THE LOSS OF POLYPHONY

TBILISI, GEORGIA

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INTRODUCTION

In his article "Tbilisi Cosmopolis", featured in the book *Tbilisi Archive of Transformation*, Zaal Andronikashvili reflects on the transformation of the essence of the Georgian capital from a cosmopolis to a provincial town. This transformation is to be attributed to the Soviet domination that affected the city for the majority of the last century. In his argumentation, Andronikashvili introduces a basic distinction between the Greek notion of *polis* (city) and a simple *oikos* (household). He states that "a city is the spatial embodiment of the human ability to become universal without losing his particularity". The foundational condition that enables this transformation is the city's production of citizen space. What makes then a *polis* into a *cosmopolis* is the city's ability to reach this universal status and transcend its spatial and temporal limitations. "A *cosmopolis* is a city gone travelling": it is not bound to any fundamental order, even if it is part of a nation or an empire, but produces a parallel space that allows the transformation from the particular to the universal.

This cosmopolitan character can define a city regardless of its physical size, as it pertains to a city's essence rather than its appearance. This was the case for Tbilisi for a couple of centuries before Soviet domination. Due to its strategic location between Asia and Europe, the city has represented a meeting point for many and diverse cultures and ethnic groups, such as Georgians, Armenians, Persians, Tartars, Arabs, Jews, Greeks, Turks... These communities contributed together to a polyphonic definition of the city's identity, ultimately identifying themselves as Tbilisian rather than Georgian, Armenian, Persian...

As said, Tbilisi cosmopolis came to an end with the establishment of the Georgian Soviet Socialist Republic in 1921. This marked the beginning of a process of provincialization in the city, strengthened by a series of urbanization policies that would oppose to the original essence of the city a substantial homophony.[1]

Even if largely in crisis, the polyphonic nature of Tbilisi is still retraceable in many aspects of the Georgian capital. Defining this character and understanding how its crisis occurs is of vital interest for the present and future scenarios of the city.

HOW DOES POLYPHONY WORK?

The term polyphony can be literally translated as "many voices", from the combination of the Greek prefix πολυ- (poly-), suggesting a numerical multiplicity, with the noun φωνή (phōne), which means "sound" or "voice". Originally defining a typology of musical texture, the notion has been expanded to other fields of knowledge. In particular, the Russian thinker Michail Michajlovič Bakhtin introduced the concept of polyphony in literature discourse as a central theme of *Problems of Dostoevsky's Poetics*. Through this word, Bakhtin refers to the *multivoicedness* of the Dostoevskian novel, a built-up of different narrators who simultaneously share the role of storyteller. This type of narration does not admit a dominating authority but rather introduces an idea of horizontal equality of each voice implied.[2] The same happens when considering the concept in the musical field: as Music Theory Academy reports. the adjective polyphonic describes a music texture characterised by the combination of several voices contrapuntally or in *counterpoint*. This means that the overall sound results from a non-hierarchical overlapping of the distinct melodies.

The concept of counterpoint, like polyphony, is also transdisciplinary. Bakhtin himself utilizes this word in his discourse, particularly referring to the explanation of the term provided by Chernyshevsky.[3] However, a more direct definition originates from the field of choreography, particularly from the work of William Forsythe. In *One Flat Thing, reproduced*, the American choreographer illustrates counterpoint as "a field of action in which the intermittent and irregular coincidence of attributes between organisational elements produces an ordered interplay",[4] hence interpreting counterpoint as a form of dialogue, where element meets, align and fall into a certain rhythm. These three verbs emphasise the nature of the interaction among the voices in a polyphony: the different parts are combined but not merged within the unity of the event.[5] The voices remain therefore independent and recognisable in their independence, despite together they produce, in the words of Bakhtin, "a unity of a higher order than (…) homophony".[6]

This specification draws a fundamental line of demarcation between polyphony and multiplicity, at least in the Deleuzian conception of the term. According to Deleuze, the elements that constitute a multiplicity are only defined by their reciprocal relationships, as they possess no prior identity and, consequently, no independence. Multiplicity "is not what has many parts"[7] as those parts cannot be described outside the relationship that holds them together. Additionally, it is not a set "whose members can be picked out one by one"[8] as none of those members holds meaning autonomously. Rather than a synonym of "variety", multiplicity refers to a condition of complexity which does not admit a state of complete unfoldness, but only continuous bifurcation, as Rajchman suggests citing

1.In music, homophony is defined as a texture with a single line of melody characterized by the presence of a harmonious accompaniment (Music Theory Academy).

2.Ness, Polyphony, p.2.

3.Bakthin reports the following image from Chernyshevsky on counterpoint. "Try to discover how one point of view passes over into another completely incompatible with it. This is the true meaning of the title 'The Pearl of Creation, as in mother-of-pearl, are all the shades of colours in the rainbow." (*Problems of Dostoevsky's Poetics*, p. 67).

4.Forsythe, Willems, *One flat thing, reproduced*.

5.Bakhtin, *Problems of Dostoevsky's Poetics*, pp.6-7.

6.Bakhtin, *Problems of Dostoevsky's Poetics*, p.21.

7.Rajchman, *The Deleuze Connections*, p.60.

8.Rajchman, *The Deleuze Connections*, p.59.

9.Borges, *The garden of forking paths*.

10.Ness, Polyphony, pp.3-4.

11.Bakhtin, *Problems of Dostoevsky's Poetics*, p.21.

12.In music, heterophony occurs when "a melody is varied by an additional voice/part at the same time as the original melody is being played" (Music Theory Academy).

the image of Borges' fable of the garden of ever-forking paths. In particular, the story draws a parallel between the construction of a complex novel and a labyrinth as two words in which all possible choices and outcomes exist simultaneously. Each decision taken in their realisation is a forking path that represents only one of the endless opportunities.[9] Contrastingly to this notion of multiplicity, the concept of polyphony specifically emphasizes the independence of the different voices that constitute it and implies the possibility of recognizing them even when combined.

A last basic characteristic of polyphony which is worth a brief allusion to is the absence of any preexisting script.[10] In a polyphonic relationship, the combination of elements produces outcomes that are not strictly predictable in advance. This means that polyphony not only accommodates differences but also allows for various possible results. As Bakthin puts it, its "artistic will is a will to combine many wills", and ultimately "a will to the event", without any form of predetermination.[11]

In summary, polyphony is here defined as a combination of more than two elements kept together by a harmonious underline, distinguishing it from heterophony.[12] Specifically, polyphony: 1. produces a higher state than the individual elements combined, and 2. allows for the identification of both the independent elements of the relationship and the alignment (counterpoint) in which they fall together.

TOPONYMS AS A REFLECTION OF POLYPHONY

As mentioned in the introduction to this essay, the concept of polyphony applies to different features of Tbilisi. Toponyms are one of the clearest examples of the polyphonic essence of the city. In particular, they reveal the complexity of the Tbilisian soundscape. Examining the etymology of the place names that describe the historic neighbourhoods of the old city, one would notice that they do not simply derive from different languages, but also encompass many alphabets - almost one for each community that has inhabited Tbilisi.

Place names reflect the interaction between a place and the people inhabiting that place. As an act of name-giving, they are typically a description of a place. Toponyms may refer to either a natural feature or a manmade intervention, define a space by its social usage, indicate the presence of an architectural element, or express a spatial relationship with that element. In this way, they not only designate a location but also convey a collection of qualities and meanings that the place holds for the people naming it.[13] The correspondence established by place names between the name users and objects named is bidirectional: a relationship of *signification* of the place and of *identification* of a community with the place. Consequently, toponyms enhance the sense of belonging to an area and to a social group within that area.[14]

Place names also carry a historical value because they testify who inhabited a location, as well as how and where. In this sense, they can be defined as mirrors and links to the past.[15] Since subject to the passing of time, they are often exposed to a process of stratification. This is the case of Tbilisi. The city's historical toponyms are not merely juxtaposed geographically, but often overlapping, demonstrating how two or more ethnic groups tended to interpret differently the same place, sometimes even in contemporaneity. This phenomenon may be described using the term *heteroglossia*, another concept introduced by Bakhtin as a side notion to polyphony, under the form of the Russian word *raznorayche*.[16] As both Bailey and Ivanov point out, heteroglossia indicates the simultaneous use of different signs within a text and highlights tensions and clashes that arise between them and their conflicting relationships.[17] Additionally, the concept accentuates that language is not neutral; it carries social value and has a significant role in defining relationships.

