



Radiator problem

*The mind behind physical interventions
of vernacular dwellings in Tbilisi*

One evening, while staying in Tbilisi, the radiator in my apartment started to collapse. I noticed that it was not aligned to the windowsill straight anymore. The old brick wall was too weak to hold it and exposed screws were barely keeping the metal structure in place, posing a risk for it to fall down and burst the water pipes. I then quickly took a paracord rope which I found in the closet and hung the radiator over the window frame.

Martynas Kilius

Italo Calvino, *Invisible cities* (2013)

Those who arrive at Thekla can see little of the city, beyond the plank fences, the sackcloth screens, the scaffoldings, the metal armatures, the wooden catwalks hanging from ropes or supported by sawhorses, the ladders, the trestles. If you ask, "Why is Thekla's construction taking such a long time?" the inhabitants continue hoisting sacks, lowering leaded strings, moving long brushes up and down, as they answer, "So that its destruction cannot begin." And if asked whether they fear that, once the scaffoldings are removed, the city may begin to crumble and fall to pieces, they add hastily, in a whisper, "Not only the city."

If, dissatisfied with the answers, someone puts his eye to a crack in a fence, he sees cranes pulling up other cranes, scaffoldings that embrace other scaffoldings, beams that prop up other beams. "What meaning does your construction have?" he asks. "What is the aim of a city under construction unless it is a city? Where is the plan you are following, the blueprint?"

"We will show it to you as soon as the working day is over; we cannot interrupt our work now," they answer.

Work stops at sunset. Darkness falls over the building site. The sky is filled with stars. "There is the blueprint," they say.

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reflection

My graduation project focuses on the characteristic transformations of the city, mostly carried out by locals without deeper knowledge in professional fields of architecture or engineering. Thus, the intention is to reveal the 'other' less visible transformative practices of the built environment, understand their approach and methodology, and extract their values, which could be applied to the architectural profession.

With this project, I intended to carry out situated, embedded research, which highly influences the thorough architectural proposal. During the situated research phase, I mapped out (photo documentation) the rich diversity of the transformations in the city to understand their material and cultural aspects, the ways of construction, and the reasons behind it. Furthermore, I continued to document the diversity of architecture with current architectural trends, the existing local material practices and crafts (such as local logisticians collecting various metal appliances from residents or furniture makers working with scavenged materials), and local material markets. My research also included interaction with residents of the city, colleagues, and professionals in the field who kindly introduced me to the social and material aspects of the culture. Simultaneously, the historical and social analysis was carried out to grasp the complex development of the city that led to initiatives as characteristic transformations of Tbilisi. The study of the contextual sources also helped to understand better the current trends in the built environment and the existing socio-physical condition of the city.

Throughout open-ended contextual research of the physical and social environment, I developed a rich understanding of this environment, which helped me proceed with a realistic, contextual, and site-specific workflow. I believe this approach is crucial for any sincere architectural development.

In this regard, I can firmly say that the chosen approach worked and contributed highly to making me more aware of the objective. During the research phase, I developed the direction I want to follow further. The chosen methodology acted as a teacher through which I not only learned about the city's physical environment but also revealed the complex socio-cultural layers as reasons for such a development.

The main objective of the situated research was to directly influence the further development of the design proposal and its strategy - a detailed material mapping of the project building helped to come up with a more realistic proposal for reusing those materials (according to their type, dimensions, and conditions); research on existing material practices led to a contextual strategic project proposal; an analysis of current architectural tendencies and public opinion towards them assisted in creating a social proposal by promoting cultural values of the city. Therefore, the design was never an intention but a result of situated research. A part of the process as a flexible step in the timeline.

The chosen approach was extremely satisfying since I learned new things in practical analysis. For example, the local transformations of Tbilisi, which I analyzed, cannot be idealized either as structures or as aesthetic objects: their extremely poor structural conditions pose risks, and they are simply accumulations of trash. Therefore, I quickly understood that their values lie somewhere else. Only their ideology and approach towards them can be later applied in practice as valuable extractions.

With this proposal, not only do I wish to promote alternative ways of operating in architecture from the dominant ones, but also to tackle the dogmatic and supreme aspects of architecture itself. As if the professional practice of an architect is challenged by the unprofessional, nearly primitive practices of residents with no expertise in the field. Concerning the studio topic (city of the future), the project aims at its pragmatic nature - the process and not the result. The city of the future might as well be the city of today.

