to teach actors what they are incapable of understanding but to learn from them how to observe their collective existences.” (Yaneva, 2012, p.4) The aim is to incorporate the complexity of

Fig. 5 - Epicenter zone between the limits of the state of Oaxaca and Guerrero: In the Costa Chica Region.
the actual experience without substituting the specifics by general details, which is the way of prefabricated housing prototypes. In contrast to this, controversy mapping relies on a diversity of tools such as word-by-word witness testimony recording in the interviews, the construction of traditional housing and the effects of the earthquake through an interpretation map, the local and national news, blogs with their different stories, the internet, statistics, and the everyday use of the house, etc. The prefabricated housing reconstruction (prototype patented by GMI) began in 2013 and ended in 2014. By 2022, it has gravely deteriorated, it has a dirty and worn-out look. However, although it served its main purpose as emergency housing for the 2012 declaration (according to the government’s and different institutions’ perspective), the inhabitants have complained about it not being decent housing allowing them to carry out their daily activities in adequate conditions (see fig.7, for a comparison between prefabricated housing and traditional). An example of this is the kitchen concept. For the people in this region the kitchen
is an outdoor-space, thus being open and big, whereas the kitchen in the prefabricated housing reconstruction consists of a single kitchen-breakfast-bar of 2.00 x 0.6m. From this perspective it is impossible to have a harmonious relation among the actors.

Also, the average temperature in the region is 30°C, with a minimum temperature of 18°C and a maximum one of 42°C. It has a warm and semi-humid climate with rain in the summer. The temperature recorded within the prefabricated housing reaches 45 ° C, mostly because of the polyvinylchloride (PVC) in the walls. Consequently, people find it uninhabitable to be indoors at noon (the hottest time of day) because of the high temperatures. On the other hand, traditional clay walls with wooden beams and tile roof housing has been restored depending on the economic situation of its inhabitants, who have improved it in time and have gone back to living in it once again. In this form of housing, domestic life is lived outdoors. The house is divided by two corridors, one that leads outside, all the way to the street, and the other one leads inside, to the yard which becomes an extension of the indoor space, which is a versatile space that is not physically bound by any wall. This makes the yard the compositional axis for activities that take place during the day. Some of these activities are of African origin such as making pottery, traditional dances, or even family celebrations. Other activities are weaving, baking in traditional ovens and preparing food outdoors (see fig. 8). In the yard, animals for the inhabitants consumption are bred, and it is also a place to store wood required for the cooking. Since there is no drainage system, the toilet is outside, next to a septic tank. For all these reasons, traditional housing has multiple descriptions, and it is considered an ever-changing space that is constantly transforming itself.
CONCLUDING REMARKS

The mapping controversies gives us multiple possibilities to interpret and represent the multiple things that affect architecture. This tool allows us to approach different variables (human and non-human actors) that are emerging, in the sense that they cannot be seen in an isolated manner. These variables are the result of their interaction and are an important part of a broader picture: everyday life. Buildings, architects, the architectonic, the construction, construction materials, institutions, budgets, etc., are all interrelated, which is why neither isolated and static frameworks exist, nor static constructions. From this perspective, isolated building construction does not work; for it goes against the changing nature of things that ends up absorbing it and a "space appropriation" takes place instead, with the inhabitants adapting the objects to their daily needs. These modifications go from relocating a sofa to using things in a different way from that originally intended. Therefore, as architects, it is paramount to think of space as embedded in a dynamic and interrelated network such that it is possible to envision the existing possibilities towards creating an integral design by interpreting, documenting, relating and representing the various possibilities.

Mapping controversies is a tool that can be useful to the architect in any stage, for it allows a more flexible approach than the rigid concept of “site analysis” in order to interpret it as something changing, unstable and in constant transformation. In this way, an initial approach to the place will allow us to understand the network of relations in which our design will be inserted. Mapping the local conditions helps us to have a harmonic building construction by envisioning the all the opportunities that exist potentially in the design.

