

Landing From Afar

🔍 belgrade



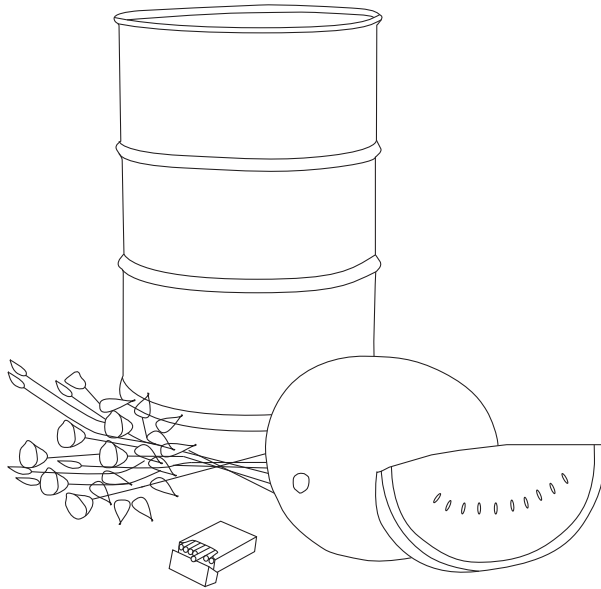
- belgrade every day life
- belgrade architecture styles
- belgrade wild kiosk
- belgrade along the river
- belgrade ruins
- belgrade floating houses
- belgrade market activities
- belgrade memorials

2020/2021

Methods of Analysis and Imagination
"Positions in Practice"



Landing From Afar



COURSE

2020/2021

Methods of Analysis & Imagination

MSc3/MSc4 Graduation Studio (AR3MET105)

Positions in Practice: Towards Inclusive Built Environments in Belgrade



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FOREWORD

Jorge Mejía Hernandez, Aleksandar Staničić, Klaske Havik

Educating future architects for a democratic practice of their profession requires, on the one hand, theories that guide students in their efforts towards the promotion and preservation of democratic values in the environments they will affect with their work. On the other hand, it requires methods that incite them to contribute to architecture as independent thinkers, and that enable them to establish distinct architectural positions while engaging productively with others.

The first requirement deals with setting theoretical goals for architecture and the city (e.g., what would a democratic architecture be like?), the second deals with the role of architects in practice: how they do their work, position themselves and collaborate with others in the production of buildings and cities. On these grounds, in the Fall 2020 version of our MSc3/4 graduation studio Positions in Practice we invited students to develop a project for the city of Belgrade, Serbia. The following pages collect the analytical findings of this project.

Belgrade, and the many tensions that define it, offers fertile grounds for the study of architecture as a democratic practice. To appraise those fertile grounds, we have advanced three theoretical goals for the studio, in the belief that they constitute key democratic purposes for the city, as they reveal the potential all urban environments can offer citizens. These goals are theoretical, in the sense that they not only aim to define a notion, but also strive for a conceptual envisioning of what a democratic city should be like.

Let us examine them: Firstly, citizens should be able to establish *meaningful* relations with the spaces they use and inhabit. This means both being able to identify meaning in those spaces, but also being able to endow them with new and useful meanings. Secondly, citizens should be able to *appropriate* those spaces, by being able to project their hopes and feelings onto them, empathically. Finally, citizens should be able to *integrate* with each other through their use of built space, based on their ability to consensually imagine and execute joint visions of possible futures for the city in which they all live.

These three qualities – meaningfulness, appropriation and integration – are essential to democracy, in the sense that they ensure genuine, productive participation from citizens in the construction of their everyday reality. Individuals who cannot identify any familiar message or any recognizable pattern in the spaces and buildings that surround them are by necessity excluded, not only from the use of their environment, but also from its development. Those who are unable to envision a future for themselves in a particular place, or feel unable to transform even minute aspects of their immediate surroundings, will hardly recognize themselves as citizens. In both cases, the inability to truly and actively participate – a *sine qua non* of any functional democracy – corrodes an integrated society, understood as one that is coordinated and open to transformation in order to benefit its associates. As concrete goals for the built environment, the qualities of meaningfulness, appropriation and integration are intrinsic to the democratic practice of cities, because they entail citizens’

right and duty to produce and claim their built environment according to their own interests, and in consensus with the interests of others.

