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MINDAUGAS
ARLAUSKAS

CUTS AS PIECES OF ARCHITECTURE

() INTRODUCTION

Bucharest, which initially developed from an agglomeration of small villages, throughout its history faced several dramatic development periods. When Bucharest became the capital of Romanian provinces, the new role imposed a shift from the previous policentric organization to a linear redefinition of the city center through emulation of an example of Paris that manifested in the construction of boulevards in the second half of the 19th century. This course of events shaped Bucharest into a collage of stylistic mixes, both monumental and vernacular. This city-scape changed dramatically in the postwar period, when the echoes of international functionalism were soured by the brutal import of Stalinist aesthetics. Later, the re-urbanization plan (see figure 2) implied by dictator Nicolae Ceausescu after the earthquake in 1977 again dramatically transformed the historic urban tissue, making the inner city a succession of decaying or unfinished ruins, empty areas reclaimed by vegetation or appropriated by informal activities, and oppressive construction fantasies. Finally, the new millennium and the market-driven activity brought to the city center constructions of high-rise office buildings and large shopping malls.[1]

This complexity found in the inner city has led to a chaotic yet poetic ensemble of exposed firewalls, gaps and pockets in the architectural and urban tissue supplemented by decaying, partly plastered or billboarded surfaces, add-ons of fences, wires and pipes, and uncovered structural elements. Typically, similar informal situations in the Western city centers could be found in introverted spaces like courtyards, while in the case of Bucharest this phenomena is often rather exposed, becoming an important part of the city's aesthetic. Yet it offers an unexplored in-between condition, a spatial field inviting to construct a knowledge and an expertise on the city.

The above described phenomena is being conceptualized as *cuts*, i.e. regarding them as pieces of architecture in order to have a critical distance from the typically negative or predermined connotations around subjects as decay and abandonment. This conceptualization is also a point of departure for the further analysis. Typically, the term *cutting* can be understood as an act of separation or removal but how is *cutting* as a technique significant for urban fabric, architectural design and for the user/observer? What types of *cuts* can be distinguished? An analysis of relevant theories, examples from architecture and contemporary art domains, and a subsequent elaboration is the main focus of this paper to research the framed phenome-
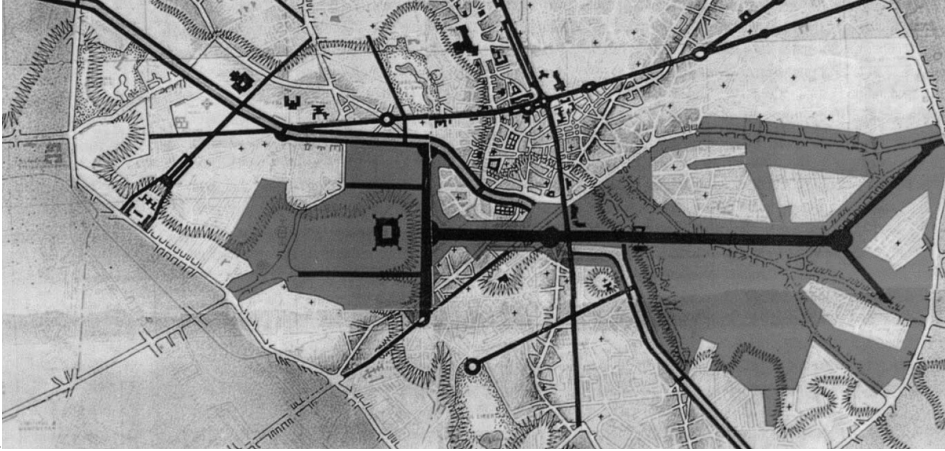
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na in a broader perspective.

CUT(S) (IN) THE CITY

Georg Simmel in his 1903 essay *The Metropolis and Mental Life*, argued that the city under capitalism as well as socialism implied new forces, which "attempted to incorporate the individual into the mass, homogenizing difference in the outer world of movement and the inner world of thought."[2] Technological progress through the imposition of rationality, science and mechanization highly altered an individual's lived experience within the city. Decreased physical movement resulted in alienation, and a narrower perception of the urban sphere. Moreover, modernization incorporated a heightened crowd control and surveillance. For example, widened streets and construction of boulevards attempted to minimize the possibility of protests and barricade erections. These systems of control and power allowed the state to discipline bodies so they would satisfy the means of industrial society. However, Simmel believed that individuals are concerned in resistance to "being leveled, swallowed up in the social technological mechanism."[3] Michel De Certeau also outlined the resistance possibilities in the city, stating that any power is able to entirely control the totality of social sphere, therefore "a resistance could take place, in spaces that eluded the grasp of power and control, in locations below the vision of power and which therefore have no readable identity."[4] The city itself is able to resist.

Interpreting these notions of Simmel and De Certeau, it seems that the system of control and the individual's desire to resist creates a certain tension within the city. This tension stresses the urban pattern which starts to break and establishes *cuts of discontinuation*. These cuts become the neglected gaps and pockets that have no predetermined functions, but become hosts for urban sedimentation that accumulate over time. In this way, these spaces are in an indefinite state incorporating changing and moving objects or as Bruno Latour calls it - in the constant "state of becoming".[5] Moreover, the edges of these cuts are often 'blind' (as for example exposed firewalls or a site of abandoned buildings) that provide a certain invisibility of the space and therefore constitute freedom below the vision of control. These conditions also mark a discontinuation of formal relations and meanings within the city, when motion, play and desires are able to (e)merge. The spaces of constant becoming are heterogeneous and, according

to Simmel, exposure of such spaces fosters individual's mental acuity [6].

Furthermore, cuts of discontinuation suggest an inherent quality of fragmentation. In 1959, a member of Situationist International, Constant conceived a futuristic project called *The New Babylon*. It was a design of a multileveled, never-ending city, suspended above the earth's surface, where inhabitants would construct their own environment of free movement, desires and play. Constant developed this project over the years, from cutted fragments of tourists maps, drawings, building models, cutting the pictures of the models and drawing again... the point was to never reveal what New Babylon looks like yet provoke desire for it.[7] As Mark Wigley points out, "all we are allowed to see is that we are not seeing very much [...] it is precisely the lack of a complete or even partial image that empowers the inhabitants."[8] Similarly, cuts of discontinuation induce an awareness of the fragmentation in the city where the great potential of it may be unforseen.