The main advantage of mapping controversies is that it can be used in any stage of a project development, such as the feasibility study or the story of a building throughout time, to name but two examples. But, the possibilities become endless. Also, mapping controversies using the current digitalization techniques can contribute greatly to envisioning the infinite web of possibilities that result from different encounters, where each intersection can be the starting point of another one.

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10.09.2013 ALBENA YANEVA: MAPPING CONTROVERSIES IN ARCHITECTURE [ONLINE CONFERENCE]


NOTES


4For more detailed information on the development of this case study, the interviews and the documented information during the field study see: Claudia Montalbán. Culturas locales y sus respuestas espaciales: La reconstrucción de vivienda por sismo en la Región de la Costa de Oaxaca. Mexico: Master’s thesis, National Autonomous U of México (UNAM), 2018.
Mapping un-captivity

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The maps presented here are part of my student project titled “Instructions for un-captivity” (2016-2017) completed on the basis of the first-year studio “Introduction to Architecture 1” at the University of Thessaly. For this specific exercise of mapping each student had to choose a subject from the city of Volos and an object useful to the subject in order to observe and investigate them, assuming the role of “a detective, an archeologist, or an urban anthropologist” (Lycourioti,2012). The aim of the research would be the production of five maps from each student, each map with a specified title presented below. These maps would allow us a view of the city as “a net of spaces intertwined around the production of the object and the habits regarding its use” (Lycourioti,2012).

This exercise became a great stimulus for an new way of becoming familiar with the -unknown to me back then- city of Volos and its people. Also, it became a way to re-discover the map as a representation tool which can present a variety of notions, data and stories behind them -spatial, historical, poetic- that escape the logic of photographic objectivity and universality of today's digital maps such as those from Google.

Using the maps presented in this paper, we will explore the network linking a man, a cage, some chickens, a city and a utopia.
The maps that are being presented here are trying to tell the story between an object and a subject that uses that object, their relation to the city and cultural elements. In this case the object is a cage made for keeping chickens and the subject is Mr. Stefanos, who uses the cage at his live poultry shop located in the old city of Volos. In order to describe these relations, various scales of representation were used: from the scale of the construction detail to the scale of an imaginary city-state.

Creating these maps or even reading and using them, allows us to see things from different perspectives e.g., from the perspective of Mr. Stefanos, the perspective of the chickens entering the cage, or from a third point of view that can evaluate better the dynamic between the two and wants to create some plot twists.

Before we study the object, it is important to become familiar with the subject using it. The daily routine of Mr. Stefanos is the following (fig.1): early in the morning he starts off from his home to go to his land in order to load the chickens on his truck and then he goes to the store to try to sell them. In the afternoon the store closes. He returns the chickens back to his land and provides them with the essentials. Following that, he goes back to his home and family to get some rest until the second part of his life begins. At night, he goes at a bar “with women” as he characteristically mentions, which is also his responsibility. Therefore, he is a hybrid-subject with a double life.

The three following maps have to do with the object itself. Through the narratives provided by the subject we learn about the history of the object (Fig.2). When, where and by whom it crafted, what materials were used and what is its purpose. The cage was custom-made by a local craftsman making its historic bond with the city even deeper. Afterwards, there is the map of the usage of the of the object in the space (Fig.3) and finally, the map of the object’s space (Fig.4) - the cage creates a space in the city.

[A cage], like a prison is a form of taking away somebody's freedom (Foucault, 1976). It is a tool for the establishment of an unequal dynamic between the guard and the guarded. The chickens are restricted inside it and live under the supervision of Mr. Stefanos, upon whom their survival depends.

However, there is an altera pars. In Aristophanes’ play “Birds”, the
Birds, following the leadership of Peistheteros managed to revolt against humans who were hunting them and establish Nephelokokkygia, a utopian city of absolute freedom. Its citizens enjoy unlimited pleasures. The only active law says that there is nothing considered illegal. In Nephelokokkygia, therefore, there is room for everyone who is hapless or persecuted. For everyone considered by humans as a criminal, coward, lazy or anything else unacceptable or shameful for their species (Aristophanes).