Past and present urban developments in Belgrade do not appear to favor these purposes or meet these goals. Large masterplans for the development of important areas of the city, for example, presume that the city and its inhabitants share an ideal of progress aligned with financial speculation at a global scale, and therefore issues in equally global architectural uses, purposes and styles. Public buildings, communal spaces, infrastructure lines, green areas – the city as a whole – are being treated as an exhaustible resource of profit for privileged individuals at the expense of public interest. Meanwhile, initiatives to redesign important public spaces, or to deal with heritage, suppose that citizens agree on a simplistic reading of the past, expressible in faux historicist revivals or the mystification of ruins.

But to what extent can such attempts for uniformity respond to the real possibilities and needs of the many individuals that jointly use and produce this environment? Is it desirable or feasible to simplify the ambitions and perceptions of a society under a single, prevalent architecture? In the face of these questions, it would seem that rather than profitable masterplans or nostalgic preservation, piecemeal action and open negotiation among individuals are able to generate more resilient social artefacts – be they laws, institutions or cities; artefacts which are open to new and unforeseen possibilities, and consequently able to adapt and change.

Based on this premise, the following analyses explore this wonderful built environment, in which citizens have historically thrived, not despite but precisely because of their diversity. While the above-mentioned goals for architecture and the city are essentially theoretical, their pursuit demands that architects adopt a distinct position within their discipline. It does not seem feasible, for instance, to work towards citizens' empowerment on the basis of dogma. Simply mimicking architectural trends, on the other hand, might not be the best response to complex societal issues either. Instead, we have encouraged this group of students to position their work methodologically, in relation to the mentioned theoretical goals and to the given context, understood as the result of the interwoven natural and cultural aspects that define Belgrade's reality, including the formal and technical features of local architectures.

Revealingly, the definition of these goals, rather than the prescription of precise briefs or sites, has directed these analyses towards vital, powerful expressions of the architecture of the city, rather than towards the corroboration of canon. Monuments, ad-hoc or impromptu occupations of marginal areas, places of distribution of goods and services, and sites of exchange, are certainly crucial for any society, and when analyzed with technical rigor and conceptual clarity, offer us considerable knowledge about people in the built environment, as we can clearly see in what follows.



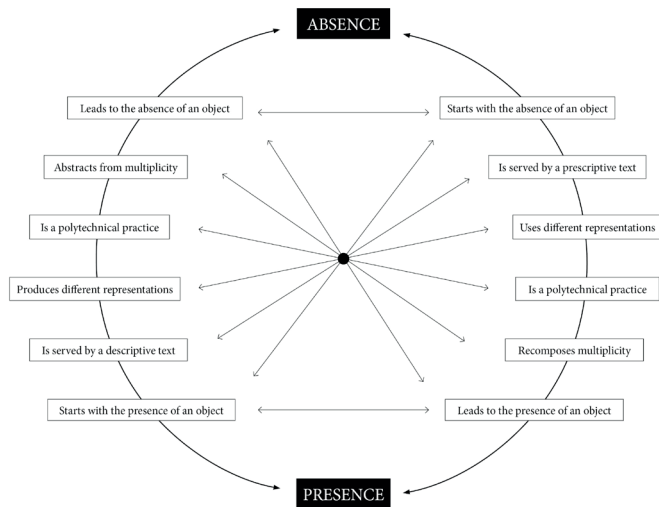
INTRODUCTION

In previous years, the Methods of Analysis and Imagination graduation studio had always featured an extensive field trip to the given project location. In 2020, our inability to visit Belgrade due to the Covid-19 pandemic triggered uncertainties in our group of aspiring architects who value physical encounters and experience-based analysis as precious tools in our usual research and design process. However, unforeseen circumstances allowed us to reflect on the vast variety of tools and methods offered by our discipline and by others and we quickly realised the great opportunities present in the physical distance separating us and the object of our study. These restrictions challenged our ways of investigating, testing our imagination, the methods we used to hypothesise based on sometimes limited resources. We saw this as an opportunity to embrace our own subjectivity, speculate and reflect on what a contextual analysis should/could be and to reconstruct a collective imaginary reality. We attempted to take our Google Earth strolls seriously, intently exploring our online forums and Instagram scrolls, while making sure to not get lost in them.