CUT(S) (IN) ARCHITECTURE

Maurice Merleau-Ponty in his book *Phenomenology of Perception* (1945) states that the world is a field for perception, and it is human consciousness that designates meaning to the world. To be more precise, perception - as explained by Merleau-Ponty - is the background of experience which directs every conscious action, while bodily experience supplies perception with meaning beyond that determined simply by thought. Mind and body cannot be separated as subject and object, they both have their own presence that influence each other. Therefore, we and our perceptions of the world are inseparable. Consciousness is explained as a projective activity, which elaborates the sensory data and is a process of both sensing and reasoning. According to Merleau-Ponty, as he recalls Husserl, perceptual objects have an inner horizon in consciousness and an outer horizon in the external world which establish an object-horizon structure that allows the individual to distinguish perceptual objects from each other. He also presents a model of sensory field which suggests that all senses are spatial, and all sensory objects must occupy space. Every object which is perceived belongs to a field of other objects which are not perceived. Every perceived sensation belongs to a field of other sensations which are not simultaneously perceived by the subject. Merleau-Ponty defines space as an experience, rather than physical setting. The relationships between objects in space are revealed by the experience of the perceiving subject, while the space is modified and restructured by time.[9]

In his other book *The Visible and the Invisible* (1968) Merleau-Ponty elaborates on the topic of perception in terms of visibility and openness, and here it becomes significant for the architectural discourse. He introduces a notion of openness in being and explains that, in the world which is a field, nothing what is visible reveals itself completely because more of the visible is behind itself. According to Merleau-Ponty, to reach that openness in being or beyond the visible, essential topics are explorability, depth and obejct-horizon structure. He also proposes a new type of being where "the horizon includes the seer"[10] or the openess in being is a horizon-structure. "The relation between what I see and I who see is not one of immediate or frontal contradiction; the things attract my look, my gaze caresses the things, it espouses their contours and their reliefs, between it and them we catch sight of a complicity".[11] One type of this new being is being by porosity, which is able to extend the limits of our perception: "[...] he before whom the horizon opens is caught

Cuts as Pieces of Architecture

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up, included within it; his body and the distances participate in one same corporeity or visibility in general, which reigns between them and it, and even beyond the horizon, beneath his skin, unto the depths of being."[12] Interpreting these notions, porosity can be regarded as a certain way of cutting, where the seer and architectural space are no longer opposites, as cuts constitue new connections on multiple levels and directions, and could be regarded as *cuts of connectivity*.

To better understand this type of cutting and its significance to architecture, I refer to the *Simmons Hall* project (see figure 3) designed by Steven Holl, where porosity was used as the main concept. It is a large residence for students at MIT consisting of a dormitory, dining hall, auditorium, and other shared facilities. The building has three different types of cuts which differ on scale and new connections they evoke. Firstly, the building mass has five large-scale openings corresponding to main entrances, view corridors, and outdoor activity terraces. In this way these cuts bound the building with its context and also become hosts and emphasized attraction points. They also provide a strong silhouette and an interplay of solid and void, rationality and intuition. The contrast between the main facade and

the facades of the openings constitute them as cut-out parts. The next scale of openings - the vertical voids - are geometrically developed from ruled surfaces, which vertically connect irregular cut-outs on every other floor plate. These dynamic openings act like lungs, bringing natural light down and moving air up. They freely penetrate the regular organization of the building creating unique spatial moments in the interior. Their sculptural expression and chalk-able materiality evokes impressions and induces interpretations. The smallest scale openings are recognizable in the exoskeleton of the building which creates a vivid rhythm that alters the light coming from inside and outside. The scale of these cuts provokes a kind of ambiguity in the perception of the whole building. When observing it from a distance, the number of floors and the actual size of the building becomes unclear (see figure 4). As the envelope works also as a structure, the rhythm of cuts masks structural stresses implied by larger cuts. Every dormitory room has nine of these openings - three rows on different heights - therefore the interior provides a fragmented gaze from sky to the city.[13] Overall the building design explores the concept of porosity on multiple levels that all together form a bold architectural expression or as noted by Holl: "a

collection of things held together in a new way where the "horizon" is open and merges with both exterior and interior."[14]

CUTT(IN)G) THE OBJECT

Henri Bergson was interested in broadening the possibilities for human experience beyond the limits sanctioned by scientific thinking, yet he was particularly mindful of the importance of science. He states that:

"Our logic sees in a new form or quality only a rearrangement of the old - nothing absolutely new… To be sure, it is not a question of giving up that logic or of revolting against it. But we must extend it, make it more supple, adapt it to a duration in which novelty is constantly springing forth and evolution is creative."[15]

The notion to think beyond the domain of reason also implies a difference in the way that the answers are assimilated: whereas a scientific question can lead to an answer that is immediately clear, a creative question may provide an answer that "…ordinarily begins by being obscure, whatever our power of thought may be". [16] This initial obscurity arises not because the answer is necessarily complex, but because there are no ready-made answers for a creative question. Bergson remarks further that these two types of clarity can be distinguished in terms

of their light, whether they keep it for themselves or whether they illuminate a whole region of thought. The clarity emerging from creative questions "can begin by being inwardly obscure, but the light they project about them comes back in reflection, with deeper and deeper penetration; and they can have the double power of illuminating what they play upon and of being illuminated themselves".[17] Reflecting on the notions of Bergson, using the technique of cutting could also be regarded as a mean of creative questioning. If cuts provide new perspectives and new spatial insights that may not be immediately clear, they provoke a stimuli for the mind and the imagination. Therefore, the obscurity of the cuts becomes their profound quality.

A similar approach of obscurity was extensively explored by American artist Gordon Matta-Clark in the dissections he produced on abandoned buildings (see figure 5). He worked "with aspects of familiar experience, and attempted to balance the supports and collapse of that which is taken for granted about such experience".[18] For example, his incisions would leave building's partition walls or floors hanging in midair raising the question of structural integrity: is it about to collapse? Evidently, the parts re-

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Cuts as Pieces of Architecture
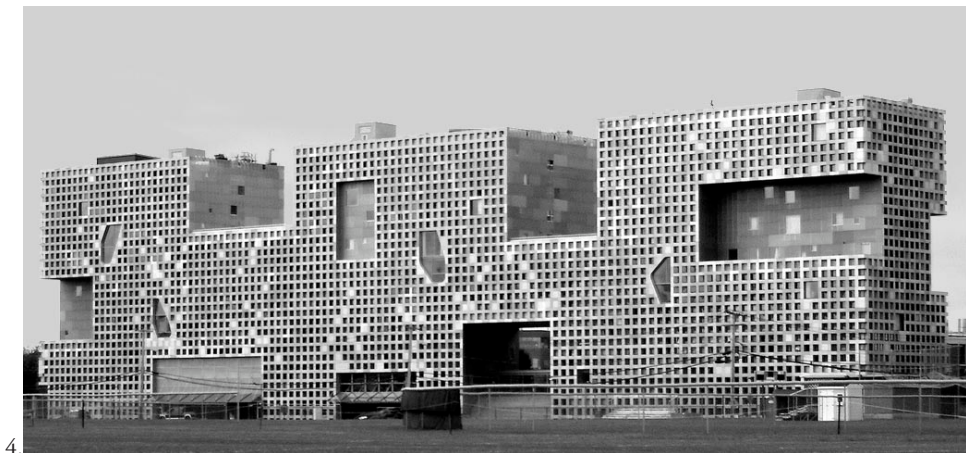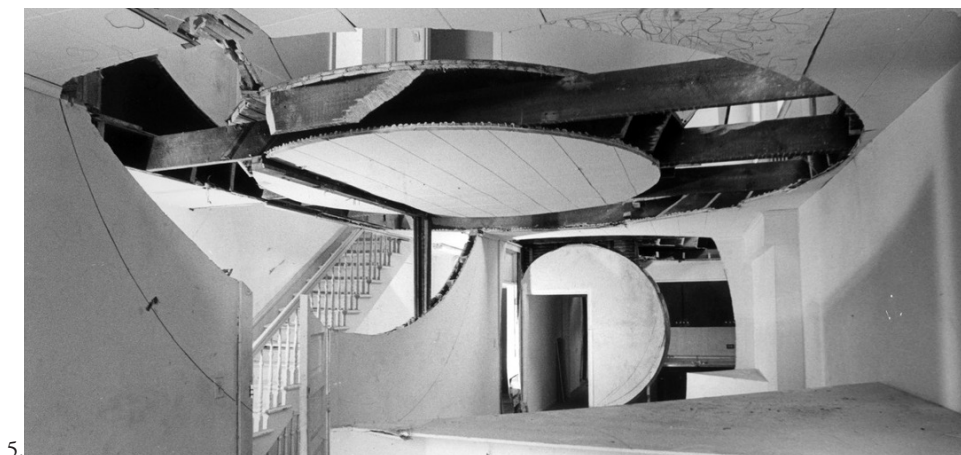
5.