The last map (Fig.5) suggests a rather arbitrary effort to represent Nephelokokkygia. It also works in a provocative way, challenging us to think what would happen if the chickens left their cage and how could that happen? Maybe they can have a second life at night. While Mr. Stefanos is at his bar living a bachelor’s life -even though he is married -, the chickens could prepare their own revolution.

CONCLUSIONS

Making a concluding evaluation of the work, I would consider the initial aim of the exercise achieved. The network of relations between the subject, the object and the city were recorded successfully and furthermore, it was enriched with additional meaning. The aim of these maps was never to be “objective”, neither could they ever be, since they are products of a procedure which relies on subjective observation and creativity. Beyond the object, the subject and the city which are the objects of observation, there is the subject that actively observes them and takes on the creation of a narrative through the maps.

In particular, the challenge to create a map called “useless” as part of the exercise, was a chance to participate even more actively in the shaping of this narrative. Observing Mr.Stefanos and the cage for his chickens gave me this “ah-ha moment” to introduce to the table the Aristophanes’ comedy “Birds” which was dealing with the issue of revolution against suppression.

Through the “Useless Map” I tried using my imagination and sense of humour to express mind association, which would allow the chickens to assume roles of active subjects in this relationship, bringing plot twists to the story. Whereas the previous maps were about the cage and the captivity conditions, the last map aims to incite a revolution by giving as motivation the image of Nephelokokkygia, the city where birds live in liberty. Therefore, the last map which, based on its title, could be everything or nothing at all, worked as a catalyst for the evolution of this story.

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Homeland Miniatures

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In architectural education, one of the most common and universal representation techniques is ‘central perspective’ which was discovered during Renaissance period. The rational world that The Renaissance offered us helps to create a universal language in the field of architecture and enables to represent our thoughts on space so as to create a dialogue between ourselves and others. On the other hand, some other techniques like iconography or miniature drawing reflect another understanding of the world and space per se that could be a new way of representation in our era.

The understanding of perspective in miniature drawing is different from The European Renaissance painting tradition. The scene depicted usually includes different time periods and spaces in one picture. Thus, we may say that miniature drawing is a multi-layered representation. Miniatures are always a part of book, not like a standalone work of art, and because of that they are closely related with the context of the book they were included in.

In our “Homeland Miniatures: A Collective Digital Travel book” workshop, we made a collective travel book that represents different cities/countries through miniature drawings of those homelands. Each student drew a miniature drawing of his/her homeland or the city where s/he was living at that time and wrote a short reflective paragraph that is related to her/his drawing. By putting all these drawings together we created our collective digital travel book at the end of the workshop.

The aims of the workshop can be listed as follows:
To introduce a new way of looking and understanding the world around us
To start a debate between “Western” and “Eastern” thoughts
To think on how to represent a city/country through one drawing
To discover the textures, important landmarks, and cultural artifacts of a city/country
To discover the multi-layered world of miniature drawings and their fragmented yet holistic spatial characteristics
To discuss the emancipatory character of architectural representations.
Cracow is a city with many important and symbolic historical monuments – a few of them are shown in the miniature drawing. These include Wawel Dragon, Cloth Hall, Barbican, St. Mary’s Church and few others. They are located in the centre, shown on the left side of the picture. Further away from the centre more and more vegetation appears and the buildings become simpler in terms of structure, colours and textures. Both parts are connected by the Vistula River flowing through the city. The author’s house is located in a quiet area, a bit from the centre of Cracow.
Cracow is a city located in the southern part of Poland, near the Vistula river. It has a rich history and culture, as can be seen in the architecture of the old town. The Old Town Square with the famous Cloth Hall is one of the largest town squares in Europe. Today, the old town is surrounded by a park on the site of the former city walls. However over time the city grew significantly. My family home is located on the outskirts of the city, where most of the buildings are single-family houses. Although the city centre is usually busy and crowded, there are also a lot of parks and a few nature reserves in Cracow, which I also wanted to show in my drawing, because this part of the city reminds me more of home.
BRISTOL | ENGLAND
by Maisie Walker

The port city of Bristol was an important point for The Industrial Revolution, and many monumental tobacco factory buildings remain in “Spike Island”, a cobbled industrial island sitting in between the waterways of the city.