All these previous considerations demonstrate how toponymy is a clear episode of the Tbilisian polyphony. Indeed, place names are not only 'identity markers'[18] but also 'identity makers'. When analysed separately, they hold meaning as social signs of belonging to a group. When considered together, they contribute to a polyphonic process of construction of the identity of the city as a whole.

List of Toponyms from Tbilisi:

Abanotubani (აბანოთუბანი): 'bath district' (ge.)

Avlabar (يملك+فقط – havl+bare): 'an area beyond the wall' ('field' arab.+'fence' pers.)

Chugur (çugur): 'pit/deep plateau' (tur.)

Didube (დიდუბე): 'a large area, a plain place' (ge.)

Garetubani (გარეთუბანი): 'outer district' (ge.)

Isani (يساني): 'fortress' (arab.)

Kala (კალა): 'fortress' (ge.)

Kharpukhi (Խարպուխի): 'to cough' (arm.)

Meidan (meydan – نادیم – майдан): 'square' (tur.) / 'marketplace' (tart.) / 'gatherig place' (pers.)

Mtatsminda (წმინდა+მთა): 'holy mountain' (ge., reference to the Greek Ἄθως)

Metheki (მეტეხი): 'the area around the palace' (ge.)

Narikala (Narin Qala): 'small fortress' (per.)/(mon.)

Seydabad (صيداباد) : 'master settlement' (pers.)

Sololaki (سولو هال– "sulu-lah"): 'irrigation canal' (arab.)/ "su": 'water' (tur.)
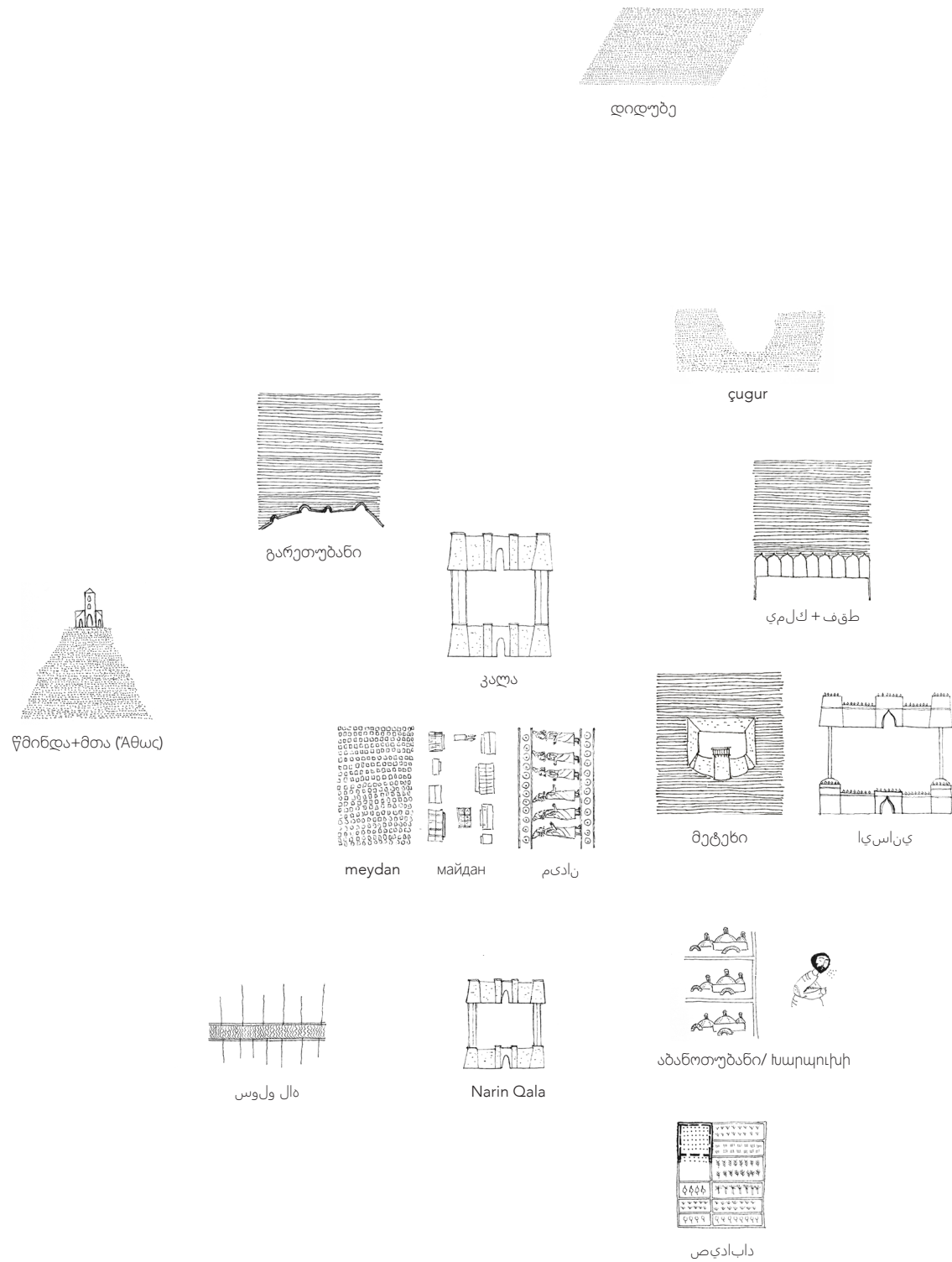
13.Helleland, Place Names and Identities, p.100.

14.Helleland, Place Names and Identities, p.109.

15.Helleland, Place Names and Identities, p.102.

16.*Raznorayche* (Разнорайче) is a Russian adjective translated as "diverse" or "varied".

17.Bailey, Heteroglossia, pp.499-502, and Ivanov, Heteroglossia, pp.100-101.

18.Helleland, Place Names and Identities, p.109.

დიდუბე

çugur

გარეუბანი

طقف + كلمي

კალა

meydan майдан مدان

მეტეხი

ياساني

წმინდა+მთა (Ἄθως)

لال ول سو

Narin Qala

აბანოთუბანი/ Խաղաղութ

صيداباد

THE LOSS OF POLYPHONY

The example of toponyms is also functional in introducing how the loss of a polyphonic condition occurs. It has been previously specified that place names typically refer to a physical object or describe a relation to it. However, when the reference term undergoes significant transformation or disappears, the correspondence between name and place enters a state of crisis. This occurs because the meaning of the toponym does not match the present reality anymore. This reflection prompts consideration of the role of materiality in defining identity, a question posed indirectly by Plutarch through the "paradox of Theseus' ship." The Greek historian narrates how the Athenians preserved the ship used by Theseus in his deeds, occasionally substituting the rotting timbers with new ones. Consequentially, the "ship became a standing example among the philosophers, for the logical question as to things that grow; one side holding that the ship remained the same, and the other contending that it was not the same".[19] As the complete replacement of the original materials of the artefact casts doubt on its identity, the role and validity of the place name are called into question when the toponym is no longer *represented* in the city.