mained standing and visitors were able to move around without causing collapse. Furthermore, "his cuts imposed a new mode of behaviour, a new reaction to the spaces of the building."[19] In other words, visitors would move radically different compared to the previous inhabitants while expanded visual space would attempt to transgress familiar sequences of spaces and the limits of the observer's perception. But an even more important part of his works is the edge of the cut itself (see figure 6). Here, the artist remarks: "What interests me more than the unexpected views that were being generated by removals is the element of stratification[...], not the surface, but the thin edge, the severed surface which reveals the autobiographical process of its making."[20] The varying ripples of cut old timbers and I-beams echo "all the noise in hell"[21] produced by every kind of power tool penetrating the material and freezing the traces of its resistance. These cuts become specific gestures that transform an objects' state from solid to dynamic and constitute a new tactility. As gestures express or supplement what language may lack, the cuts produced by Matta-Clark act in a similar way, establishing themselves as a mean of communication. Simultaneously, the edge of uncovered floor joints and the dark uncanny spaces in

between them constitute the existence of other kind of spaces[22] where the mysterious evocations have their own force and a certain attraction. Such cuts imply openness for new interpretations in both a conceptual and physical way. The cuts that express a new tactility, a process of change and communicate certain emotions could be considered as a distinctive type and described as *cuts of (attr)action*.

Furthermore, recalling the notions of Merleau-Ponty, one can state that the edge(s) of the cuts also introduce new horizons. To be more precise, the exposed stratification and the depths of new tactility invite for exploration and interaction with cut object, which triggers the perception and the intrinsic relation of body-mind eventually constitutes a new horizon.

(ARCHITECTURE BEING CUT)

Unmaintained, forgotten or abandoned places found in the city of Bucharest became the inspiration point of this project. The theoretical investigation provided an argumentation that it should be conceived not as a negative but as an existing spatial phenomena full of potentials, poetic manifestations and unique spatial conditions.

The elaboration on theoretical notions suggested a broader perspective of the spatial understanding of architecture 'being cut'.

Three different types of cuts were distinguished, based on the varying scales between *city-architecture-object*. The *cuts of discontinuation* recall the tension between hightened control over the city and individual's desire to resist. This tension results in cracks of urban tissue where urban sedimentation gets trapped and an awareness of fragmentation emerges, also supported by the potential of the unseen and the unforeseen.

The *cuts of connectivity* suggest new transitions on varying levels and directions corresponding to tangible and intangible forces. In the field of perception this type of cut becomes significant as it provides the possibility for new sensual and bodily experiences. An important specificity of this technique is porosity, as suggested by Merleau-Ponty: it is a new type of being, where architectural space and the seer are no longer opposites.

Lastly, the *cuts of (attr)action* provide a zoomed-in view as close as the edge of the cut is to be seen. In this point of view, the frozen traces of the 'clash' between the material and the cutting tool becomes apparent and the existence of otherness is constituted. This condition occures in-between familiar and unfamiliar experiences which instantly coincide and become a new but also ambiguous whole.

Discontinuity, *connectivity* and *(attr)action* are the notions that can inform the architectural design beyond the mere mimicking of the cuts found within the city. Reflection of these types of cuts reveals another intrinsic interrelation of the *body-cut-perception*, which is applicable for all types and suggests that the actual scale of the entity being cut is no more important. Furthermore, it blurs the boundaries between the strict distintions of the different types and renders a possibility for *hybrid* types. Here, the synthesis between theory and practice becomes crucial.
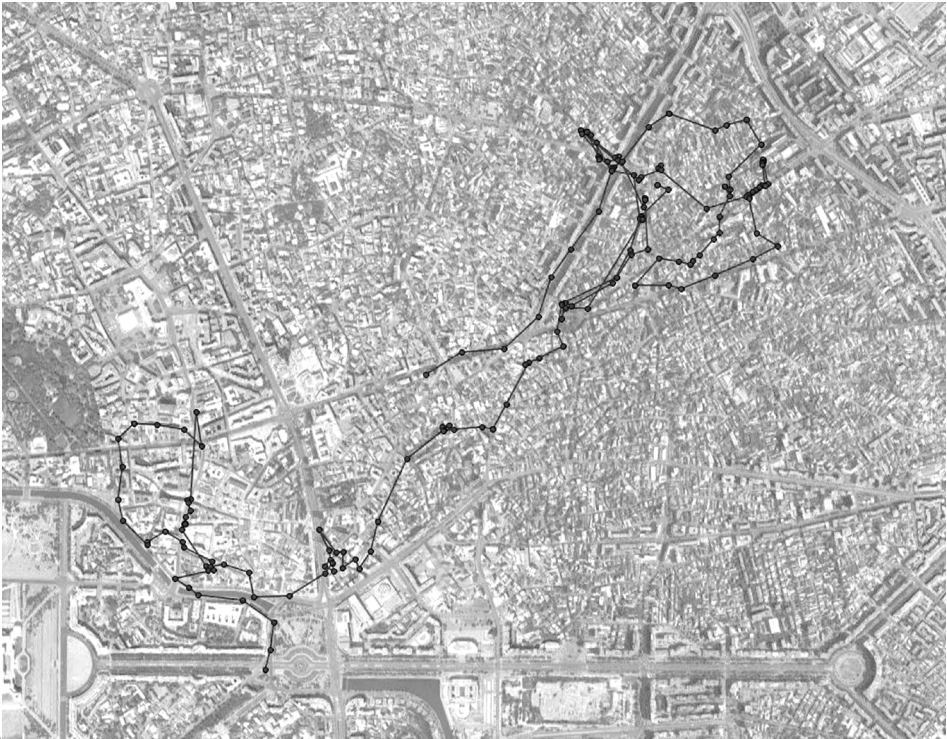

6.