The factory buildings contrast with the small terraced Victorian housing which moves up the hilly landscape to the north and south. To emphasise the repetitive high density housing I chose to draw two lines of houses in similar colour schemes and overlap them in different orientations according to the river. These are juxtaposed by the larger and less densely populated suburban neighbourhoods. The suspension bridge is an iconic structure in Bristol, connecting the highest points of the city across towering cliffs. The bridge is oriented to show how it is viewed from the centre of the city. Isolated from the buildings, I drew Cabot Tower another iconic building which sits alone at the top of a hill in Bristol, offering panoramic views.

Bristol has a strong link to nature. To highlight the difference between the built environment and natural environment I used different textures. The texture of the built environment flooring is a sketch of the “Bristol Byzantine” brickwork, which is a brick design specific to Bristol.

The home I live in is a Victorian terraced house, I used a gradual expansion of the terraced street towards this more detailed sketch of my house in elevation and plan.
In this miniature drawing I am representing the city of Albacete from my perspective. We can see my house at the bottom right, including a plan of the room. From there, I drew some paths to different places that I usually visit at certain times of the year. For example, I show how to get to the city centre. I usually go through a door that leads to this area, and from there go down some stairs to reach another. To represent these seasons, the trees have more or fewer leaves depending on winter or summer. Also, to emphasize this change of season, the sky is drawn warmer in the summer areas and colder in the winter areas.
QUIMPER | FRANCE by Mathilde Le Dérout

This personal work includes several important points of this city:

- The predominance of white and blue: these are the colors of the city, used for many centuries in the kitchen earthenware. They are handmade in Quimper. It is also seen in the embroidery of the household linen - A few touches of yellow-orange, like the lace of Breton costumes, they are handwoven. Also, we can envisage:
  - The city surrounded by hills, Mont Frugy for example
  - The city is known for its quays on the river Odet, very flowery quays and many bridges
  - The cathedral of Saint Corentin, dominates the city centre, its long spires can be seen piercing the sky

- The architecture of Quimper dates from the Middle Ages. It is made of half-timbered houses, the city centre does not have an orthogonal plan. It is a maze of small streets, one can get lost quickly. In my work you can understand the density of half-timbered houses and how to get lost.
I live in Istanbul, but I visit my hometown, Samsun, every summer. In this work I drew my grandmother’s house where I stay every summer and the images of Samsun that caught my attention. Since the city is the oldest settlement in the Black Sea region it has many historical textures. According to a rumour, Amazon women lived in Samsun. For this reason, there is an Amazon woman statue in a park called Bati Park. The city has been one of the most important factors in the independence of Turkey. The Bandırma Ferry, known to have started the Turkish War of Independence, still stands in the centre of the city. You can see the reflection of this diversity in Samsun, which has hundreds of tree species, such as Cedar and Cypress trees in my work.
ANKARA | TURKEY by Helin Karadeniz

In the workshop our homeland was depicted by drawing miniatures. I was born in Ankara and lived in Ankara for a part of my childhood. First of all, I started by identifying the important structures of Ankara. On the left side of the drawing is Anıtkabir, the mausoleum of Mustafa Kemal Atatürk, the founder and first President of the Turkish Republic. On the upper right is Ankara Castle, Atakule, which has become the symbol of Ankara, is located in the lower right corner of the drawing. Mogan Lake is located in the far left corner of the page as it is located a little outside of the city. Also, there is the Museum of Anatolian Civilizations in the upper right. Kuğulu Park and Youth Park, where the people of Ankara often spend time, are in the centre of the miniature. After that, roads and structures were added to show the chaotic and crowded feeling of Ankara.
ÖDSMÅL | SWEDEN by William Kjaernes Tholl