We also had the chance to access a substantial amount of academic research being done on Belgrade and were lucky enough to take part in two virtual seminars organised by Aleksandar Staničić with guest speakers Vladimir Kulić, Nikolina Bobić, Ljubica Slavković, Katarina Andjelković, Ana Perić, Dobrica Veselinović, Rade Mrlješ and Marija Marić. These distant encounters with architects, artists, researchers and activists complemented our vision of Belgrade with a more grounded perspective. We are also immensely grateful for the support of our tutors Jorge Mejía Hernandez, Aleksandar Staničić and Klaske Havik from the

Chair of Methods of Analysis & Imagination.

Our process followed a method developed by the studio and based on Giancarlo Motta and Antonia Pizzigoni's "project machine" diagram describing a loop between "presence" (concrete manifestation) and "absence" (concept or abstract idea) (fig.1). One side of the loop is inductive, analytical, and leads to abstraction, while the other is deductive, synthetic, and leads to concretion. By initially focusing on precise built forms and trying to extract more abstract ideas from them, we first went through an inductive process, followed by a more deductive and more synthetic one. Going back and forth between these two poles of the loop using multiple techniques, we attempted not only to collect information but to produce knowledge that our research and design projects would benefit from.



**Fig.1 Image by Crevels E.
Based on: Motta, G and
Pizzigoni, A. (2008)
La Máquina de
Proyecto., p. 178.
Bogotá: Universidad
Nacional**

During the first part of the semester, we studied four specific built manifestations, four threads from Belgrade's complex weaving which we believe would lead us to other threads and knots, slowly re-assembling parts of the city's tapestry. None of the built manifestations we chose are canonical buildings, but they all tell stories about Belgrade. We chose to explore built forms that challenge structure and agency. In one way or another, all of them express a certain openness, inviting various interpretations and projections of meanings while often involving the users in the construction, maintenance or protection of these forms.