The condition of a non-place related name could be described as a state of loss or 'crisis of presence', a term coined by the Italian anthropologist Ernesto De Martino. With this expression, De Martino indicates a growing sense of disorientation caused by the loss of domestic references. The concept is clearly exemplified in *La fine del mondo* through the episode involving the old shepherd and the bell tower of Marcellinare. In particular, the author describes the profound existential anguish observed in an old shepherd from Calabria. This feeling arises as he drives away from his hometown with De Martino, who has asked him for directions. As they leave, the shepherd watches the bell tower—the main reference point of his domestic space—fade from view through the car window, and therefore appears gradually more and more lost.[20] In Brečević's words, he experiences a "loss of self-relation with the world".[21] For De Martino, presence is strictly dependent on the world, as its constitutive character is the *being-in-the-world*.[22] Moreover, presence is also tied to the idea of a cultural horizon of meaning: the collapse of one of the two elements in the relation necessarily leads to the failure of the other. The crisis is usually induced by a change of sign due to the encounter with something unexpected. A shift is perceived, but it is not possible to make full sense of it.[23]

A similar situation occurs in the condition here referred to as a 'loss

19. Plutarch, *Parallel Lives*. "Life of Theseus", Vol 1. 1 XX.

20. De Martino, *La fine del mondo*, p. 480-481.

21. Brečević, Crisis of presence, p.38.

22. Moretti, *Crisi della presenza e apocalissi culturali in E. De Martino*, p.12.

23.Moretti, *Crisi della pre-senza e apocalissi culturali in E. De Martino*, p.15.

of polyphony'. In this expression, the word 'loss' does not imply a mathematical subtraction. Instead, it assumes the same connotation as the German term *verlust* in the title of Hans Sedlmayr's book *Verlust der Mitte*, a critical examination of modern art and culture. The meaning of verlust indicates the loss of the centre of value, cohesion and stability; it conveys the crisis of the mitte as a principle of order and sense. A polyphonic system experiences this loss when it encounters an element that does not fall in the same alignment that keeps together the other melodic voices. The introduction of this external component mines the clear reading of the overall under-harmony. Simply put, the loss of polyphony corresponds to the *verlust* of the counterpoint.

It is important to note that the element of disturbance is not a mere dissonance, but something completely 'out-of-tone'. As for the unexpected factor introducing a change of sign in the case of a crisis of presence, it can be identified as extraneous but it is not strictly describable in the same terms as the parts defining the polyphonic. This is due to the fact that it operates outside polyphony, according to a different, unclear logic rather than falling into the same harmony as the established members of the system. Finally, this disorientating element may have different natures: it can be a new introduction that distorts the readability of the alignment principle; it can relate to the recognition of an original member missing; or it may be a factor preexisting the institution of a polyphonic system that has not been incorporated in it.

CONCLUSION

While originally a musical definition, the notion of polyphony has been shown to imply a series of theoretical sub-concepts that allow its application in transdisciplinary discourses. Specifically, the adjective "polyphonic" seems to capture the original identity of the city of Tbilisi perfectly. Despite incorporating the idea of harmony as the aligning element, polyphonic constructs are not characterized by fixed stability; rather, they can be subject to a particular form of crisis triggered by the introduction of an external disturbance.

In architectural terms, the loss of polyphony can be retraced in the form of spaces of unclarity. Those are defined by the presence of at least one element that seems completely unrelated to an urban structure accommodating difference and variation. It is therefore possible to acknowledge that the disruptive object follows another principle, but the latter results of difficult understanding, and can appear almost illogical at times. This triggers a sense of disorientation of the individual

as well as of the collective, resulting in a form of detachment and almost alienation of the citizen from the city.

Many questions arise from the observation of this phenomenon, addressing spatial, architectural and social issues. Namely: what are the implications of a loss of polyphony on the urban scape? How does it affect the perception of a space? And, ultimately, how to solve it, admitting that it demands any type of solution?
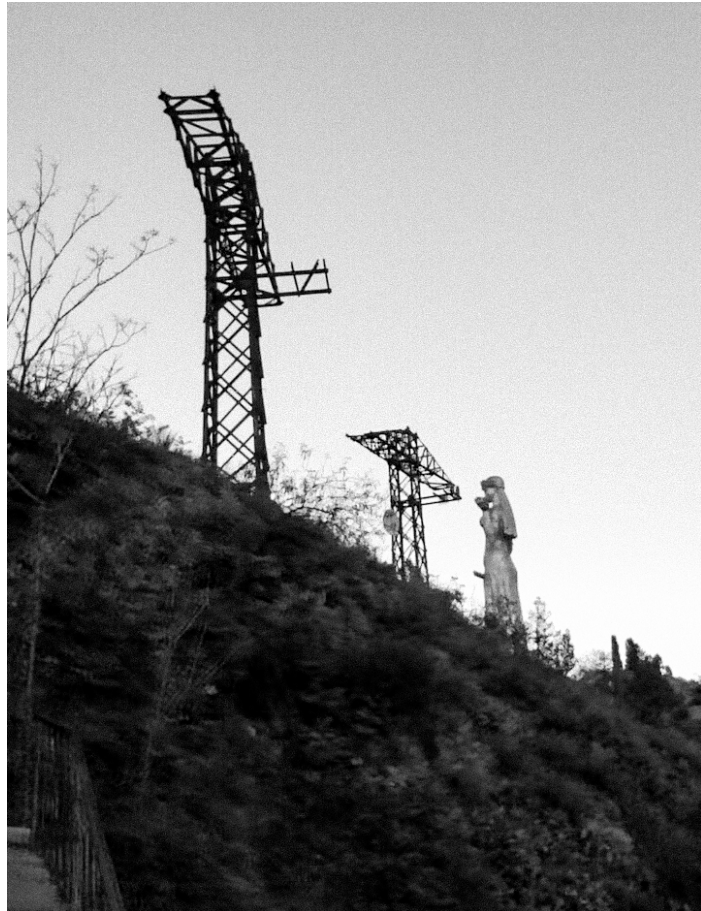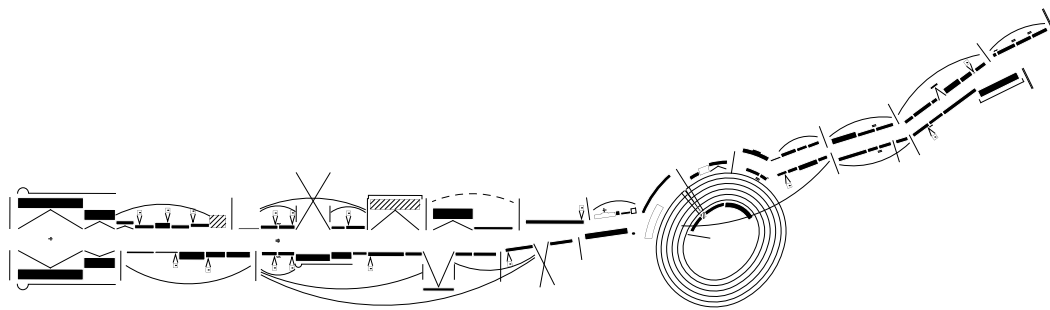
Dissonance and Repetition

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SAMPLING

The phenomenon of the loss of polyphony has been traced in the city through the sampling of areas in which different urban structures coexist in an ordered system of relationships, which is however called into question by the presence of a disruptive element.

The representation of such a spatial situation resulted in the definition of a notational system borrowing graphic elements from musical scores by Earle Brown and John Cage and the chorographical writing of the Labanotation. In particular, the components of the urban melodies, namely buildings and constructions, are written in a two-dimensional notation as rectangles characterised by the following attributes: duration (length), presence (thickness) and timbre (filling). Those elements are then described trough signs of rhythm, relation, analogy and spatial actions.