Ödsmål Village is a coastal village in the west of Sweden. It is a rural place connecting one of the biggest Swedish islands to the mainland through a ferry, and the village is a mixture of farmers and industrial workers. Most villages in Sweden look like this. A roundabout with an primary school, a church and two neighbourhoods close by - one bigger and one smaller. Because of the dense Swedish forests it is hard to see the landscape, except for when a field appears. Most fields in Ödsmål are either wheat fields or made for horses or sheep. The typical house is a wooden house with the famous Falu red colouring and with white contrast and a black ceramic roof, or with red ceramic roofs if the wooden façade has another colour. The village has a beach into the sea and one next to one of the small lakes. But, the last lake is a “bottomless” lake with a mud bottom so soft that you cannot stand on it; however, thick enough to make it impossible to swim out of it. Therefore it is forbidden for people to swim in it. The lake is surrounded by even thicker forest and is named “Pine Tree Lake” after that fact.
DUBLIN, IRELAND by Vladislav Krylov

Dublin as a city is characterised by two textures: the brick of its Georgian buildings and the cobblestone that lines the most iconic streets. It is a city of vibrance, although it rarely presents itself that way. One just needs to look at the entry ways and shopfronts to see the colour and life that the city has to offer. In this miniature I tried to reflect Dublin's almost chaotic, mediaeval layout, full of tight streets and confusion. Punctuating these streets, and giving some orientation are its landmarks, grand structures such as: Trinity College, The GPO and more modern additions such as Ulster Bank buildings and Liberty Hall. One of Dublin's most iconic features is one that is not present in its architecture - Dublin Bus. You cannot escape the hum of this double decker motor anywhere you go and they take you to all four sides of the cartesian map. This Miniature also helped me realise the size of the city, as many many parts had to be omitted to be legible, but overall it is a collage of the centre, a persian carpet of brick and stone.
ORIHUELA, SPAIN by Manuel Penalva Cases

Orihuela is the main city in the district of La Vega Baja located in south Alicante, Spain. It is situated at the foot of the ‘La Cruz de la Muela’ mountain, on which a cross sits at the summit, along with a ruined ancient castle and a priest seminary from the XVI century. The city has an extension beyond the Segura river.

My house is part of the rural area located in the middlepoint between Orihuela and Arneva, another residential zone which is still part of Orihuela. I’ve been living in Orihuela since I was a child and also in Arneva as my grandparents are from there.

All Orihuela is nestled between the mountains and one of them, the ‘Repetidor de Hurchillo’ close to Arneva, has a high antenna that controls signals for TV and radio. Palm trees are also typical, as an heritage from the Arabs and are very representative of the place’s nature.
KASHAN, IRAN by Mohammad Gerami

Here is Kashan. A historical city located in the centre of Iran whose name is associated with traditional architecture and specifically central-courtyard houses.

And here, a journey through an eastern traditional style is illustrated in miniature. A very unique way of picturing tales and events through distorted perspectives, known as reverse perspective. This is a style in which the widely-known illustration’s principles do not limit the author from picturing a vast, detailed event and field of view. This is an architectural journey through the city and at the same time, an opportunity to picture our city in one shot and nothing more accurate, detailed, and artistic than miniature to help us to overcome this challenge.

The presented illustration is a selected part of the historical zone of Kashan, with its unique urban texture, shaped organically with mono-colour central-courtyard houses. In this picture also there are some well-known spots including: Agha Bozorg Mosque, Tabatabai House, Boroujerdi House, Ameriha House, and Saljooghi Castle, that shaped a considerable part of the final illustration.
JOINVILLE-LE-PONT, FRANCE by Tristan Sanchez

My hometown is a little town in France, in the suburbs of Paris. It is separated from the capital by a forest called “Le Bois de Vincennes”. There are roads and bike lanes that cross the forest to go to Paris. My town is called “Joinville-le-Pont” : the city that is joined by the ‘pont’ - bridge. Indeed, Joinville is divided into two by the river Marne" and there is a beautiful bridge that links the two parts. I live in the upper part of the town in an apartment with my family, in a building made out of red bricks. I cross this bridge every time I have to go to the other side of the town, where all my friends live and where I had my school and middle school. The bridge also goes over an island “I'le Fanac” where I used to play violin in the music school. The town is very flowery and green, there are many sitting spaces along the river.
In late 19th and early 20th centuries modernist architects discussed the “machine aesthetic” in which form is to follow function. “This belief in “functional form,” in a “machine aesthetic,” betrays the extent to which modernism misunderstands its own “aesthetic” uses of technology. Indeed, modernist aesthetics are very often based on “the myth of functional form.” Taking technology and mass production as models for art and artistic production does not, after all, make modernist art inherently more functional (1). As Reyner Banham has shown in discussing architectural modernism, its “functional forms” were rarely particularly technological or functional; they merely “looked” technological, functional (2)”. 