Fundamentally, this relates to the broader spectrum of social and professional issues found not only in Tbilisi. In the social context, this proposal pronounces the importance of direct action as an individual way of operating, which, I believe, is crucial for critical thinking. Not only does it place one directly to the problem but also resists dogmatic comforts posed by the society. Furthermore, I believe that this project is not about developing a finished architectural product but acknowledging the temporal nature of every brick in the wall. It is a preservation of a process as a condition and not the matter, in which aesthetics are the result and not an intention. Therefore, from simple material definitions, the ways they are combined, and their day-to-day users, it questions the current systematic approach to architecture and the supremacy of architects themselves in design practices.

1 introduction

The city of Tbilisi, Georgia is currently at the crossroad of various conflicting directions - be it a political one, between the desire to escape towards Western Europe and a contrary one of Russian oppression, or the future development of the built environment, between drastic modernizations in the city which fall entirely out of context and questions concerning preservation strategies. Although, the latter point seems to have no clear strategy and less interest. Currently, the vernacular architecture, with all its characteristic creative transformations, is collapsing. With the lack or even absence of logical regulations on how the city should act towards its cultural heritage or crumbling domestic architecture, Tbilisi became a playground for political power games. Since there is no clear definition of value in the built environment, the city obeys the monopolistic transformative practices without hesitation, destroying the undefined - mostly the vernacular dwellings with various cultural layers accumulated over time - the transformations.

These transformations are anonymous interventions, usually carried out by citizens without any or extremely low budgets. Interventions are almost invisible and rarely distinctive from the context, as they blend into the totality of the city. Even though they would hardly fall under any preservation category, they are accurate representations of society and a considerable part of the city's identity. Therefore, with a huge fascination with the process of untangling the complex nature of those transformations, I formulate the further research question:

How should Tbilisi act towards the physical and cognitive values of local interventions?

With this research, I intend to reveal the complexity of Tbilisi's built environment, analyze the dominant urban processes and their driving factors, current architectural trends, and finally, the characteristic phenomenon of transformations - the objective of this research. Furthermore, I aim to depict the character of transformations and extract their values for further project development. Methodologically, I intend to explore the topic in a much more direct way - thus, not only by studying the historic contextual literature, various theoretical sources, or similar materials but by interacting with the physical environment of Tbilisi myself. Moreover, not only material explorations of transformations and their context but also interactions with local residents, artists, and artisans are crucial parts of this research. Therefore, the research that I conducted is the one of the participant and observer. I believe that only by doing so the holistic proposal respecting the subject's environment could be later conceived. Additionally, with atmospheric inserts depicting the face of Tbilisi, I wish to bring the reader closer to the topic.

2 context

diversity

In order to grasp the complexity of Georgian identity and current trends in architecture, one must look into its chaotic historical development. Geographically, Georgia is situated at a different crossroads between many cultures, and it was always perceived as a transitional area. Therefore, the country was conquered by many empires, such as the neighboring Persia, Byzantium, Arabia, Turkey, Central Asia, Mongolia, Turkmenistan, and Russia, what resulted in a multicultural community.¹ It is not a surprise that during its 1,500-year history, the capital Tbilisi was radically destroyed over 20 times.² The oldest private house stands for around 200 years and marks the date when the city was last destroyed.³ Therefore, the constantly changing appearance of the city created its unique character.

The city had no time to develop beauty.⁴

With the extremely complex historical development came the variety of architectural styles that can now be easily identified in the built environment: from thorough Persian vernacular architecture to massive Soviet concrete monuments; from modern starchitecture phenomenons to glass business towers and over-night appearing housing complexes. However, the contrasting architectural styles, as well as the physical conditions of these architectures, bring confusion to the observer. The vernacular dwellings and a huge part of the domestic architecture of Tbilisi are currently collapsing.

¹ Peter Cachola Schmal and Irina Kurtishvili, *Hybrid Tbilisi* (DOM PUBLI, 2018), 11.

² Schmal and Kurtishvili, *Hybrid Tbilisi*, 11.

³ Schmal and Kurtishvili, *Hybrid Tbilisi*, 11.