2. Sample_02
in Navtlugi

The introduction of the object that causes the loss of polyphony compromises the clear reading of the 2D notation previously described just as it mines the understanding of the common principle that keeps all the melodies together acting as their counterpoint. The unsettling element is depicted as a pentagram drawn in an unclear axonometry, following a linear path when it relates to an infrastructural element. In contrast, it takes on a circular shape if the ambiguity arises from its spatial arrangement. The pentagram is not only superimposed on the polyphonic score; it also influences it, attracting its graphical signs and causing them to gravitate towards or around it, thereby detaching from their original alignment.
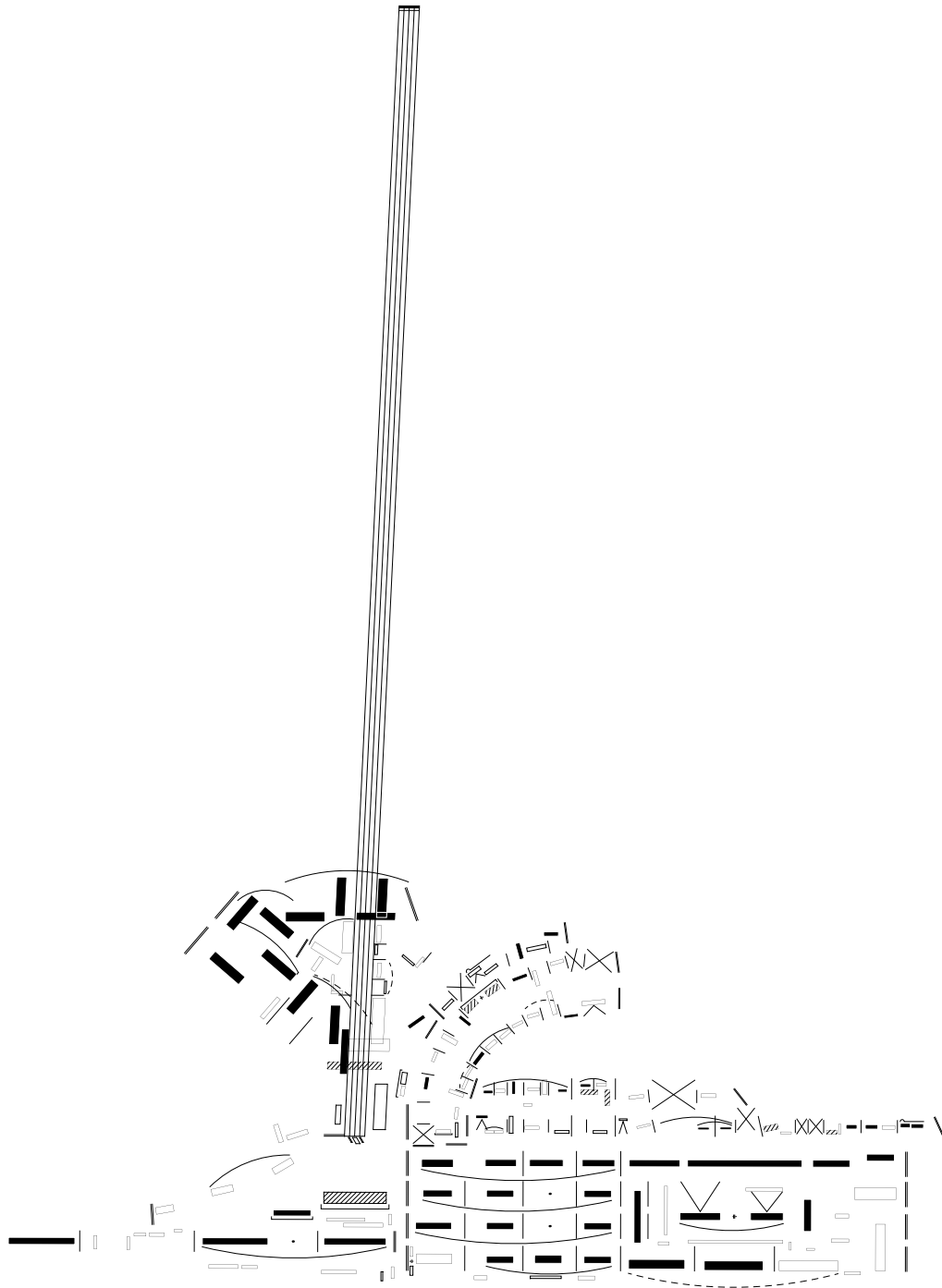
1. Sample_01
in Neue Tiflis
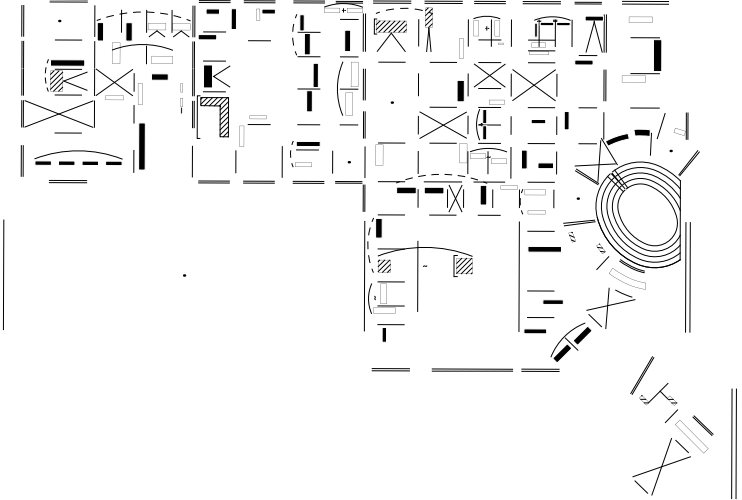
4. Sample_04
in Dighomi Dachas

3. Sample_03
in Saburtalo

Elements	Duration	Presence	Timbre
	long	heavy	main
	short	light	secondary
			complex

Signs	Rhythms	Relations	Analogy	Spatial actions	Other signs
	start / end	together	equal	spacing	void
		near	simmetrical	approaching	
	division	isolated	similar		missing
	subdivision	addressing			
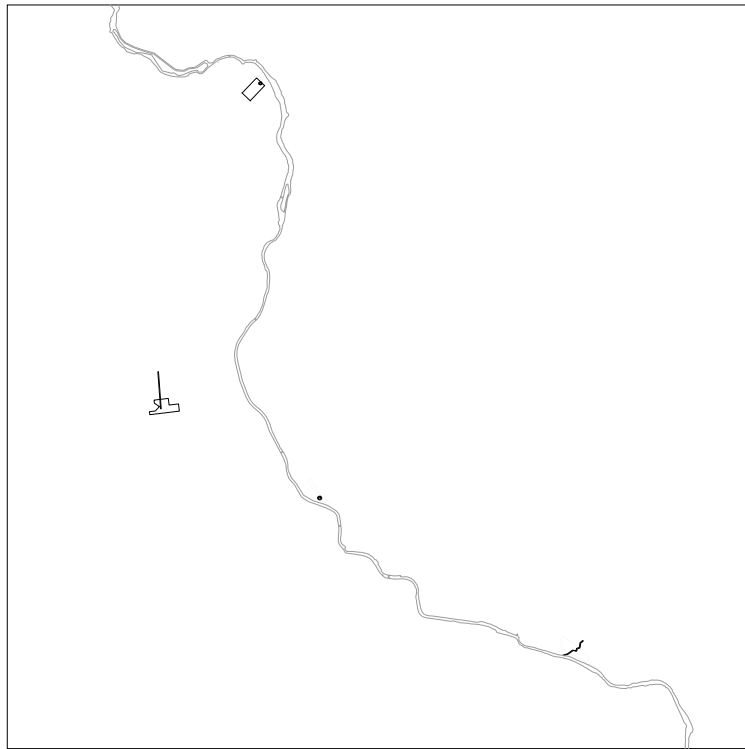
5. Map showing the real
distances between samples
and their orientation.

MAPPING_01

In the first map, the samples are placed back in the city following their original location. Floating in the abstract white space of the squared layout of the map, the constructs are grounded through the depiction of their relationship with the Mtkvari river, the only physical element of the city represented outside the graphic notation system that describes the samples.

Both the structures and the corresponding segments of the river are then scaled up from their central point of the same factor.