“The “machine aesthetic” of modern design was, then, precisely that: an aesthetic, a style, a simulation of the rationalised, standardised forms of machines and factories, often abstracted from any functional or instrumental context. Here, the “aesthetic” of functional, technological form leads modernism—albeit unknowingly—to a conception of “technology” that is less a matter of functionality or instrumentality than of style, of aesthetics. The machine aesthetic’s simulation or reproduction of “technological style” enables technological form to be separated from function; it allows a technological style or aesthetic to be “freed” or “unsecured” from its previous, functional context. This capacity for simulation or reproduction is only enhanced by the rise, so crucial to modernist aesthetics, of technological reproducibility. If the machine aesthetic’s reproduction of technological style splits style from function, with the rise of technological reproducibility, the function of technology itself begins to become a matter of reproduction, of simulation (3). 

In this workshop we will discuss machine aesthetics through landscape and we will design collective landscape(s) together. Each student will draw machines first. These drawings will be black and white line drawings and the format of the drawings will be vector based, preferably drawn on Adobe Illustrator. Then each student will share his/her drawing with the others and we will have a pool of machine drawings. After this collection, students will work as groups of two and design their own machinery landscape by using all of the drawings in the pool. At the end, we will have various imaginary landscapes that have similar DNAs.
NOTES


STUDENTS WORK:
Anja Bakullari and Pelin Yardımçı
Dorna Farrahi and Beyzanur Meriç
Eslem İnce
İpek Erişen and Joschi Kron
İlir Gökhan and Elora Perez
Mohammad Gerami and Asiye Nur Öztürk
Nilay Aslan and Niklas Klinck
Thomas Piacenza and Zümra Ocak

Fig. 1 - Anja Bakullari and Pelin Yardımçı

Fig. 2 - Dorna Farrahi and Beyzanur Meriç
Fig. 5 - İlír Gökhan and Elora Perez
Fig. 6 - Mohammad Gerami and Asiye Nur Öztürk
Competition research: Venice in the Metaverso

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CONTENT / what is relevant to Architecture nowadays is talking about SUSTAINABILITY AND DIGITALIZATION. WATER as a physical and digital substance that create new environments, relations and horizons.

The proposal for the workshop is to create a sustainable space with lines, agents and objects in order to design a project inside the “METAVERSO”. The design will be a scenario for a video game in VENICE.

As a third aim for this workshop, using WATER AS ARCHITECTONIC MATTER, we are going to create a new horizon with LINES, AGENTS AND OBJECTS, and, going beyond, to design it into the “METAVERSO”. For this purpose, we will work together with one digital platform.

AIMS / to understand the presence of the SUSTAINABLE AND DIGITAL SPACES in our projects.
To relate drawings, physical models and video as a way to produce an architecture DIGITAL project.

METHOD / The students will use drawing to create A SUSTAINABLE SPACE USING WATER AS A MATTER. We will draw lines, agents and objects, and model them to create a space as a sustainable scenario.
Finding opportunities of Multimedia Dawing_Model_Video relationships to start with a digital project.

PHASES /

Select one scenario in Venice and draw the lines, agents and objects that constitute the sustainability of the space.
BIBLIOGRAPHY / “Power of ten”. Charles and Ray Eames:

Part 2: Model. Group Work. Story Board
Transform the individual work into a three-dimensional object.
BIBLIOGRAPHY / “Cloud Cities and Solar balloon travel”. Tomas Sarraceno:

Work all together to design the project as a new scenario into the “METAVERSO” with all your ideas.