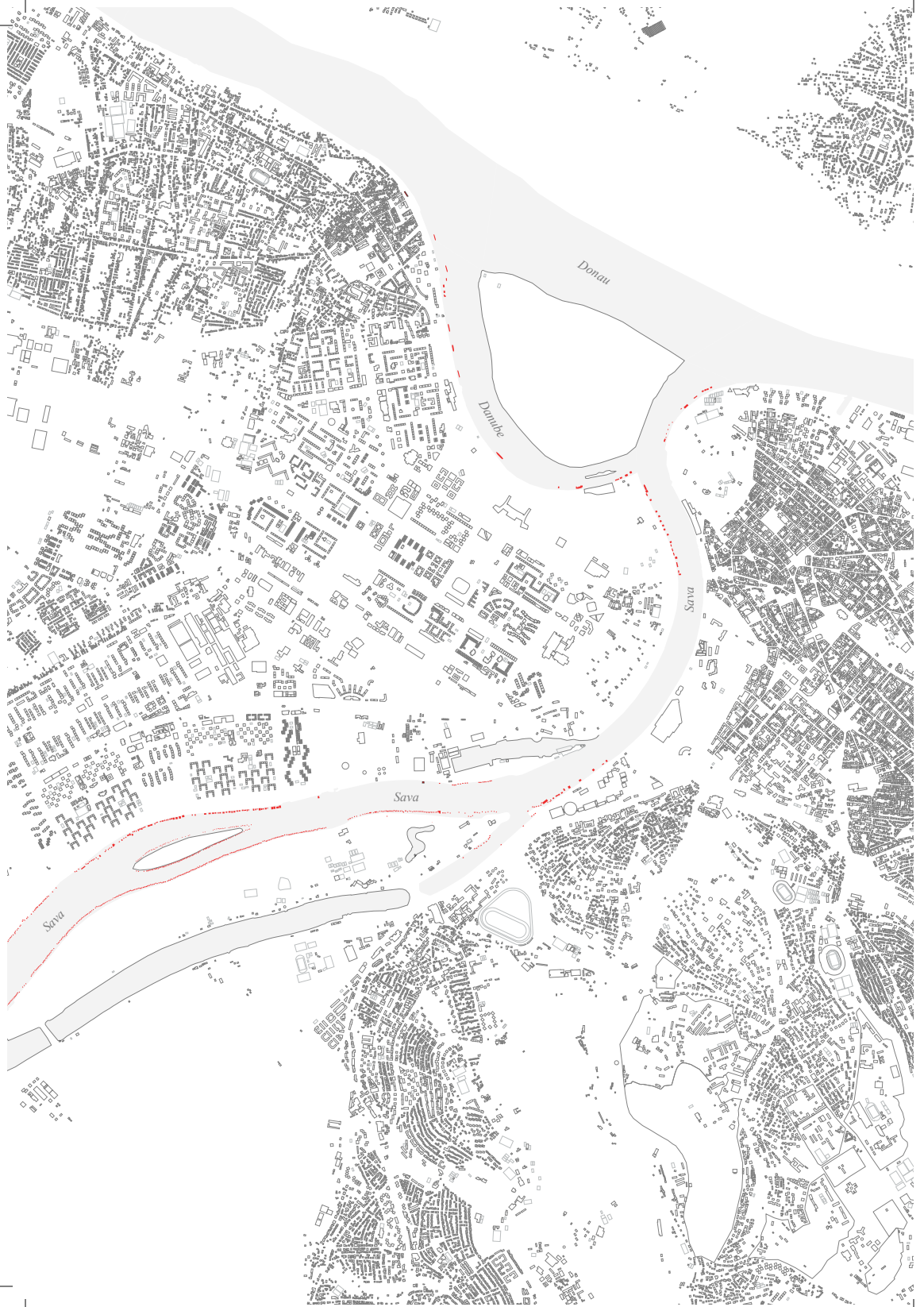
The combination of these four collective studies on *splavovi*, kiosks, market and cemetery allowed us to cover topics as broad and diverse as leisure, exchange, commerce and memory. Following these four chapters, six short precedent studies are presented and analysed through the lenses of form, use, technique and communication, constituting an additional analytical exercise developed in parallel to our first individual design proposals.

Rather than wishfully trying to grasp Belgrade in its totality, we recognised the potential of approaching an unknown object of study by exploring specific fragments that sparked our curiosity. It is our belief that focusing first on specificities rather than generalities offered us an opportunity to produce a more precise and meaningful shared knowledge of the city of Belgrade. This book is a collection of these findings.



*Andrea Bautil
Benoît Marcou
Emiel van der Vlies*

SPLAV



INTRODUCTION

Belgrade's floating islands

This study focuses on the widespread presence of 'splavovi' on the Sava and Danube rivers of Belgrade, which in Serbian means 'rafts' or "floating construction". This spontaneous initiative to build on water began in Belgrade in the 1960s and now amounts to a presence of nearly three thousand Splavovi spread over twenty kilometers of the river edge. These floating objects are seen as the perfect way to temporarily disconnect from the urban framework, by locals and tourists alike, giving them access to a variety of recreational activities within reach of the city.

Due to the location-bound challenges, such as the fluctuation of the edge, limited access to infrastructural networks and the largely unpaved banks of the Sava, the construction of the floating object itself forces one to be aware of rapid changes caused by unforeseen circumstances. In short, to be able to survive, a 'splav' needs to be in a constant fluid state; flexible and adaptive. Fluidity is defined as "the quality of being likely to change repeatedly and unexpectedly" (Cambridge dictionary) or "the state of being unsettled or unstable" (Oxford languages). The term is also used by philosopher Zygmunt Bauman as the "leading metaphor for the present stage of the modern era". In *Liquid Modernity*, he argues that "Forms of modern life may differ in quite a few respects – but what unites them all is precisely their fragility, temporariness, vulnerability and inclination to constant change."¹

What are the processes of assembly which make this fluid state possible? How do they encourage moments of competition or cooperation between various entities?