6. Samples of losses of
polyphony in Tbilisi.
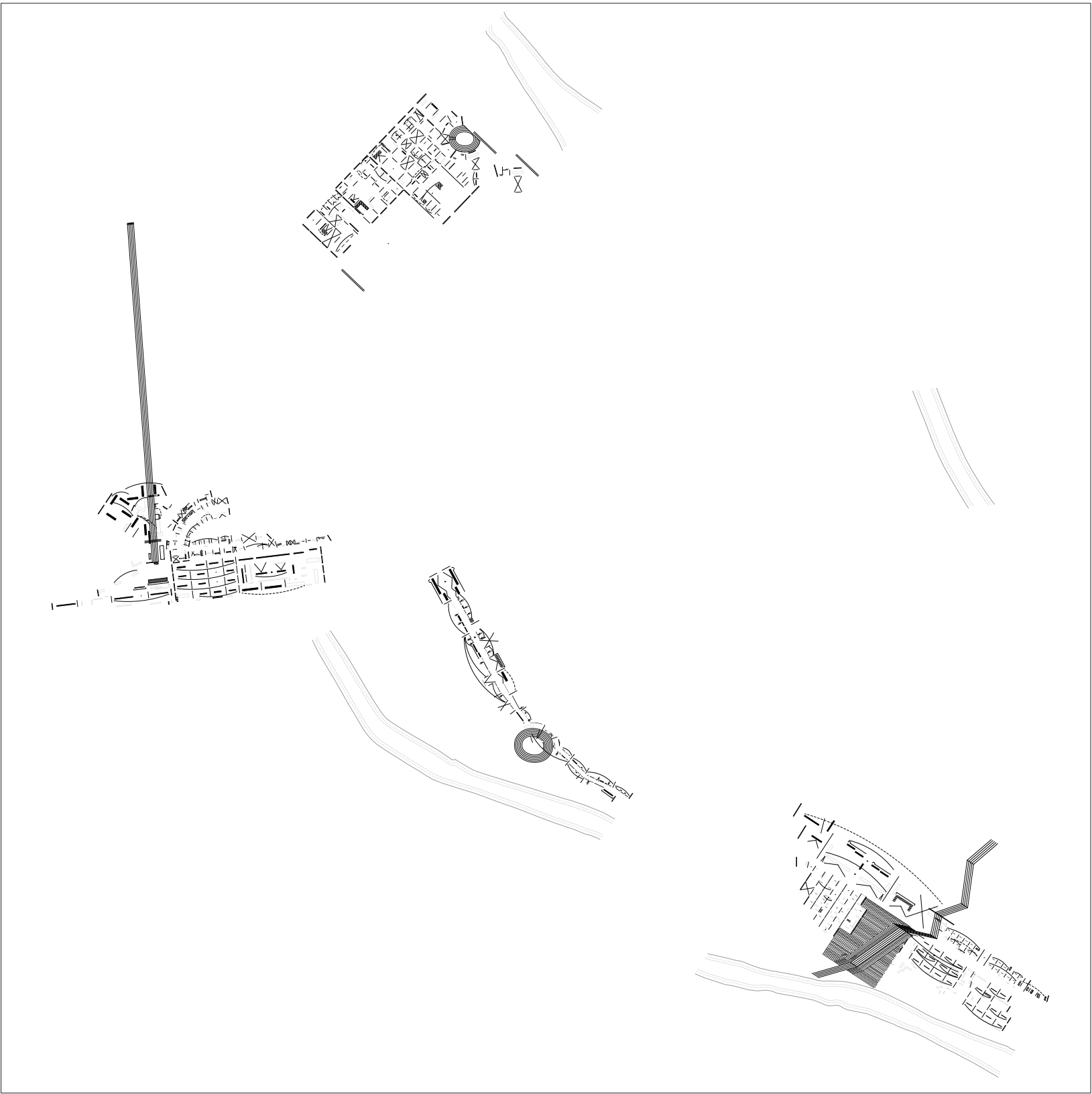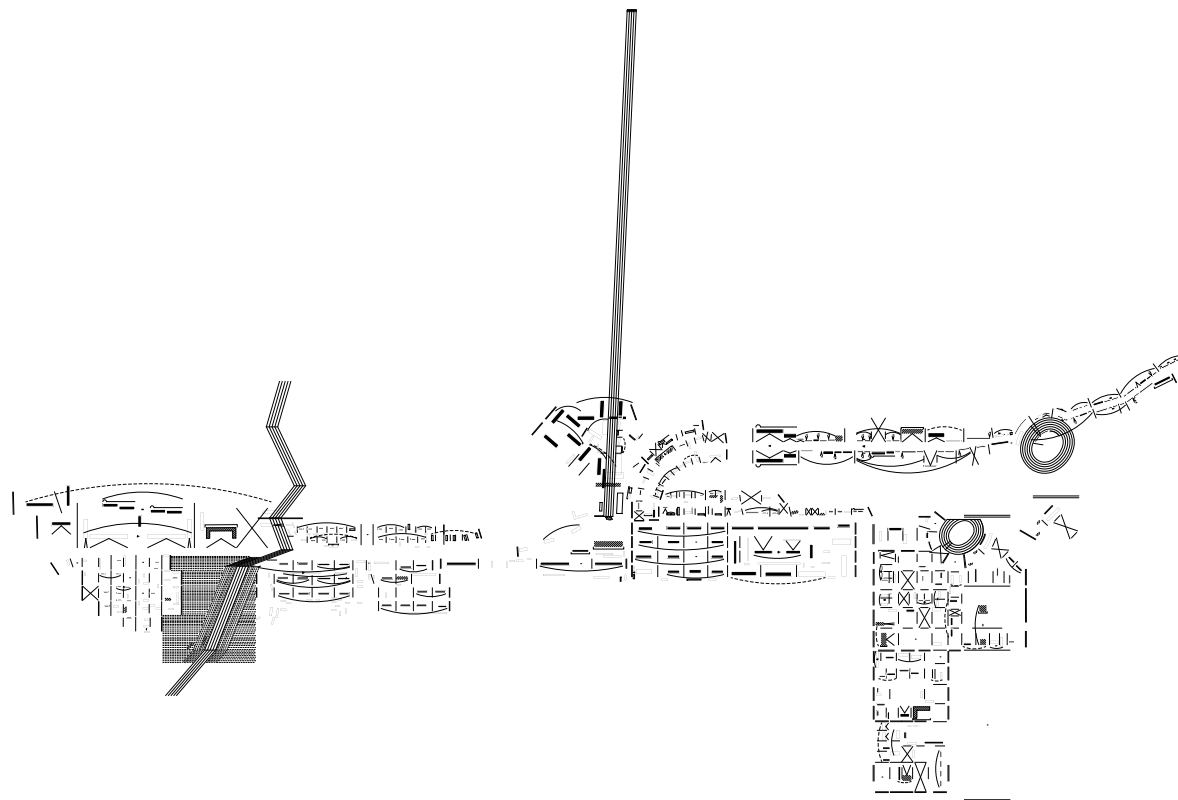
Not only does this manipulation reduce the distances between them, but it also makes them interact with each other. However, if one considers the real displacements that occur between the constructs, it becomes evident how the phenomenon of loss of polyphony is spread all around Tbilisi

MAPPING_02

The iteration of the mapping introduces an exercise of reconfiguration of the samples previously portrayed into a new polyphonic structure. The latter does not consider the original orientations nor distances between the four constructs but brings them together in a new organizational system

The four samples are here treated as four melodies and arranged according to the alignment of their counterpoints. The drawing resulting from this operation reveals a new set of relations between the original structures and overcomes the unclarity introduced by the disruptive elements incorporating them as parts of the melodies.

7. Polyphonic construct
from the rearrangement of
the samples mapped.

0 – 1
MO1 Site

The first exercise reinterprets the notation previously defined in the mapping rewriting one site out of the four sampled in the map as a binary code. The complexity of signs of the previous notational system is reduced to a succession of elements, either one or zero, either material (paper) or absence of it (cuts in the paper).

The score resulting from this operation is then inserted in a decoding machine and becomes itself a fundamental part of the musical instrument that allows for it to be played. In particular, metallic plectrums slide over the surface of the script and bounce off the paper below when they hit a void causing it to vibrate in a ground sound. The distruptive element is introduced through a different materiality and consequentially a different way of playng than the score: realized in metal just as the plectrums, it sounds because of the scratching of latters over its surface, producing a shrill and distortive note.