⁴ Schmal and Kurtishvili, *Hybrid Tbilisi*, 56.

an abandoned city where human presence no longer dictates the position of every brick is soon reclaimed by nature. Various weeds penetrate flat streets and sidewalks, parasitic plants climb the former polished facades, and groves accumulate on empty roofs. A chaotic city that lacks structure and regulations is soon taken over by human presence who mold the town inventing their own rules. Doors cover the asphalt pits, planks fortify the collapsing brick facades, walls open up for the exhaustion pipes. Both, an abandoned city and a chaotic city, are very different in style, yet, very similar in character. Both are very alive and both feel natural.



diverse architectural styles of Tbilisi, Georgia

power

The lack of clarity in the visual identity of Tbilisi opens up the gates for many different initiatives, although the dominant one is the demonstration of power. As Irina Kurtishvili explained it - “anyone who manages to give this city a face has truly demonstrated power.”⁵ This provides rulers the possibility to show off their power by erecting massive modern manifestations as promises that scream for progress everywhere in the country.⁶ On the other hand, it manipulates citizens to gain political support by showing this so-called long-awaited *progress*. Therefore, any change could be perceived as a positive and promising change.

As one can expect, behind the curtain of promises hides a different reality. The architectural heritage that keeps disappearing overnight is one example. A 13-floor residential building, a significant historical object since it was not only a former Institute of Marx, Engels, and Lenin but also The Independent Institute of National Problems (after the fall of the Soviet Union),⁷ was demolished because “it was not permitted to build such a high-rise building in the historic district of Mtatsminda.”⁸ Ironically, later in its place appeared the tallest building in Tbilisi - a Biltmore hotel.

⁵ Schmal and Kurtishvili, *Hybrid Tbilisi*, 56.

⁶ Schmal and Kurtishvili, *Hybrid Tbilisi*, 56.

⁷ "Where past meets modernity: Historic amphitheater of The Biltmore Hotel Tbilisi," 2017, accessed 10/12, 2021, <https://georgianjournal.ge/business/33554-where-past-meets-modernity-historic-amphitheater-of-the-biltmore-hotel-tbilisi.html>.

⁸ Data Chigholashvili, *Tbilisi it's complicated* (2019), 172.

Biltmore hotel, the tallest building in Tbilisi, Georgia



A situation similar to one of the dilapidating vernacular dwellings could be drawn from the observations of Soviet mosaics by Georgian designer Nini Palavandishvili - mosaics are a very typical phenomenon in the city, although rapidly disappearing with current modernization processes. As the artist claims “They became such an invisible part of our daily visual culture that inhabitants of Tbilisi do not even notice them anymore; hence, they do not notice when they get knocked down.”⁹ Precisely the same is happening to the vernacular architecture, which is falling down without getting much attention.

Although, probably the most fascinating example depicting the absurd level of thirst for power in the country is the film “Taming the Garden” by Salomé Jashi. The movie portrays the transportation of massive ancient trees through roads and the ocean, which are then collected to a specific location in order to create an exotic botanical garden - an obsession of one of the wealthiest and politically powerful figures in Georgia.

⁹ Chigholashvili, *Tbilisi it's complicated*, 126.

shot from the movie *Taming the Garden* by Salomé Jashi



trends

Currently, there are three main architecture trends that are processing the identity of the city - massive renovation projects of the pre-Soviet architecture, such as Persian vernacular architecture, demolition or repurposing of Soviet monuments, and new shiny starchitecture manifestations.¹⁰ The latter trend is the most visible, highly contrasting from the other two. Its ignorant approach towards the existing scale and condition of the surrounding buildings could be perceived as an architecture of neglect. Although, even the trend of massive renovations could not be taken as a better example.

Renovations most of the time are carried out in a fast-paced manner, without precision or attention to detail, which leads to the abandonment of any deeper historic layers resulting in polished Disneyfied structures. Interestingly, the heritage of the pre-Soviet vernacular architecture is considered unique and, thus, was a strong candidate for inclusion in the list of UNESCO. However, because of the poor involvement of the local government and its weak aspiration for further responsibilities to take care of the architectural heritage, the application was later neglected.¹¹

¹⁰ Schmal and Kurtishvili, *Hybrid Tbilisi*, 109.

¹¹ Angela Wheeler, "New Look for Old Tbilisi: Preservation Planning in Tbilisi Historic District," (2015): 71.

Locally, many Tbilisians recognize the values in many of their still-standing structures, although the approach is usually different than one might expect. For example, the high value of characteristic red-brick houses of Tbilisi is identified, although through the actions of consumeristic exploitations, and not the ones leading to a careful appreciation and ideological preservation as a whole. Red bricks are dismantled as valuable assets, which are later used to build nostalgic villas outside of the town for rich Georgians.¹² After that, inhabitants of torn houses are left with promises for luxurious apartments that are soon to be erected in their place. Unfortunately, however, the new luxury apartments hinting at a modern lifestyle are usually erected in a very questionable manner: most construction processes are carried out during the night, leading to accidental spilling of concrete to the neighboring properties, as well as unprecise and wonky structures as a result.¹³ Owners of the new apartments are left pretending how their new wonky structures are “straight enough for us Georgians.”¹⁴

¹² K. Neuburg and S. Pranz, *Tbilisi: Archive of Transition* (Arthur Niggli Verlag, 2018), 68.