1. Bauman, Z. (2013). *Liquid modernity*. John Wiley & Sons.

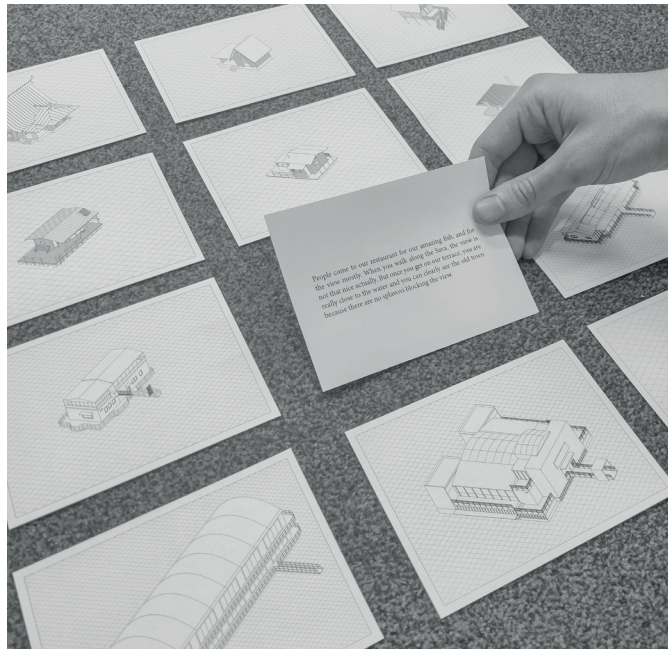
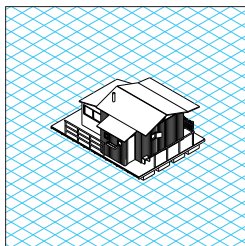


Fig. 1 Postcards of the different manifestations of 'splavovi'

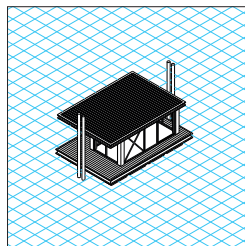
These floating objects are frequented – by locals and tourists alike – as leisure interfaces which are capacitated for boating, fishing, dining and partying.

Once isolated, each splav seems to be defining its own world, its history deeply influenced by the users. While many residential splavovi spread out along the north edge of Ada Ciganlija and around Ada Medjica are weekend or summer houses, some of them are actually inhabited yearround. On New Belgrade's side, the edge of the Sava river is colonized by commercial splavovi, larger in size and also very diverse in their forms and programs: restaurants, bars, clubs, gyms, conference rooms...