BIBLIOGRAPHY
“Let me tell you about my boat.” - The Life Aquatic. Wes Anderson

RESULTS AVAILABLE AT:
https://vertice.cpd.ua.es/271675
1st Price
Venice Metaverse Game

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This videogame was created as a final project of the semester in Design Studio 5 and 7 at Alicante University under the platform UNIVERSITY of Universities.

It is a videogame which is located in a virtual Venice Arsenal, home of the Architecture Biennale. We took this part of the real world and transferred it into digital form. We then placed different artifacts into this game map. Three of them are located above the water in a normal Venice world. Another three artifacts are placed under the water in a mysterious underwater Arsenal environment. When you play and approach one of these artifacts with your avatar a video window pops up. Each of the artifacts are linked to different videos which were produced by other groups in their class as their final project outcome. We have created a digital world where these artifacts are used as links to other projects and other interesting realms. This digital environment can serve as a constantly growing digital space where further artifacts can be added, enriching this digital world with more information and projects to create a collaborative metaverse incubator.

INSTALL AND PLAY THE GAME:

1. Download the folder called Windows from the google drive link. You need to have installed Unreal Engine 5 or newer to run the game:

   https://drive.google.com/drive/folders/1UwNqt112ViFL57fMSFb93_bbYPt68jZd?usp=sharing

2. Open the folder called Windows. You will see different files and one application file called venice

3. Run the venice application and the game should start.

4. To end the game turn on the task manager with ctrl+alt+delete and end it manually there.
METAVERSE IS MORE
Great revolutions in the world can suddenly make the impossible possible. Years ago to be able to listen to a broadcast on the radio was unimaginable, no one imagined that TV was possible and then it was in color. Without realizing it the impossible draws closer to reality. Today virtual reality already exists and arguably it may be just a matter of time before the virtual world is indistinguishable from the real world. The role of the architect will be essential to create this digital world.

Architects have always speculated alternative worlds, such as Archigram’s The Walking City, and the field of science fiction creates a very large number of worlds. Our project follows in this tradition and tries to imagine the future of Venice. We enter an impossible world inhabited by entities that live outside our accepted rules such as, gravity, and within an aesthetic similar to that of a video game but that nevertheless holds a reflection of the past of Venice and water. In the epicenter of the metauniverse all physical laws can be redrawn, and therefore the creator has control over the story of creation. The creator determines what happened at the time of the creation of the new world and what was the beginning of the metauniverse.

Of course, this new architecture will have to meet the new needs of the virtual world, incorporating new building typologies to cover our virtual needs. With the development of Web 3, it will be necessary to incorporate new architectures that incorporate blockchain technology and in which NFTs are usable.

Anyone could have access to this type of endless space, something unimaginable in the real world.

In any population of organisms capable of self-replication genetic variations and differences in upbringing are inevitable. This means that some individuals more than others could be more able to draw correct conclusions about the new world around them and act in accordance with these conclusions. Such individuals would have a better chance of succeeding, and therefore their way of thinking and their behavior could become dominant.

Having moved to the metaverse all the rules of hierarchy we are used to are broken. Who is higher and who is lower? Just think about it, because metaverse is more.
SOMEBODY IN VENICE...

WHERE ARE YOU GOING?

I'm going to a crypt. I haven't yet found the exit to the maze, but I'll find it...

CAN'T SLOWER THIS CAR?

That depends on whether you have the corresponding key. But if so, you can still control it.

THE NUMBER ONE RULE TO NOT GET LOST JUST LOOK UP

THE MOMENT HE STARTED LOOKING AT THE MAP HE REALIZED THAT HE WAS IN AN AMAZING PLACE. I COULDN'T BELIEVE WHAT I WAS SEEING WAS A TOTALLY DIFFERENT PLACE FROM WHAT I HAD ALREADY SEEN. HE THOUGHT HE SAW SOME SUPER MODERN HOUSES, SOMETHING APPRECIATED IN AN ART GALLERY BUT EVERYTHING HE SAW DID NOT RESEMBLE REALITY.
Mention
Rising Venice

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“Rising Venice,” is a game with a new interpretation of the world heritage city of Venice. The players have the opportunity to explore the city of Venice in a completely unique way without physical travel, or environmental impact.