¹³ Neuburg and Pranz, *Tbilisi: Archive of Transition*, 68.

¹⁴ Neuburg and Pranz, *Tbilisi: Archive of Transition*, 68.



polished renovations



an entrance before and after an insensitive overhaul, which resulted in the loss of significant detail.
(Bourgeois Dreams, 2004)



Georgian red brick house



the quality of current construction processes

3 transformations

resistance

Out of the complex urban and social landscape with no singular architecture defining the city's identity, without a clear conservation strategy for its cultural heritage, and with no political action taking care of dilapidating houses, inhabitants took matters into their own hands. From the chaotic nature of Tbilisi, spectacular transformations emerged. Be it a rotten railing of the staircase tightly secured with a cut wire, a dilapidated frontal part of a facade supported by a couple of wooden planks, or even a warning barrier made out of tape and a few plastic bags - these transformations are crucial elements of the city's characteristic nature and its identity. They could be seen as non-architectural architecture or the architecture after architecture, where simple residents with no professional knowledge act as architects themselves. Transformations born during the lawless period after the collapse of the Soviet Union were political actions as responses to the dark times of ignorance.

While this phenomenon of resistance is visible on many different scales, *kamikaze* loggias are one of the clearest examples portraying the domestic transformations where the "self-organization became a form of political and social resistance."¹⁵ After the Soviet Union collapsed, inhabitants partly reclaimed power by creating various extensions to their apartments in *Khrushchyovkas* (Soviet apartment blocks). Loggias were usually built by inhabitants themselves with no architectural or engineering background. Because of that, their extensions resulted in poor structural solutions, which led to occasional collapses killing the ones inside.

¹⁵ Schmal and Kurtishvili, *Hybrid Tbilisi*, 63.

Thus, the name *kamikaze* was drawn from the unpredictable nature of these loggias.¹⁶ Interestingly, these extensions did not have to be removed; instead, they were appropriated and reinforced with additional framework support by the city hall. I would even dare to argue that it is indeed a bottom-up approach at its purest and not a trendy bottom-up branch of architecture. The kind of transformations can be a reference back to the historic palimpsestic building technique, where new domestic structures were directly built on top of the old ones, and by that “not monumentalizing the past, but expanding on it for the future.”¹⁷

Later on, the Georgian Pavilion at the 55th Venice Biennale "kamikaze loggia" attempted to portray the lawless do-it-yourself approach by recreating the space. As later explained by the artists, the loggia was decided to be left unfinished for the show's opening to reveal its imperfect ideological nature. The decision was to construct the pavilion during the rest of the show.¹⁸

¹⁶ "Kamikaze Loggia- Georgian Pavilion on the 55th Venice Biennial, 2013," accessed 11/12, 2021, http://geoplatforma.blogspot.com/2013/06/kamikaze-loggia-georgian-pavilion-on_6.html.

¹⁷ Schmal and Kurtishvili, *Hybrid Tbilisi*, 82.

¹⁸ Schmal and Kurtishvili, *Hybrid Tbilisi*, 84.



kamikaze loggias reinforced by municipality of Tbilisi

transformations (domestic)

Even though *kamikaze* loggias are probably the most obvious examples of local DIY solutions to more significant structural problems, transformations usually of a smaller scale that carry the same ideology scatter the city denser, almost invisibly. I was immediately caught up in their extremely fascinating character and, therefore, felt the urge to explore these phenomena with my work. One could start by tracking the clusters, tracking their density where they are most accumulated; however, it would merely make one get lost quickly. It would be pointless to try and map out these areas since it is fused into the culture. They are engraved into the mindsets of Georgians rather than being mere physical solutions. For example - an antenna made out of reused film camera discs, a metal rod, and a cable is welded to the pipe - reminds a symbiotic relationship between pipe and antenna. A wooden cutting board covering the plastic pipe protects it from accidental burst when stepped on. Or an extension for a car shed constructed by welding metal rebars and sticking visibility tape on the sides. These are only a couple of examples.