Residents

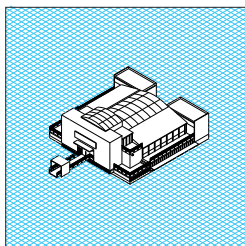


Name: 'Assembled splav'
Function: Weekend recreation

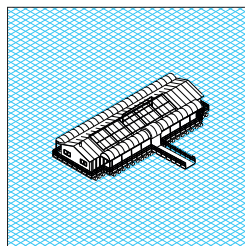


Name: 'Modern splav'
Function: For rent

Clubs

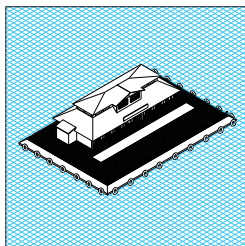


Name: 'Festival splav'
Function: Parties and events

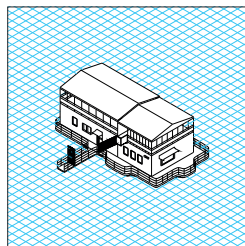


Name: 'Bar splav'
Function: Parties and events

Restaurants

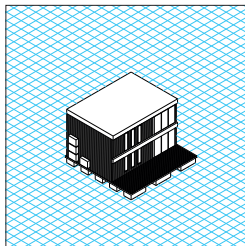


Name: 'Hut on platform'
Function: Serve food and drinks

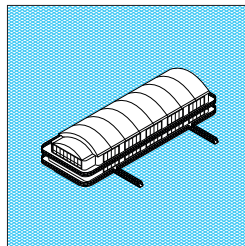


Name: 'Boat Restaurant'
Function: Serve food and drinks

Other



Name: 'Business splav'
Function: Meetings



Name: 'Sport splav'
Function: Physical workout

Figs. 2-9 Identified splavovi types and their functions

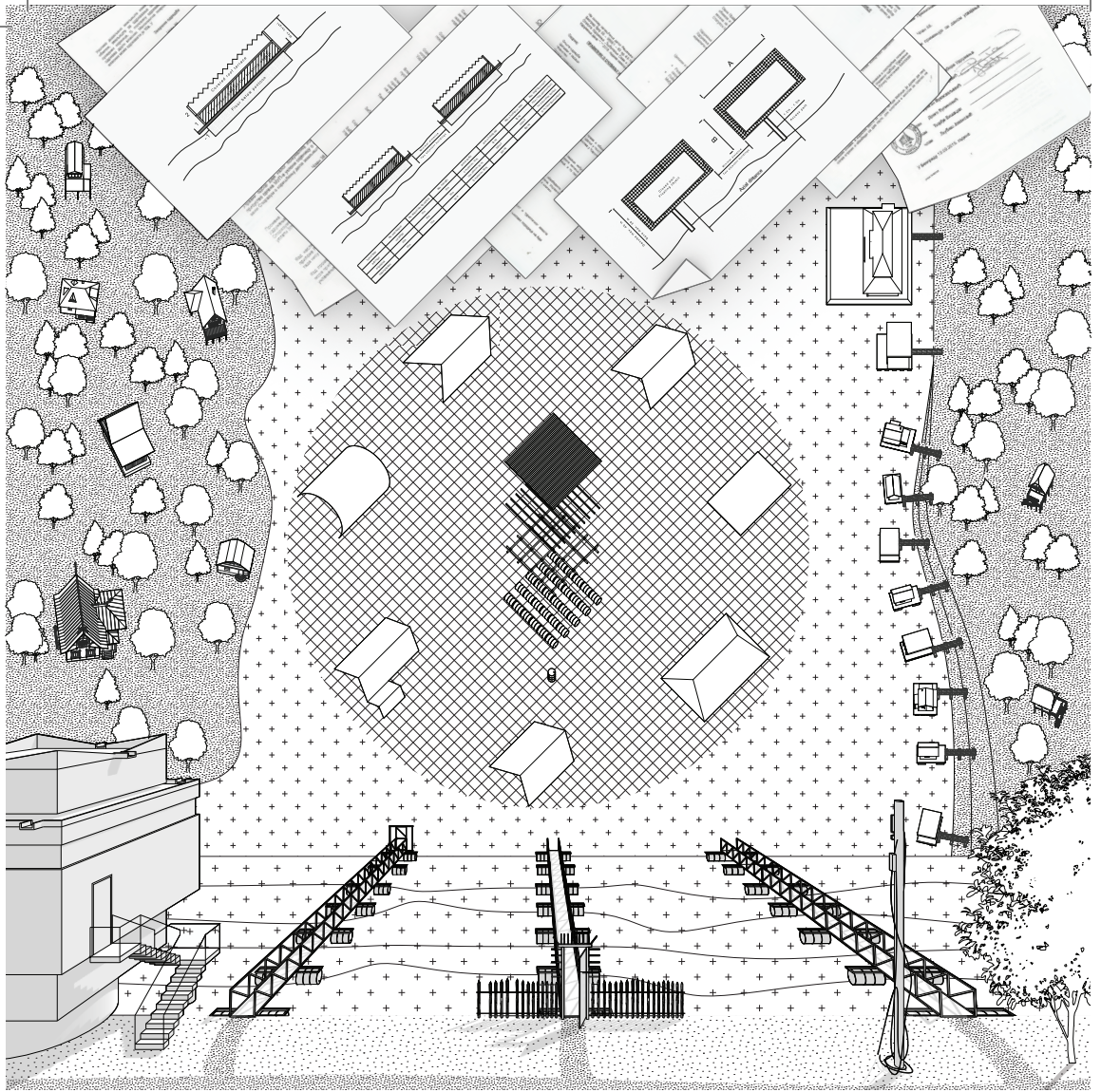
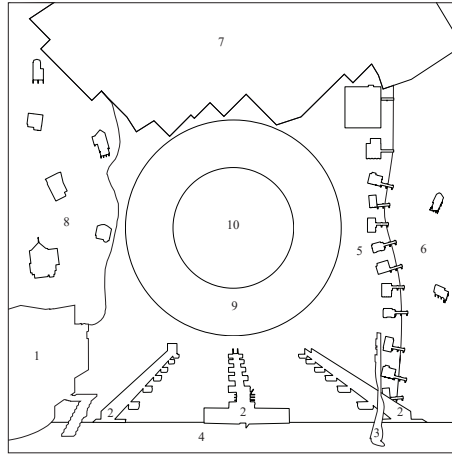