ENDNOTES

Endnotes

1. C. Dan, 'Bucharest: Spritz, Concrete and Dusty Trees', in: C. Wagenaar (ed.), *Happy Cities and Public Happiness in Post-War Europe* (Rotterdam: NAI Publishers, 2004), p. 465

2. G. Simmel, 'The Metropolis and Mental Life', in: K. Wolf (ed.), *The Sociology of Georg Simmel* (New York: Free Press,1950), p. 409

3. Ibid., p. 413

4. M. De Certeau, *The Practice of Everyday Life* (Berkeley: University of California Press, 1984), p. 95

5. J. Lecomte, 'Beyond indefinite extension: about Bruno Latour and urban space', in: *Social Anthropology*, no. 21, 2013, p. 468

6. G. Simmel, op. cit., p. 410

7. M. Wigley, 'Paper, Scissors, Blur', in: C. de Zegher and M. Wigley (ed.), *The Activist Drawing Retracing Situationist Architectures from Constant's New Babylon to Beyond* (Cambridge (Mass.) and London: MIT, 2001), p. 52

8. Ibid., p. 52

9. A. Scott, Merleau-Ponty's Phenomenology of Perception. Book Review: online at www.angelfire.com/md2/timewarp/merleauponty.html [accessed on: 22-12-2016]

10. M. Merleau-Ponty, *The Visible and the Invisible* (Evanston: Northwestern University Press, 1968), p. 100

11. Ibid., p. 76

12. Ibid., p. 149

13. S. Holl, *Parallax* (New York: Princeton Architectural Press, 2000), pp. 302-17

14. Ibid., p. 305

15. H. Bergson, *Creative Evolution* (London: Macmillan and Co., 1911), p. 31

16. Ibid., p.38–9

17. Ibid., p.40–1

18. S. Walker, *Gordon Matta-Clark: Art, Architecture and the Attack on Modernism* (London and New York: I. B. Tauris & Co., 2009), p.17

19. Ibid., p.17

20. D. Wall, 'Gordon Matta-Clark's Building Dissections', in: *Arts Magazine*, no. 50, May/1976, p. 77

21. C. Diserens, *Gordon Matta-Clark* (London and New York: Phaidon Press, 2003), p.8

22. Matta-Clark expands on possible other spaces, 'the kinds of space we all, all of us, have stored in our memory… spaces that are detailed and precise, or very general, at all levels of reminiscing. And of course once you get into reminiscence an infinite number of associations surface emerge concerning real space, desired space, imagined space, false amorphic space, grotesque space, nostalgia enters space perception, sentimentality…' Matta-Clark, Transcript: Interview Between Wall and Matta-Clark: Rough Draft, EGMC, Articles and Documents 1942–76, circa late 1975/early 1976, #11

Images, figures and tables

0. Experimental drawing, layering+contours+porosity
1. Photograph of decaying house, Bucharest
2. Lazzarini, L. *1980s plan for Communist Axis and People's House overlayed on existing city fabric.* [Available online at: http://contemporarycity.org/2014/05/bucharest-3/ accessed on 01-02-2017]
3. Hill, J. *Simmons Hall model.* [Available online at: http://archidose.blogspot.nl/2002/10/simmons-hall.html accessed on 01-02-2017]
4. Brodzinsky, E. *Simmons Hall, MIT.* [Available at: https://www.flickr.com/photos/atelier79033/2765418148 accessed on 01-02-2017]
5. Walker, S. 2009. *Gordon Matta-Clark: Art, Architecture and the Attack on Modernism.* London and New York: I. B. Tauris & Co, p. 25
6. Saeed, A. *Conical Intercept.* [Available at: http://thecreatorsproject.vice.com/blog/original-creators-anarchitect-gordon-matta-clark accessed on 01-02-2017]

Cuts as Pieces of Architecture

7.

RESEARCH
The Cuts of Bucharest

DERIVE

During the visit in Bucharest a personal derive was performed in order to engage, explore and document the framed phenomena of *cuts*. Two walks were carried out in two separate days without any particular destinations. Only after the trip, based on the tracking data from mobile phone, the performed free walk route was rendered on the map (see figure 7). This derive resulted in a collection of over 300 photographs of the *cuts*.

SORTING

In order to start understanding the rich spatial phenomena, the following step was the organization of the photographs into different groups based on what do these *cuts* constitute in the city. Eventually, 12 research topics were formalized:

01_Layers	07_Elements
02_Light	08_Tectonics
03_Circulation	09_Porosity
04_Texture	10_Skin
05_Contours	11_Voids
06_Billboards	12_Vegetation

Collected examples were sorted according to their most prominent spatial qualities by the different research topic. However, often the same situation (same picture) appeared in several groups due to its high complexity (see figure 8).

MAPPING

The next step was a production of a set of drawings (see figure 9), which developed a more profound understanding of different spatial qualities due to new combinations from several examples per drawing or a more detailed view into specific characteristics of the observed objects/conditions. A stronger emphasis was made on the inherent relations between depth, light and shadow.

01_Layers   02_Light   03_Circulation   04_Texture   05_Countours   06_Billboards

8.