In the game, Venice intersects with the city of the player [in this case, Alicante], making it possible to make connections between their own city and Venice. In order to reach the city of Venice the player has to make their way through vertical paths, [which are the canals of Venice projected over the city] with obstacles forcing the player to make different specific movements to avoid them. The cities of Venice and Alicante are drawn in the style of miniature drawings in 3D in order to create a sense of the real space of the Metaverse. The project is a combination of several workshops developed throughout the semester.
‘A New Anatomy for Venice’ is an exploration of the connection between tourism and the flooding of Venice.

In this short film we bring to life an evolved Venice, in which the complex system of the city works as the body does, with a heart mechanism regulating the waterways, or “veins” of the city.

The heartbeat slows as the visitor leaves the canals to enter the city streets and buildings. The heartbeats races as it regulates the water flow to restore peace in the city once more.

In this new reality the visitor can only explore the city as it floods, highlighting the difficult connection between tourism and Venice; the city cannot survive with tourism and it cannot survive without tourism.

The work offers an alternative scenario; the city could survive if it developed a heartbeat; a new regulatory system. Although the speculative system we offer at first might seem absurd, on closer inspection it offers a network of complex mechanisms working to regulate the anatomy of Venice. Is this idea ultimately so far-fetched?
Venice in the Metaverse

Topuria, Mariam\textsuperscript{1}; Taskova, Teodora\textsuperscript{2}

\textsuperscript{1}Georgian Technical University
\textsuperscript{2}Robert Gorgon University

The main idea of the project is to allow people to travel, explore and enjoy Venice from a different point of view and by an unusual method, flying by bubble. The bubble is made from double-layered plastic which grows when put in water using the same technology as the growing dinosaur toy. When the bubble is fully expanded the person can enter within through a zip opening. Simultaneously the plastic bubble's shell is filled with water from the canals. This water serves as fuel for the bubble's flight. With this completed the bubble is ready to go and the person starts the process by walking in the bubble in the same manner as in an exercise wheel. The bubble flies throughout the day when the sun is able to evaporate the water in it's shell. At the end of the day when the sun sets and the water is almost evaporated, the bubble returns down to ground level and the journey through Venice ends.
Mention
The video aims to share the virtual representation of my desire to experience architecture in a different way, with nature invading and dominating the architectural space. This utopia is created through mixing different concepts from different workshops. We start in Venice.

Workshop 6 a new Venice invaded by nature where we are transported in floating bubbles to different realities that share this same conceptual utopia. From Workshop 1 my desired architectural residential concept is invaded by nature as is the Monumental Follie from Workshop 3.
The motivation for this project was to challenge the typology of everyday space, and thus our perception of architecture. The idea of a platform emerged to accommodate those small exercises that could challenge existing rules without the limitations of academic or professional submissions.

The cube was selected both for its architectural purity and for its ambiguity. Symmetrical in shape, it can be rotated and divided endlessly. The individual parts were also carefully chosen so the resulting surface could be just large enough to accommodate a structure tall enough to feel spacious yet contained.

The proposal is a hub that combines different programs in a fluid dynamic. A kind of folly of several small entities with an allied program, this project develops in the Venice metaverse by organising each element to generate a unique space.
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editor in chief: josé antonio carrillo andrada
(American University in Dubai)

July 7th: OPEN CALL
September 15th: Submission DEADLINE
October 1st: Notification of PEER-REVIEW Evaluation
October 30th: Final Submission DEADLINE

This call for articles aims at exploring the notion of Gastronomy in the field of research in architecture and urbanism in an international framework.

https://revistes.ua.es/uou

UOU is the scientific journal of UNIVERSITY of Universities. It is born out of the collaboration of international schools of architecture, sharing their intercultural interests.

Every issue underlines a specific topic addressed by one of the universities involved in the Research Project, with a focus on Pedagogy in Architecture.