Fig. 10 Analogous map This map aims to capture the simultaneity of diverse fluid movements. The top part represents retroactively instated regulations over the different splav types, indicating a certain fluctuation of tolerance shown by the state towards the appearance of this floating culture. This tolerance can also be said to be displayed, more generally, towards the development of self-initiated constructions in Belgrade – both legal and extra-legal.



1. Reni well
2. Bridges leading to splavovi
3. Electricity pole
4. Water edge providing static connections
5. Variety of identified splavovi in Belgrade
6. Houses on stilts - Ada Medijca
7. Rules/regulations
8. Cultural background
9. Variety of roofs - individual structures
10. Build-up of splav platform

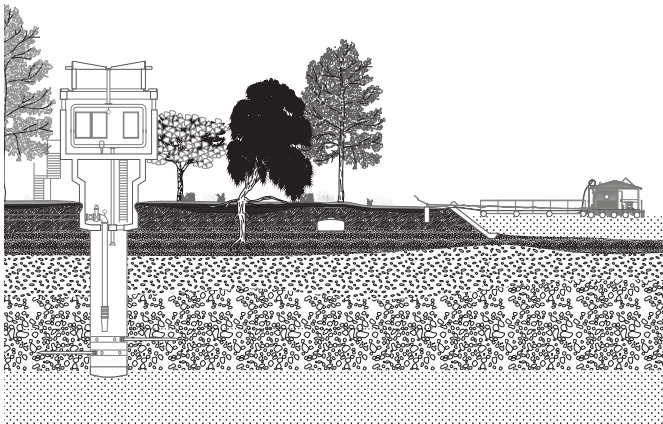


Fig. 11 A composite fluidity

The central part suggests a speculative genealogy of the weekend house, initiated in the countryside with the Russian Dacha and the Balkan's Vikendika, later on appearing in Belgrade's riverside with the stilted house, and eventually the 'splav'. This progression expresses a gradual disconnection from the ground but also shows how fragments of the Balkan's culture were transferred from the countryside to the riverbanks of Belgrade, often identifiable in the roofs.