07_Elements   08_Tectonics   09_Porosity   10_Skin   11_Voids   12_Vegetation

Cuts as Pieces of Architecture
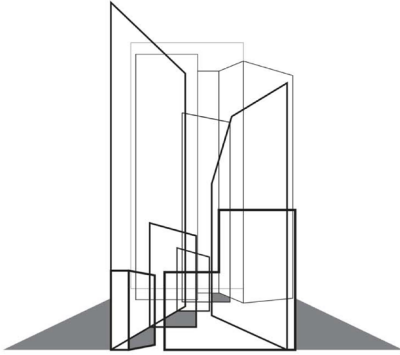
01_Layering
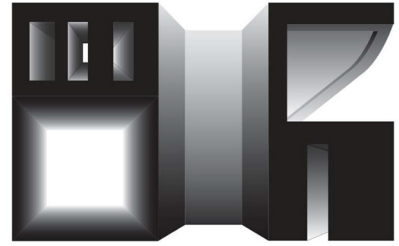
02_Light
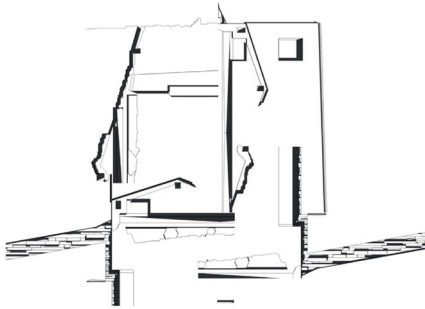
05_Contours
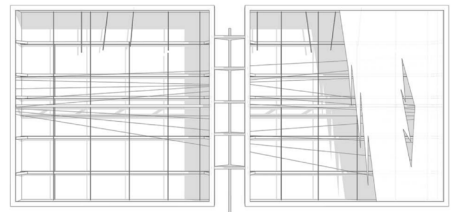
06_Billboards
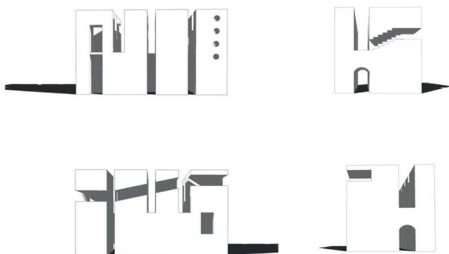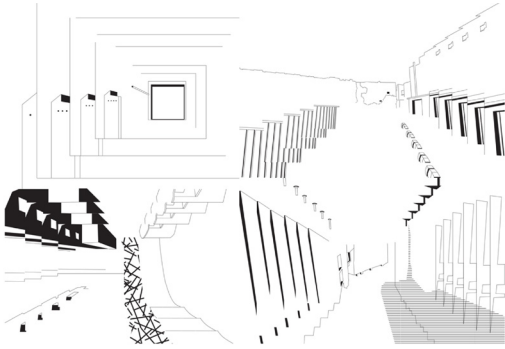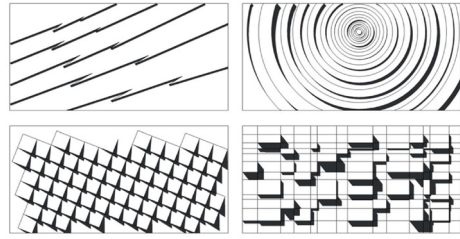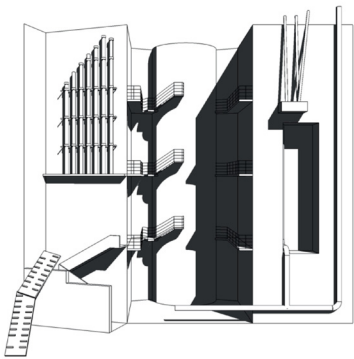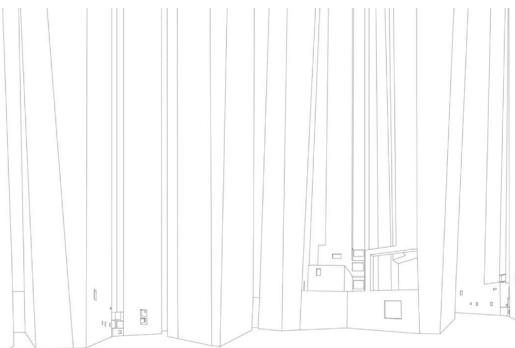

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09_Porosity
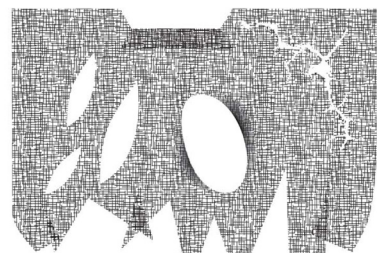
10_Skin

03_Circulation

04_Texture

07_Elements

08_Tectonics

11_Voids

12_Vegetation

Cuts as Pieces of Architecture

SYNTHESIS

Even though mappings provided an understanding of the varying spatial qualities from the collected examples of the *cuts*, the richness of the phenomena resides in the high complexity of smaller pieces coexistencing together. Therefore, a step of synthesis has been implied, which resulted in 4 experimental drawings.

Reusing and reinterpreting the developed mappings, new combinations were formed in a rational and intuitional way. An attempt to start transfering into the design

10.

phase is also a consideration of the new formations:

voids+circulation+elements > floor layout (see figure 11)

skin+light+billboards > envelope (see figure 12)

tectonics+texture+vegetation > material properties/structure (see figure 13)

layering+contours+porosity > urban strategy (see figure 14)
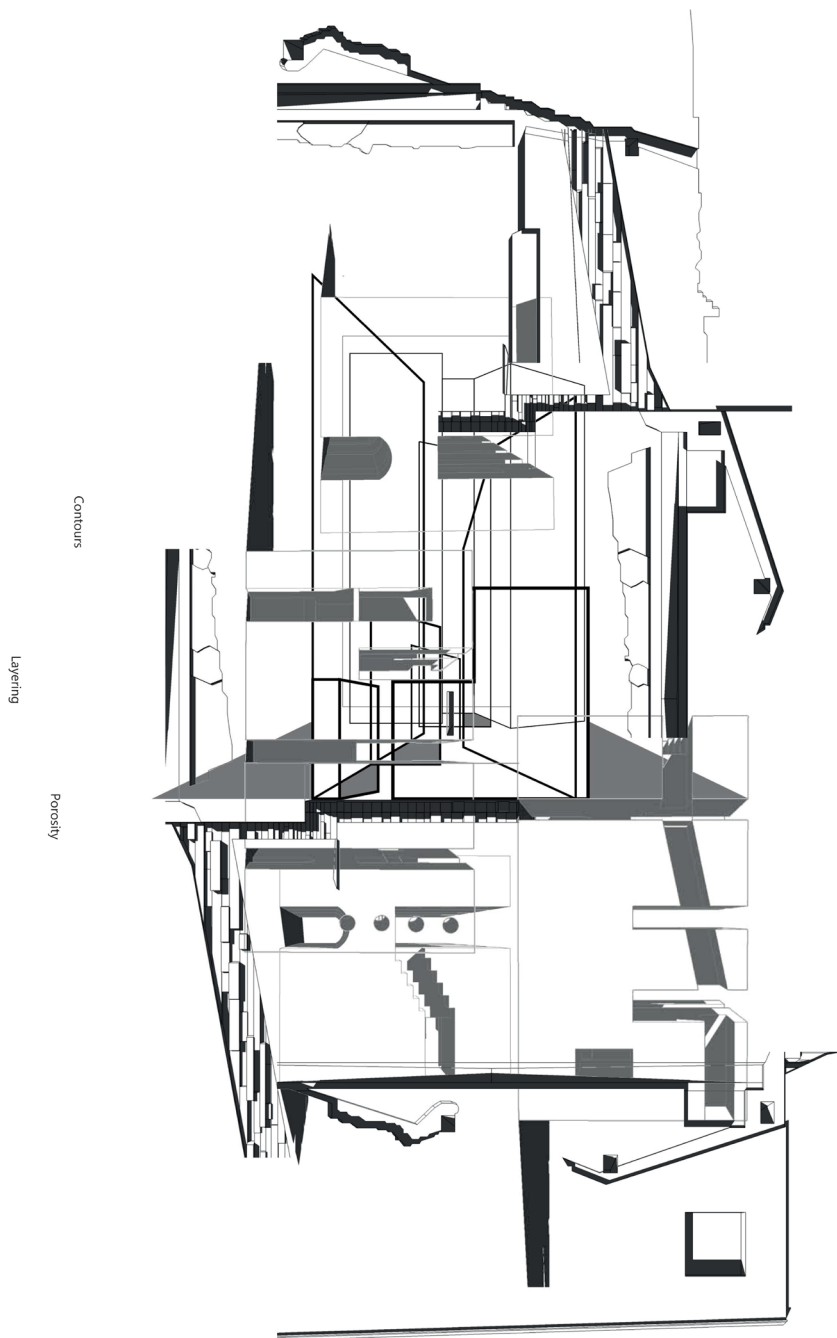
Voids,
Circulation
Elements

11.