1 — 2 — VARIATION
MO2 Assemblage

The second model works on the definition of a polyphonic construct trough the interaction of four rhythmic lines extracted from the same site of the previous exercise. Again, the complexity of the mapping is reduced in the model to successions of elements in two dimensions only. Each one of the four melodies is represented by a graphical sign from the map deprived by its symbol. Every sign is extruded in space acquiring a new dimension: the dot develops in a line, 1D geometries such as line and arch become 2D, while the rectangle is transformed in a three-dimensional object.

The rhythmic lines resemble melodies within a polyphonic structure, each showcasing its independence as they occupy different spatial planes, each with its own direction, rotation, and inclination. However, when viewed collectively, these sequences begin to interact, forming a structure that transcends the individual lines. Emerging from the model is finally also the everchanging distance between elements of the same melody.
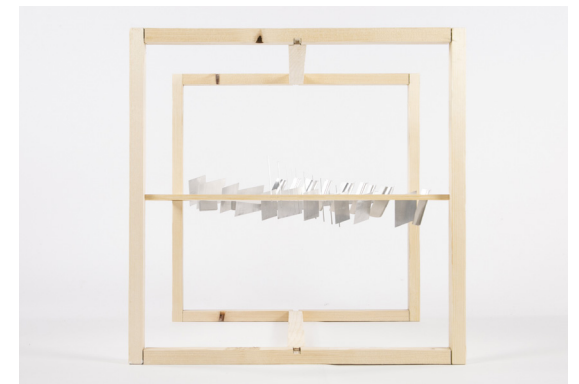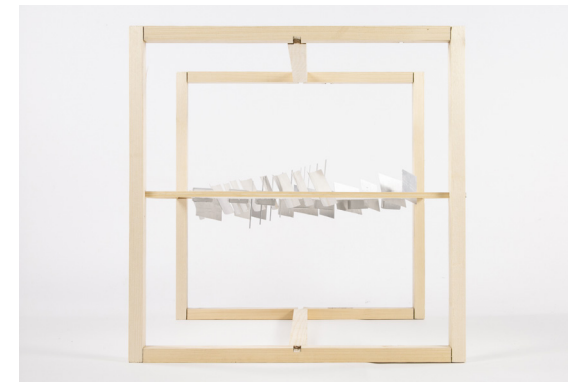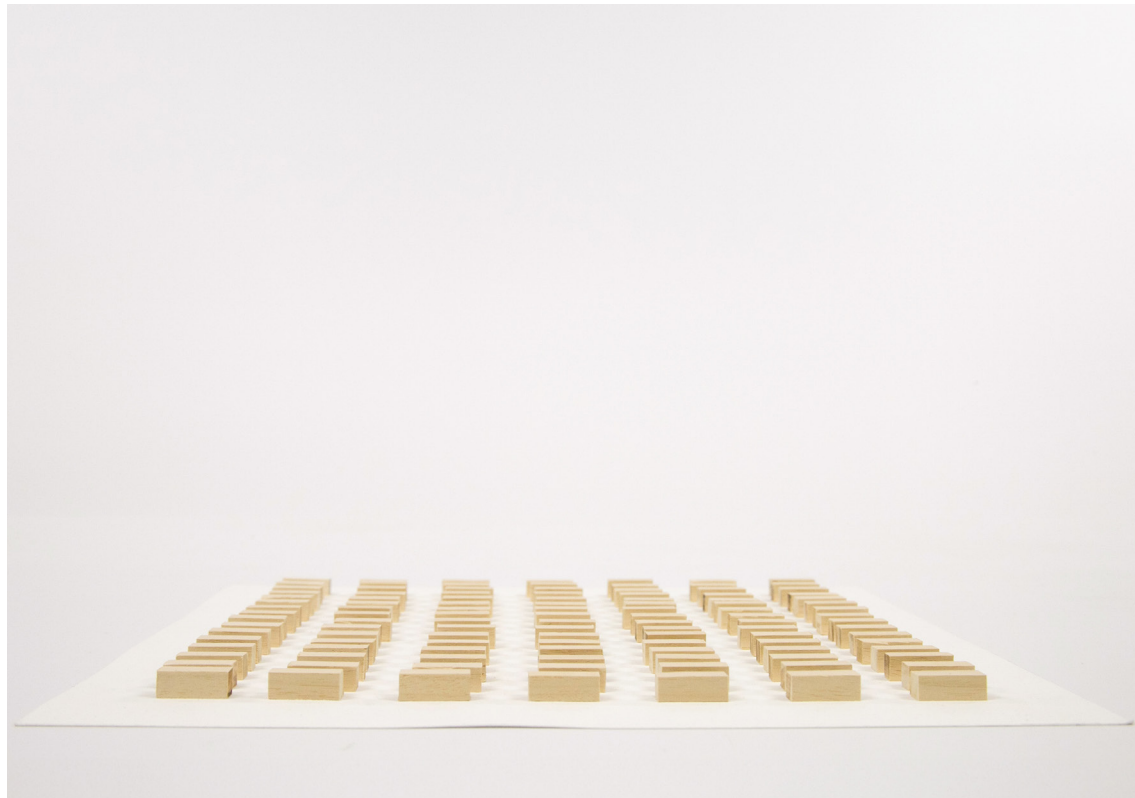
1 — INFINITE VARIATION
MO3 Program

The last exercise reflects on the themes of repetition and infinitesimal variation. A set of blocks of the same size is placed on a plane aligned in one direction while their distance in the other direction varies infinitesimally. In particular, the misplacement of one piece reflects in terms of the propagation of the infinitesimal mistake on the next one.