gutter is a car shower, pipe is a pillar, armature is a bench, glass jar is a lamp, soda can is an antenna, tree is a basketball board, plastic bag is a stop line, door is a sidewalk, attic hole is an air conditioner window, wooden stick is a lamp post, bricks are bench legs, bricks are a table, log is a traffic pole base, pipe is a vine tree rest, tree is a wire pole, tree is a pipe pole, radiators are a parking spot, pipe is a fence, tree trunk is a column, wire is a pipe rest, pipe is a wire rest, chair is a pipe rest, cutting board is a pipe support, wardrobe is a wall, fence is a plaster net, internet cable is a vine tree rest, plastic bottle is a pipe roof, branches are pot legs

antenna



pipe hood



film camera discs

symbiosis (commensalism) - pipe offers support for antenna but gains nothing

attachment detail

metal rod welded to the pipe

cable



cutting board

board protects the pipe structurally, acts as an indicator

plastic water pipe

extended car shed



welded metal rebars

visibility tape

radiator garage



people

In addition to ideological resistance, another obvious factor that led to such an improvised approach towards the built environment is the dominant poverty conditions across the country. Currently, around a fifth of Georgians are under the absolute poverty line.¹⁹ Most of the economic activities are informal with very low salaries. The construction sector, financial insurance activities, and nowadays booming tourism sector are treats to many Georgians with promising high salaries. On the other side, activities such as craftsmanship and education are among the lowest ranking in the field.²⁰ Therefore, it becomes clear why the construction sector is booming at such rates, usually without attention to details or any craftsmanship precision. Poorly executed structures, renovations, and governmental neglect of the existing condition of houses pose safety risks. During my unsettled one-year stay in Tbilisi, I experienced three floods in different apartments, a couple of power outages, and many unpredictable water cut-offs, of which I was never informed beforehand. My friends had two fires started in their new apartment because of poor power outlet installations; thankfully, everything ended well.

¹⁹ "Geostat," accessed 03/05, 2022, geostat.ge.

²⁰ "Teleport," accessed 03/05, 2022, <https://teleport.org>.

Surely, transformations are usually conceived from poor living conditions as a survivalist operating mode, although it wouldn't be accurate to assume it is the sole reason for their prosperity. People responsible for these transformations are usually from the middle to lower class. A friend of mine once explained to me the fascinating nature of the Georgian mindset. His father had a broken boiler. Instead of buying a second-hand boiler for his apartment for a genuinely fair price, without any hesitation, he dove right into fixing it by learning all the mechanisms himself. Even if it meant learning everything from scratch, the directly gained experience interacting with an object seemed undoubtedly valuable to him.



boiler in a process of fixing

transformations (municipal)

Lastly, to better understand how those transformations not only come from survival conditions but are fused into the whole culture, I must mention the broader approach - the characteristic nature of ad hoc transformations visible in the bigger scale interventions done by the municipality of Tbilisi. From gigantic chaotically welded steel structures supporting the collapsing vernacular houses for later transformation processes to exposed water and gas pipes, entwined electrical and internet cables, municipal interventions, therefore, reveal the ad hoc approach being a cultural one and not belonging to a certain class of people. It acts as an example to locals or takes inspiration from their transformations - either way, it is an intertwined palimpsest system where the gutter bypasses the self-extended loggia or antenna welds to the gas pipe.



municipal transformations in the city

4 theory

physical vs theoretical

Ahead, I turn away from solely *biological* research towards the more theoretical aspects, which in my understanding, highly concern the topic of transformations. My intention is to apply the knowledge extracted from analyzed transformations to the later architectural proposal. Therefore, to continue further, it is essential to express my position towards the visual (or physical) aspect of the transformations and the whole built environment.

The vernacular dwellings consist of many different layers of transformations, as physical structures hold no importance and consist of no particular value by themselves. Only the reflected ideologies of their creators, builders, fixers, and users could be perceived as valuable. Dwellings can give away creative minds behind or depict the lazy ones. They are visual representations of the societies that produced them. According to Irina Kurtishvili, architecture as a mirror is able to depict the shared values of the community.²¹ Furthermore, this process of putting oneself into the physical structure, a process that creates a possibility for meaning, also works the other way around - the structures can project societies and shape their minds. As Berardi explained it, "man is the animal who shapes the environment that shapes his/her own brain."²² In this sense, it is feasible to recognize and extract cognitive values from the physical transformations.

²¹ Schmal and Kurtishvili, *Hybrid Tbilisi*, 8.

²² Franco Berardi, *And : phenomenology of the end : sensibility and connective mutation*, Semiotext(e) foreign agents series, (South Pasadena, CA Cambridge, Massachusetts ; London, England: Semiotext(e) Distributed by The MIT Press, 2015), 24.