Cuts as Pieces of Architecture

Skin_LightBillboards

12.

Vegetation

Texture

Tectonics

13.

Cuts as Pieces of Architecture

Contours

Layering

Porosity
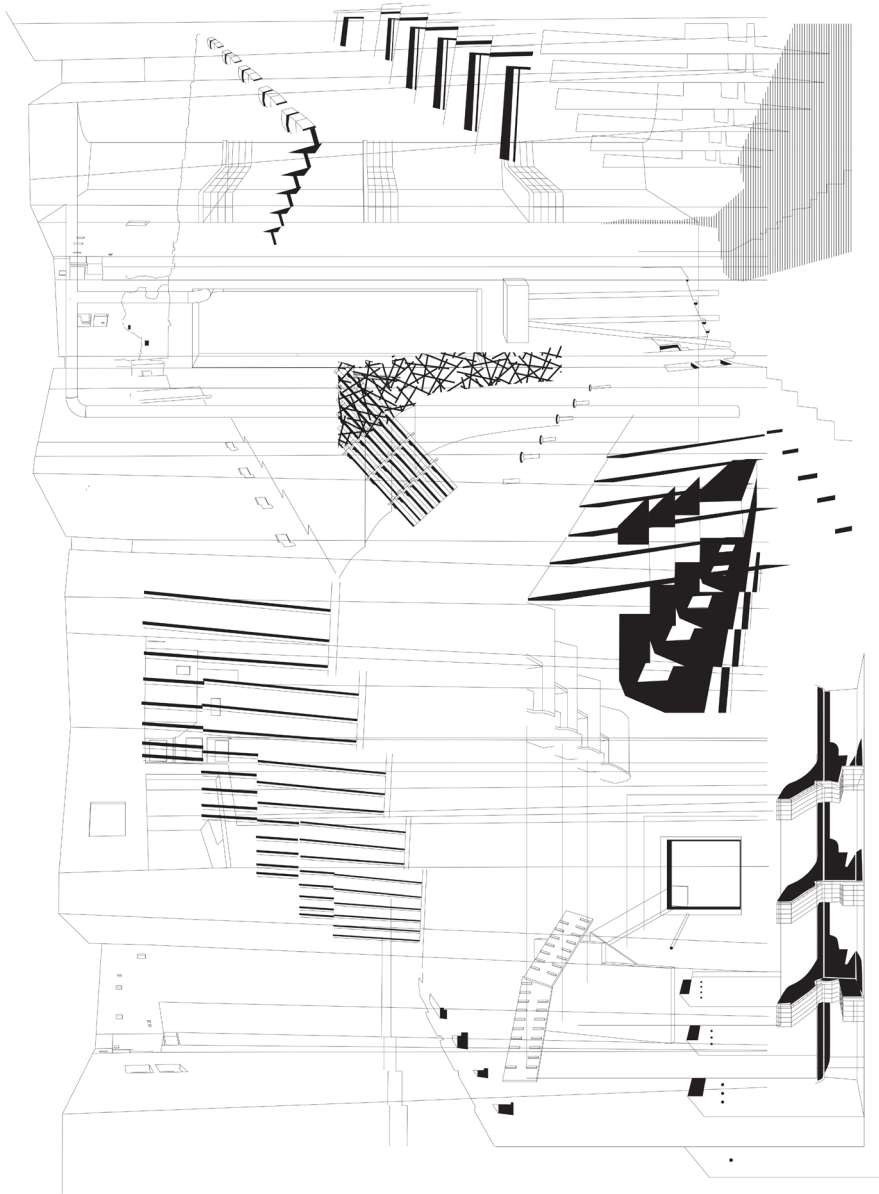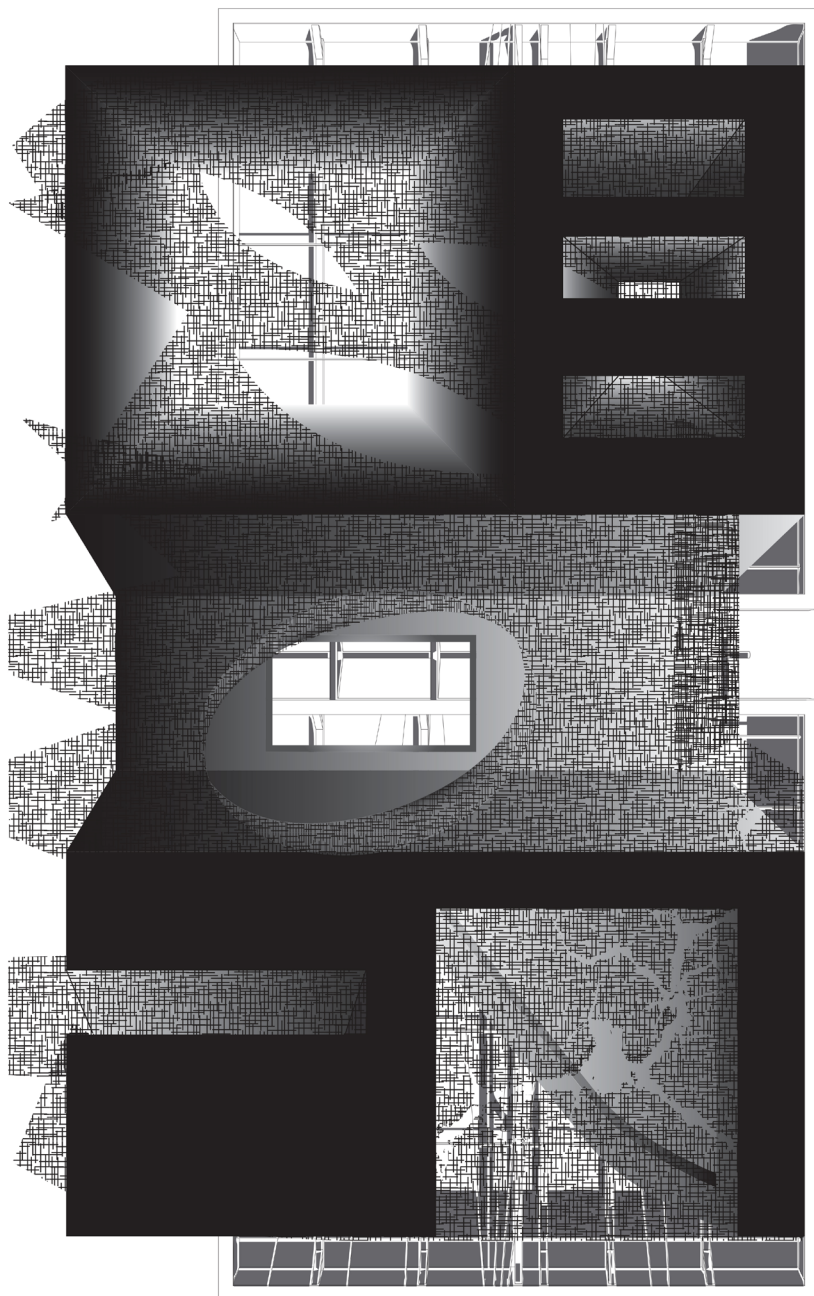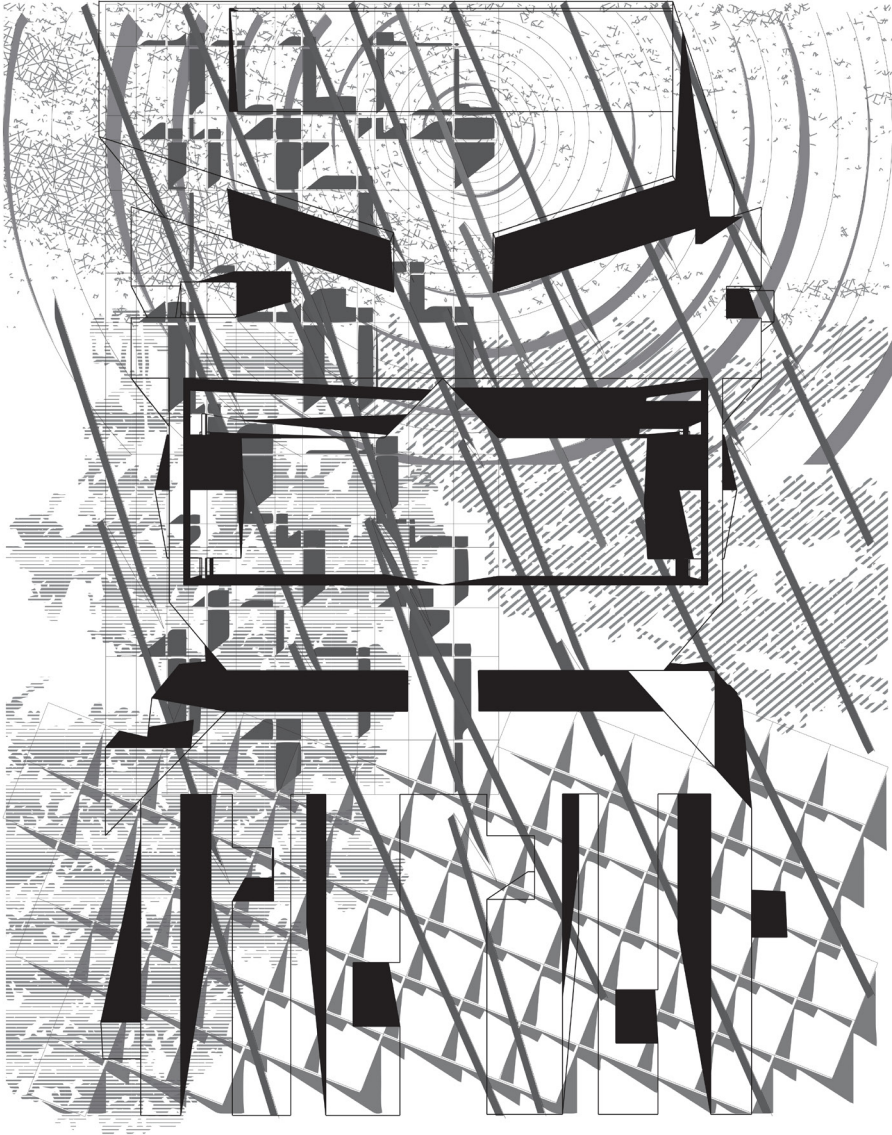
14.