The possibility of bending the base plane acts directly on the relations occurring between the elements, enhancing the variation of the dimension of the voids through dilatations and compressions along multiple directionalities.
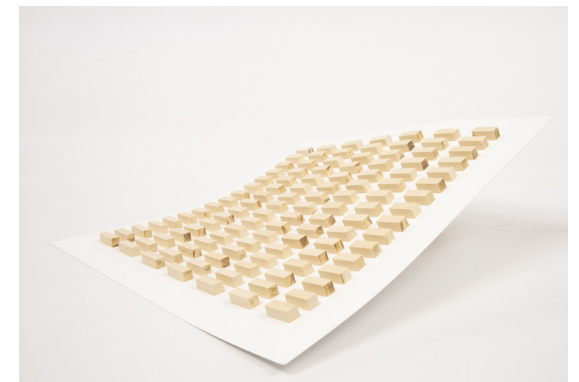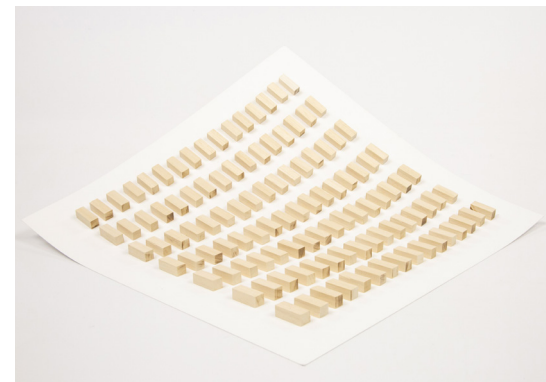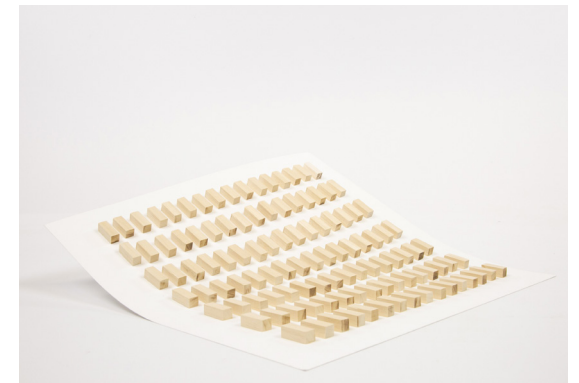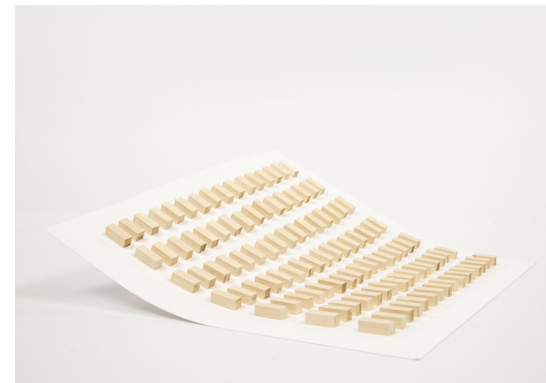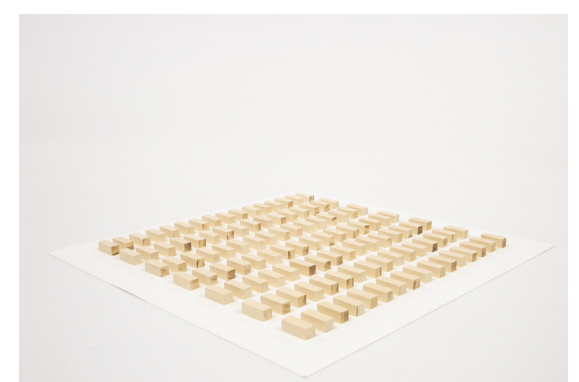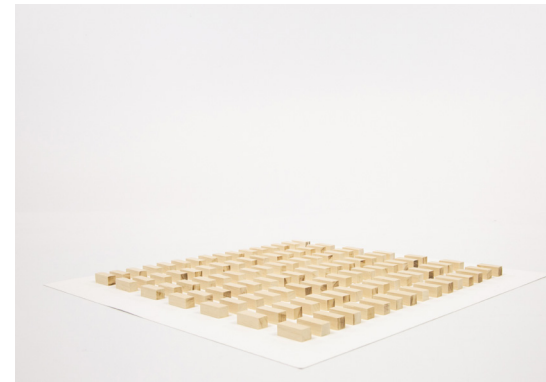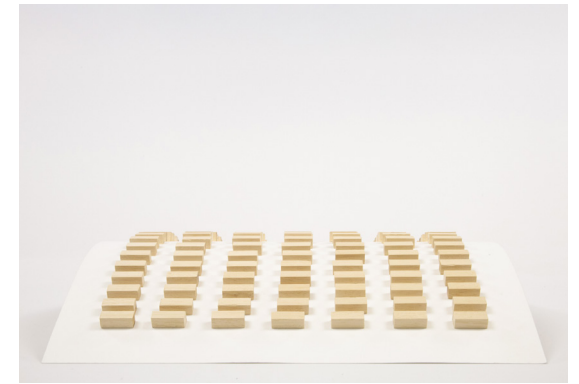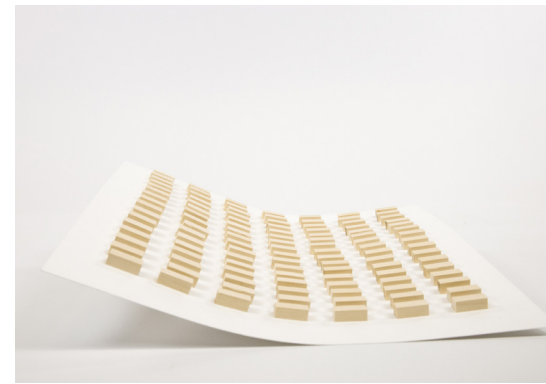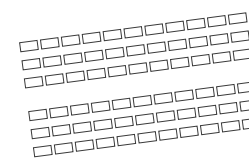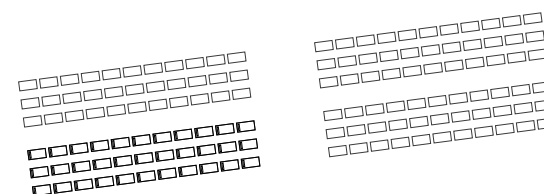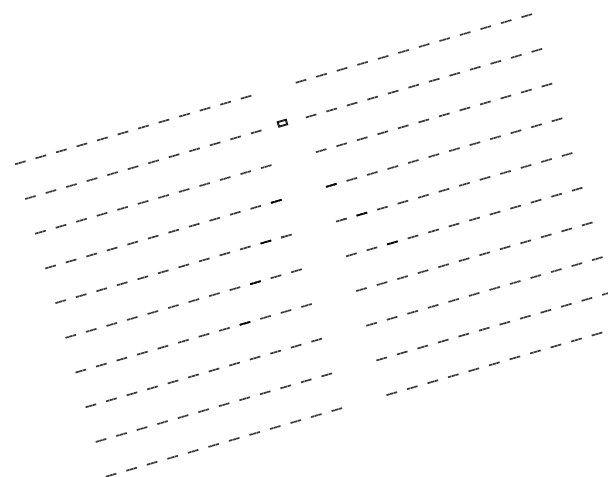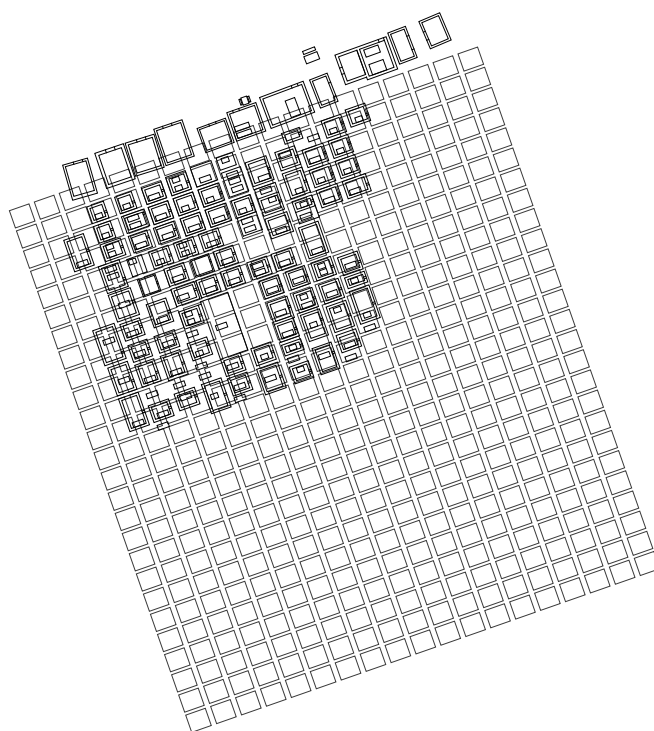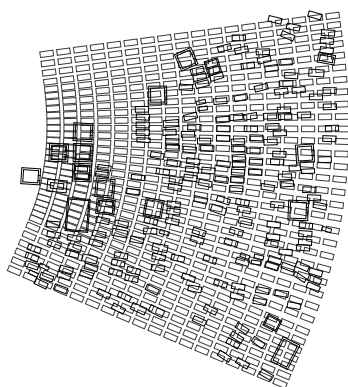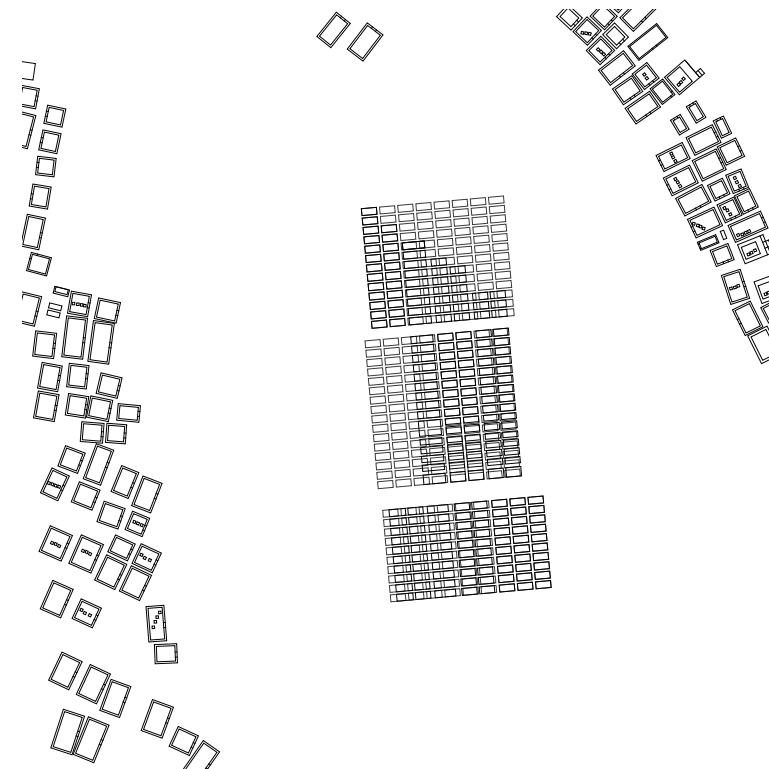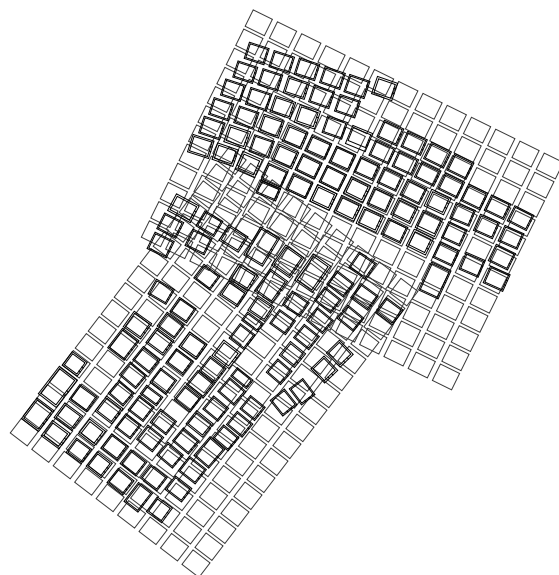
8. Abacus of cemeteries structures currently existing in Tbilisi analyzed trough rigid and distorted grids.