A both-way transformative process - the physicalities altering human mindset and the other way around - is a process of mutual *collaboration* between these two, consolidating as a sturdy system. This system would otherwise not work if one element of it was missing. It is a connection, although not a direct one. Let's take the concept of beauty, for example. We usually find beauty revealing to us in the physical shape, even though its foundation lies in a metaphysical realm. It does not lie in the precisely crafted object itself but in our ability to understand such an object as a beautiful product of careful craftsmanship. It is not in the physical shape of a car garage made of reused radiators but in our ability to recognize the creative mind behind this type of transformation. Therefore, "transcendental ideals cannot appear directly but must be presented indirectly as an expression of another object or situation."²³

However, I do not aim to draw a direct connection between the physical and the theoretical realms - as there is none. Beauty and value do not exist in the physical world, as physicalities do not exist in the metaphysical world. It can only explain how these two are disconnected, like magnets of the same polarity pushing each other away, never touching, although constantly impacting one another. The relation is indirect. It echoes, mirrors, pushes and pulls. Furthermore, it is an interpretation and not a fact that a specific structure holds these particular values (of which I will talk ahead) and not the other ones. Although to be clear, it is not my intention to idealize the analyzed transformations from their structural conditions - because they are unstable, neither from their aesthetic values - because they are accumulations of trash.

²³ Marie Shurkus, "The Sublime Event With Kant, Deleuze, and Lyotard," (2013): 15.

if I told you how it falls here as in no other place you have ever been before, it wouldn't mean anything to you. only by being here could you truly believe me. you would then see how it travels from the rooftops through the gutters to the pipes that chaotically stick everywhere with no manners. how randomly it then pours out all over the city, on streets, sidewalks, cars, trees, cats, dogs, and passengers. how freely you can observe this spectacle of the city washing itself. and how alive it appears.

I would then tell you how we learned about beauty and hid the pipes inside the walls and underground.

ad hocism

One of the best theories which could host the topic of transformations is *ad hocism*. Transformations could be defined as *ad-hoc* solutions coming out of resistance and translating into direct action. Ad hocism, as Charles Jencks describes it, “places purposeful action against the ideologies of determinism, and immediacy against the omnipresent delays caused by specialization and bureaucracy.”²⁴ Its philosophy suggests applying an already existing system differently to rapidly solve a problem, ignoring the repression of systems that tend to extort every possible value. Therefore, the philosophy is very straightforward: If it works - it works.

Shaping the local environment towards desired ends is a key to mental health; the present environment, blank and unresponsive, is a key to idiocy and brainwashing.²⁵

Its character lies in its very approach, resisting the limits posed by corporate standards, philosophies, and architectural dogmas. And yet, without giving a final answer, it explores never-ending creative possibilities. As boat builders of the seventeenth century who gathered material in the shape of trees for numerous possibilities during later carving procedures,²⁶ the ad hoc transformations of Tbilisi do not refer to particular material substances but instead see an unlimited potential from every one of them. Their nature lies in the process of using/reusing whatever is at hand for a precise purpose. Thus, they could be accurately defined as *material meanings* - accumulations of matter which fulfill a specific function.

²⁴ Charles Jencks and Nathan Silver, *Ad hocism: the case for improvisation* (London,: Secker and Warburg, 1972), 19.

²⁵ Jencks and Silver, *Ad hocism: the case for improvisation*, 15.

²⁶ Jencks and Silver, *Ad hocism: the case for improvisation*, 15.

The key points that shape their character could be extracted:

function

First of all, *material meanings* are very functional, contextual, and never about themselves. It is opposed to the consumerist product, usually designed in a refined form suggesting a confined meaning. Transformations strip any object from its original (or previous) function to give a new, more relevant one. Therefore, disregarding the original function, they open up unlimited potential from limited resources.

aesthetics

Aesthetically, they do not refer to a specific design choice. They simplify the whole problem-solving process by neglecting aesthetic values and the topic of beauty, which is very dominant in architectural and design practices. In this case, the actor is placed more directly to the problem.

directness

Finally, that leads to the most critical aspect which defines their identity - a direct action. Directness is a form of resistance escalated from the socio-political situation when Tbilisians' revolutionary mindset led to the direct transformation of their own environment. It is a pragmatic approach. Directness resists having a master plan or a project since it is more about a present task than long-term progress. Directness resists planning as opposed to taking action and simultaneously urges one to think while in action. Thinking *while* doing differs from thinking *before* doing (as in planning). This way, the doer becomes more aware of his surroundings, rigidly embedded in the context he operates. The action of fixing becomes a creative, improvised, and spontaneous process in which everything can be perceived as potential. Thus, the doer is not a mere consumer but a creator who takes matters into his own hands. The doer must know how to interact with his environment to get what he needs, which is a factor that activates the community. In the end, it is not a community that learned to sell and buy to satisfy individual needs but the one that mastered exchanging goods, tools and materials, knowledge and ideas. It is a community where its members depend on each other.