TRANSLATION

2.5 D MODEL

The transition of one of the developed experimental drawing (see figure 14) into a 2.5 D model (see figure 15) is a first step into materialisation and architectural design. During this process the constituted spatial qualities from the drawing of layering, contours and porosity are imposed on the chosen materials: plasticine and cardboard. Therefore, the conditions were tested on the soft and hard material simultane-
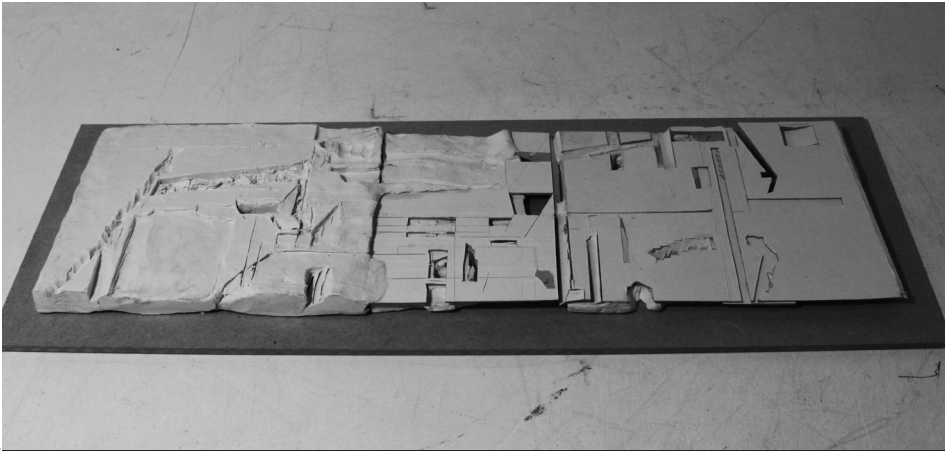
15.

ously. The model was interpreted as an uneven surface emphasizing the properties of tactility. However, this approach appeared to be rather decorative when applied either on plasticine or cardboard only. The more intriguing part was the junction between the two different materials and the cuts that intersected them. Moreover, the limitations of the materials became apparent as more complex shapes of the drawing were difficulty translatable into the model.

Cuts as Pieces of Architecture

ASSEMBLAGE MODEL

In the following step, the same drawing (see figure 14) has been translated into a three dimensional model (see figure 16), again attemting to construct spatial qualities of layering, contours and porosity. Firstly, the drawing was folded vertically four times in order to start comprehending it as an object. The chosen materials (mdf, wood, cardboard, synthetic membrane, metal wire) and the method of assemblage (stacking and wraping) resulted into intraverted spatial workings, rather contradicting the folded drawing. The choice of materials was
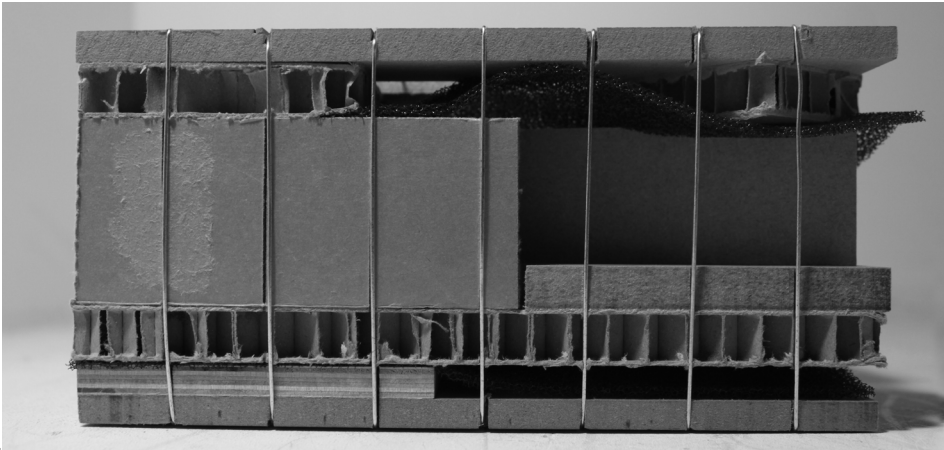
16.