from top to bottom:
St. Babara Cemetery of Samgori (orthodox);
Ortachala Old Jewish Cemetery;
Armenian Pantheon of Tbilisi;
Petre-Pavle Cemetery (orthodox);
New Jewish Cemetery
(in Cemetry of Dampalo);
Dighomi Cemetery (orthodox);
German WWII Prisoners Cemetery;
Mukhatgverdi Brothers Cemetery
(in Mukhatgverdi Cemetery).

DESIGN PROPOSAL

Even though a considerable number of the historical cemeteries were either destroyed or transformed during the Soviet era, cemeteries are still one of the last testimonies to the polyphonic nature of Tbilisi. Each ethnic community had its own places in the city where they buried their dead according to their different religious rituals. Not only do these differences manifest in the size and typology of the graves, but also in the structures of the cemeteries themselves, which result from the relationships between tombs. Cemeteries can thus be understood as micro-urbanities characterized by an unfixed degree of variation in terms of the dimensions of the elements and the spaces between them, as well as of rotation caused by the coincidence with the topography or by the propagation of an error in the placement of one tomb after another.

The proposal consist in the design of a cemetry in which the diverse structures described above can coexist and come together as the melodic lines of a polyphonic composition. Particular attention is paid to the spaces in between, which are characterized by episodic elements that may seem out-of-tone in terms of their function, but in reality act as a counterpoint to the polyphony by absorbing the differences between the various constructions and thus holding them together.

9. Abacus of axnometries of grave typologies highliting dimensional differences.
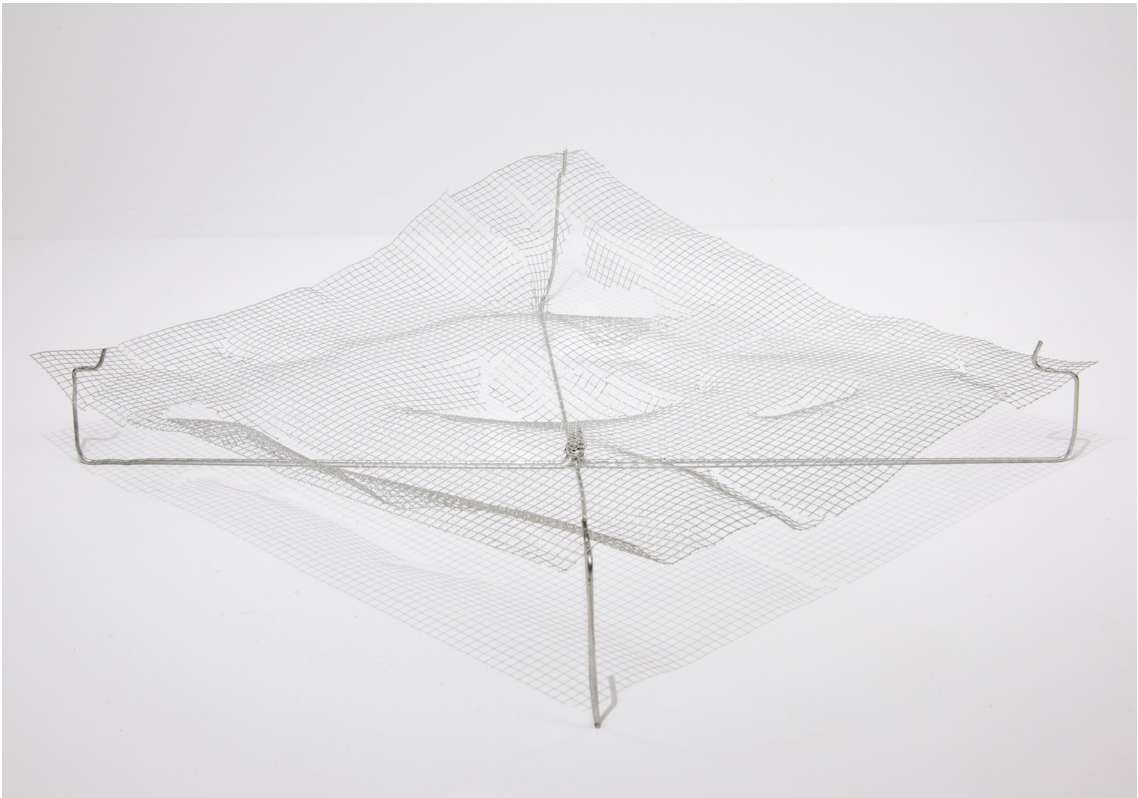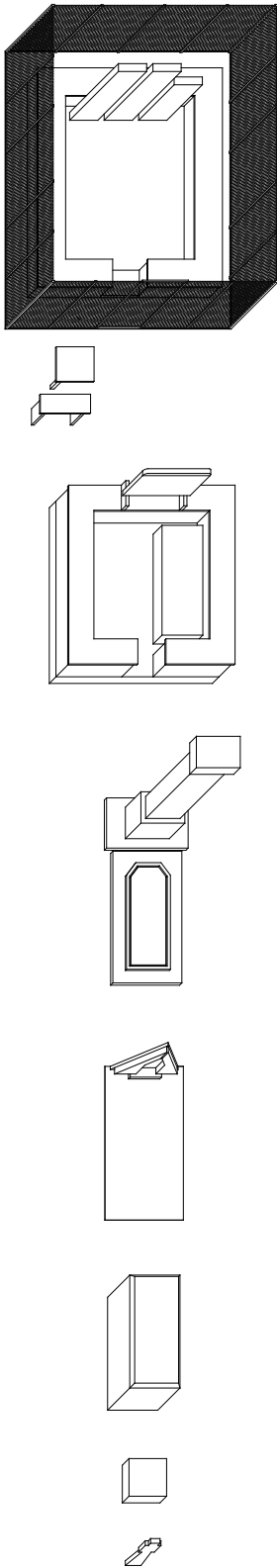
SITE

Located in the East side of Tbilisi in a poorly developed area where the urban fabric gradually fades as it meets harsh terrain condition, the site has been chosen because of a considerable amount of unconstructed land as well as for its challenging topographical conditions.

The area is characterized by the sudden encounter of a planar surface with the steep mountainous landscape that borders with the city, including an interesting rhythmic structure of parallel ridges.

10. Terrain site-model.

11-12. Orthophoto of the site and site plan.