old-world communities

There is much to learn from architecture before it became an expert's art.²⁷



(left) the Dogon community in West Africa
(Architecture without architects, 1964)

(right) Uplistsikhe community in eastern
Georgia
(wikipedia, 2019)

²⁷ Bernard Rudofsky, *Architecture without architects, an introduction to nonpedigreed architecture*, 1 vols. (New York,: Museum of Modern Art; distributed by Doubleday, Garden City, 1964), 15.

The mindset behind ad hoc transformations could be traced far back to the old-world communities. The physical character of kamikaze loggias in Tbilisi is recognized as one reminiscent of older communities capable of expanding their dwellings in palimpsestic ways by preserving various cultural layers of historical transformations. It stretches even further to the mental ideology behind the common practices - architecture before architecture. Pietro Belluschi defines it as a “communal art” which is “not produced by a few intellectuals or specialists but by spontaneous and continuing activity of a whole people with a common heritage, acting under a community of experience.”²⁸

This kind of architecture is found in various old-world communities, such as Dogon, located in West Africa. Its dwellings are erected on rocks fallen from high cliffs and resemble vast debris fields, a natural landscape rather than the man-made one. Its architecture, therefore, does not aim at achieving a particular visual identity representing the culture, but the cultural practices themselves are creating this specific visual identity. Or Uplistsikhe, a community in eastern Georgia that dates from the Early Iron Age, is mainly carved out of the rock close to Mtkvari River.²⁹ Its dwellings are subtracted from the rock and, thus, thoroughly blend into nature in a very particular manner. Therefore, the process driving the growth of these communities is the same process that binds members together, brings them closer to their natural surroundings, and clarifies the direction they should follow by introducing the notion of resistance.

²⁸ Rudofsky, *Architecture without architects, an introduction to nonpedigreed architecture*, 14.

²⁹ "Uplistsikhe," updated 13 April 2021, accessed 09/10, 2021, <https://en.wikipedia.org/wiki/Uplistsikhe>.

old-world communities - resistance

That leads me to another distinctive approach recognizable in the practices of the old-world communities and characteristically similar to the domestic transformations of Tbilisi - a resistance.

As Marullo explains while exploring the ascetic community of Vardzia in Georgia - its particular practice bases on "a voluntary detachment from the neoliberal hypnosis that continually urges us to produce, document, accumulate, exhibit, and share any experience, activity, affect, or information, while quantifying and extorting their value."³⁰ Furthermore, he states that "the necessary locus for absolute concentration and oceanic expansion, destined not to avoid temptations but the daily duties and useless working distractions, that "tyranny of stimuli and influences that condemns us to spend our strength in nothing but reactions and does not permit their accumulation to the point of spontaneous activity."³¹ A resistance from actions required by the system of "common," the one that operates only if everyone onboard is blind, is a resistance from "hypnosis" that critically questions the processes which convert humans into tools and products, a resistance that looks for alternative ways. Therefore, resistance is the ability to defy the idea of being stuck in a machine. There is no 'machine' that controls, only 'machinized' individuals who let the machine control them.

³⁰ "Vardzia. Together, Alone.," 2020, 2022, <http://www.genericarchitecture.org/index.php/is-a-series-of-essays-about-architecture/together-alone/>.

³¹ Marullo, "Vardzia. Together, Alone.."

By dint of logic, life in old-world communities is singularly privileged. Instead of several hours of daily travel, only a flight of steps may separate a man's workshop or study from his living quarters. Since he himself helped to shape and preserve his environment, he never seems to tire of it. Besides, he is largely indifferent to "improvements." Just as a child's toys are no substitute for human affection, to him no technical contrivance makes amends for the lack of viability.³²

From the first sight, an extremely basic or even primitive approach of these communities declaring the importance of directness is, in fact, a significant factor of their growth. Old-world communities thrive by operating on day-to-day processes rather than seeking profit or progress. This approach, a more survivalist one, is capable of escaping the limits of architecture. Communities that directly interact with their surroundings by solving relevant problems operate with a process-based mindset without a goal of constant progression, without seeking endless improvements. Therefore, the only constant is a process. According to Huizinga, the belief that everything new that is discovered or any process that shapes the existing condition should hold "higher values" or "greater happiness" is nothing but "an extremely naive thought."³³ He then continues explaining how "it is not in the least paradoxical to say that a culture may founder on real and tangible progress."³⁴

³² Rudofsky, *Architecture without architects, an introduction to nonpedigreed architecture*, 18.