also highly influenced by the properties of their cutted edges (see figure 17). The motivation was also related with the recurring interest in the spatial qualities of tactility. The soft synthetic membrane layer worked as a contrast to the rest of the used materials, and through the assembled openings provided unexpected and intriguing play of light and shadows in the inner spaces of the model (see figure 18). The soft in-between layer also disabled the ability of rigid assemblage, therefore the wraping of metal wire was used, which induced an idea of reassembling for further developments.
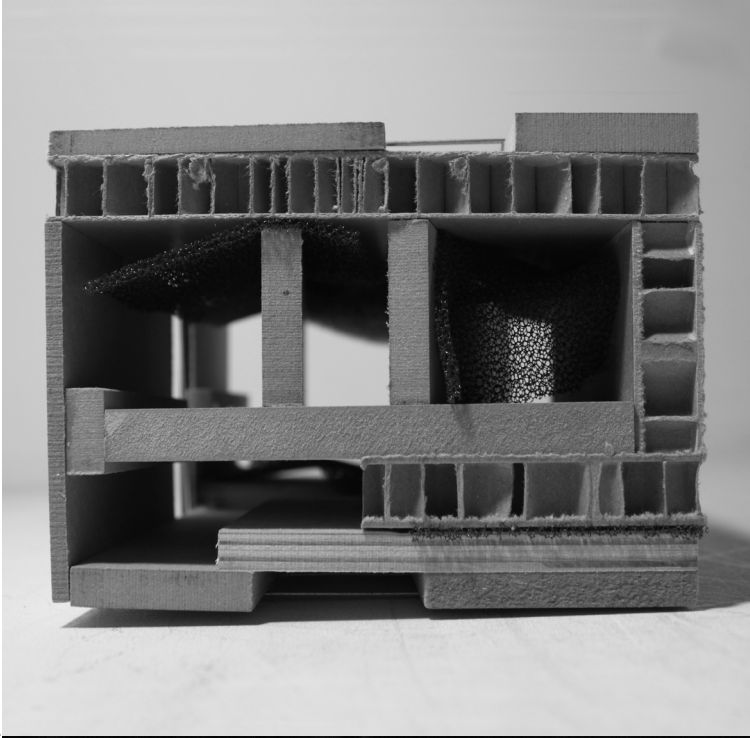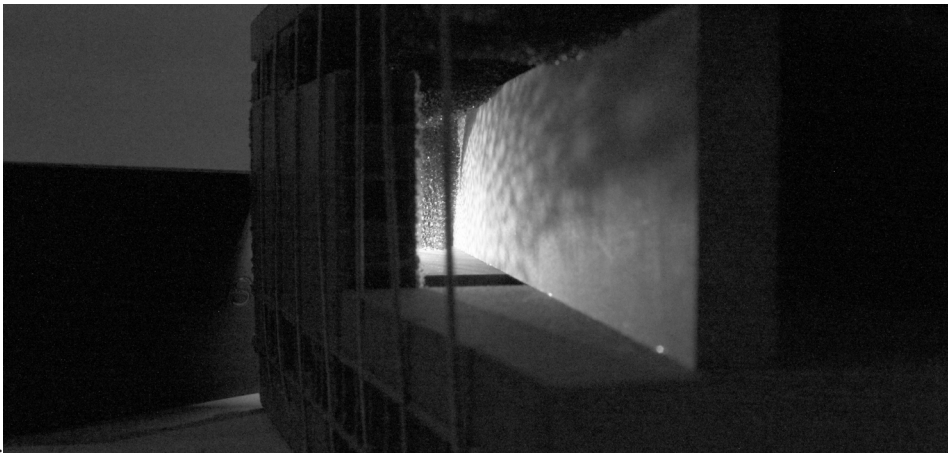
17.
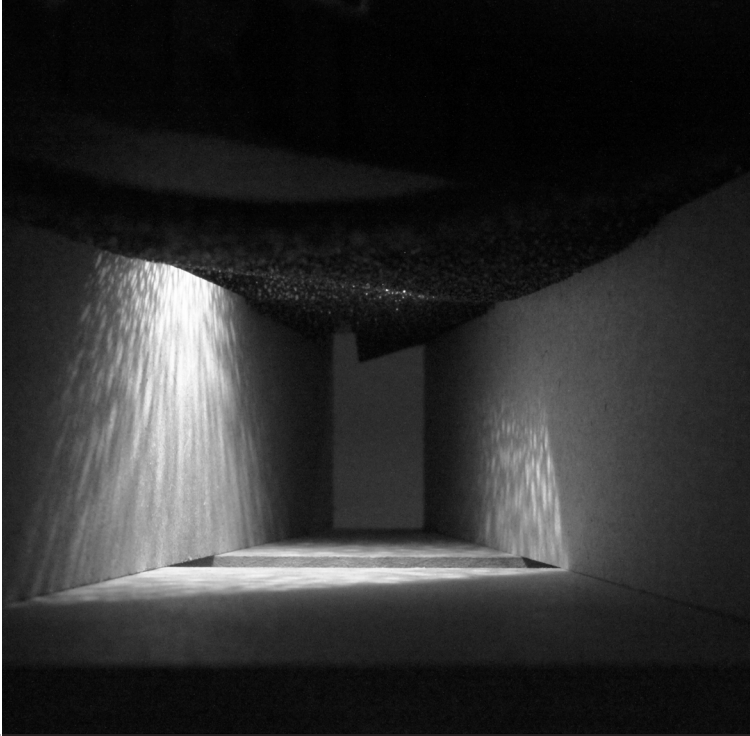
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19.

REFLECTION

The process oriented research strategy allowed to move away from the framed examples in the city of Bucharest and constructed a bold starting point for the design process without the mere mimicking of the spatial phenomena.

The theoretical framework described in the essay provided a broader understanding of the significance of the *cuts* on different scales and suggested valuable inspiration for possible and applicable program and the neccessary properties for choosing a site.

Experimental drawings suggested certain architectural implications, however the translation of these drawings into the models revealed that certain understanding of the spatial qualities may disapprove while new insights have emerged. Moreover, this transition remarked the inherent relations between the different spatial workings, implying that a further process of testing, evaluation and consideration is necessary in the design process.

CONCLUSIVE STATEMENT

The first models revealed intriguing outcomes of the constant synthesis between the different materials and between the space and light. Therefore, a focus on these specific qualities will be addressed in the further process. Moreover, during the phase of the design, the developed models, the framed program and the chosen site will start to merge, while carrying out the themes of discontinuity, connectivity, and attr(action), and emphasizing the tactile material properties and reassemblable construction/ spatial methods.

ENDNOTES

Images, figures and tables