³³ Rudofsky, *Architecture without architects, an introduction to nonpedigreed architecture*, 18.

³⁴ Rudofsky, *Architecture without architects, an introduction to nonpedigreed architecture*, 18.

In this regard, the distinction between a process and progress becomes clear: a process does not state any solution as a final one but instead accepts it as a continuation of ongoingness, while progress feeds off any given solutions (as bones thrown its way) rocketing towards *the goal*. As a dog chasing its tail, narrowing the field of vision to the smallest point while intentionally ignoring every surrounding complexity.

We are simply too safe and comfortable, resting in our disciplinary easy chairs, that we resist the notion that there might be more furniture in the room—or that there might be interesting and fruitful things to do other than thinking while sitting down. Or, to paraphrase Dr. Seuss: “Oh, the thoughts we could think!”—if we could just get moving!³⁵

The pragmatic process of fixing resulting in transformations is weaved in the broader context of various processes and concepts. It is a complex whole that cannot be simplified or easily untangled since positively and negatively acclaimed notions are not necessarily creating the same outcomes. Let's take this process of fixing as an example. It arrives from the existing dilapidation condition leading to regress or discomfort - the urgencies that require action. These urgencies then create awareness from where one comes up with improvised creative solutions. Fixing as a direct process becomes meaningful and creates value, and with likely occurring direct interactions, it strengthens the community. In contrast, the endless desire of the modern world to constantly progress and improve brings endless comfort. This comfort produces laziness and finally leads to a spoiled mind. A mind that blindly operates on infinite production tasks, a mindless mind that becomes a product itself, like a chicken grown on steroids. A modern mind that has all the comforts for taking the least effort for its improvements is long ago disconnected from its *primitive* direct approach capable of providing meaning.

³⁵ Brian McCormack and Stuart Henry, "THE PROBLEM WITH PROBLEM SOLVING" (2009), 31.

concept relational diagram





an ascetic community of Vardzia in Georgia
(Vardzia. Together, Alone., 2020)

wires of Tbilisi



if you want to untangle the city to reveal its true face, start with the hanging ropes, metal wires, and electricity cables. the maze will guide you through the streets to the lobbies into the courtyards, and you will quickly find yourself lost with entwined chaotic structures reminiscent of desartic Tumbleweeds or parasitic Mistletoes plants. they find support on trees, water and gas pipes, metal and timber structures. they hang from one balcony to another, connecting the two sides of the street. they hold on zip-ties, duck-tapes, other ropes and cables, or simply wrap around any object. and yet, no tree is in the way.

my host Teimuraz once explained to me that the white internet cables installed in a chaotic order are meant to last for two years only. after that, they are replaced.

5 conclusion

Tbilisi is an extremely complex totality of various cultural layers that accumulated over time. Its visual identity cannot be named easily because its character lies in its multiplicity. Although, there is a clear ideological distinction between current processes that shape or used to shape the city: on the side, Tbilisi faces massive modernization processes which drastically disregard the fragile but thorough architecture of the past; on the other side, inhabitants, excluded from dominant power games, are fixing their structures in a very ad hoc approach by making various transformations.

These transformations create a big part of the city's identity, portraying their makers' struggles and ingenious achievements, which manifest resistance, depicting the creative minds behind and their fascinating approach to the physical environment, presenting the city as a natural and living organism.

These transformations question the meaning of materials and their endless possibilities, the tricky concepts of beauty and value in our dogmatic professional domains, the modern understanding of the process, progress, comfort, and regress, and our obsession with finished products in this temporal nature.

From their modest pragmatic approach, they ask - would life still go on without the master plan?

...

With that in mind, I want to propose an alternative way of operating in Tbilisi's built environment instead of the dominant ones erasing the culture. In this regard, I intend to utilize architecture as a tool to empower the domestic transformative processes (which are not considered professional practices). What follows is a process of preservation. Although not the one concerning the collapsing physical structures with their many domestic transformations, not the one seeking to maintain transformations as a visual identity, but the preservation of the approach, mindset, and methodology behind these transformations. Therefore, I recognize this "primitive" approach as not the one preceding architecture but as a strong example of how architecture can learn from it and improve.

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transformations

