ASSEMBLY

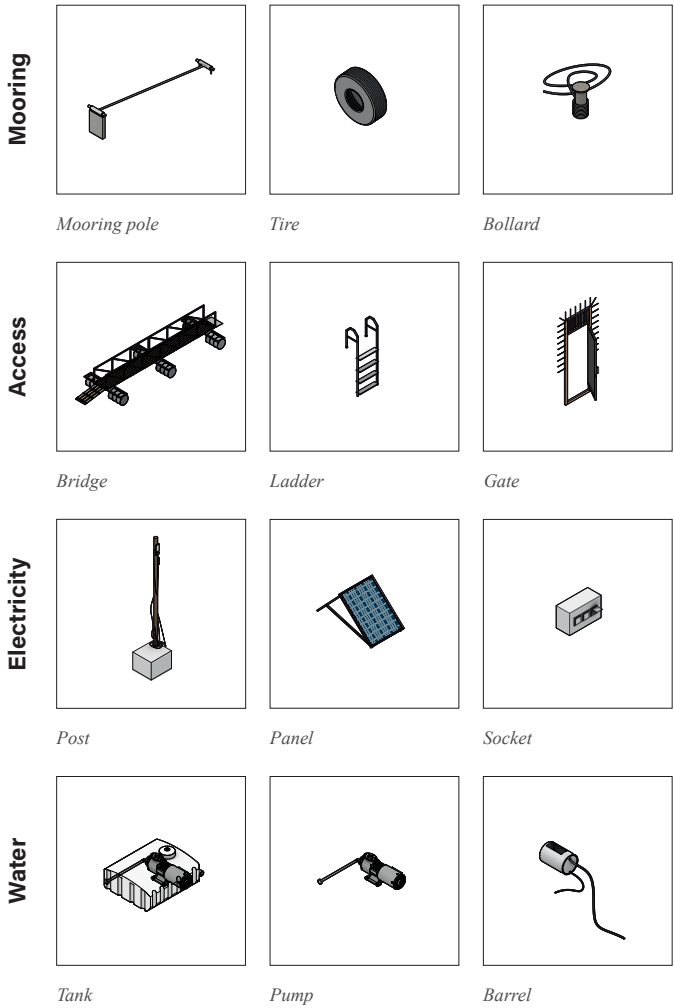
The power of parts

Assembly is defined as: “the action of fitting together the component parts of a machine or other object” (Oxford Languages). This notion is essential to see the splay as a technical object in constant adjustment, operating in mediation between its static and dynamic components.

Some limitations are expressed in how the splay’s performance depends on a multiplicity of interfaces, which choreograph the contact between the necessary components (highlighted on the opposite page). These, however, can be isolated but are only operative and comprehensible when put in relation to one another.

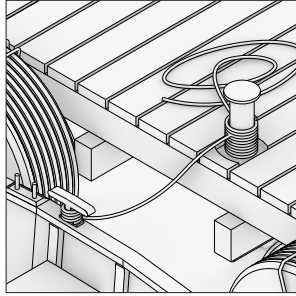
Because of their material qualities, dimensions, and economic affordability, these elements can easily be appropriated, repurposed and subverted in creative ways to mediate relations between land and water, water and splay, and splay and splay, in order to attain new functional values or meaning. In considering them as an assemblage we recognize that the strength of this system is achieved through patterns of material use and experimentation rather than in the definition of perfect canonical solutions. In doing-so, this aggregation of details becomes a repository for knowledge and in a sense a material bank for their constant regeneration. Pieces can be replaced, adjusted, removed or borrowed, thus expressing the resilient potential of the composite system.

In this sense the architectural detail is open and empathetic – contrary to conventional building design, many of the details here are exposed and communicative. There is no need for a manual, they invite and encourage an understanding and manipulation of their parts.



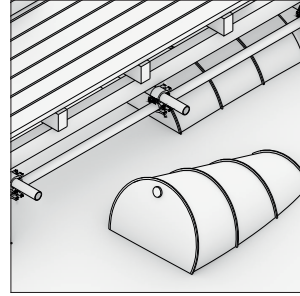
Figs. 12-23

Anchorage



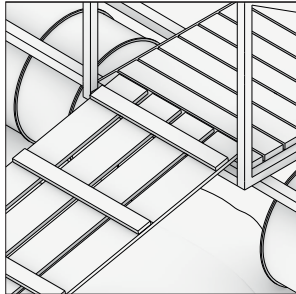
*Dock
Rope, Tire*

Regeneration



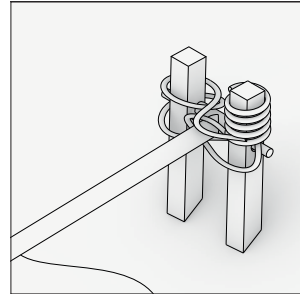
*Platform
Barrels, Scaffolding, Wood*

Mediation



*Bridge
Steels, Barrels, Wood*

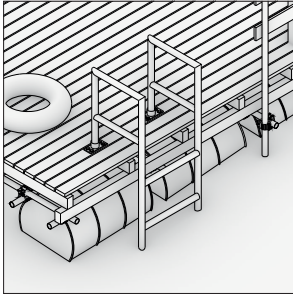
Prevention



*Mooring
Steel, Rope, Wood*

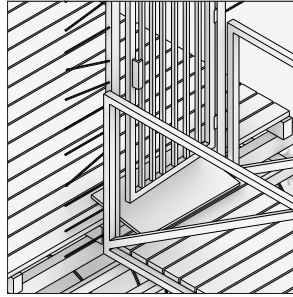
While not evident, the combination between tire and bollard (displayed above in anchorage), allows for the splav platform to become a dock for boats. This embodies potential explorations beyond the river edge, as well as the connection between multiple splavovi.

Invitation



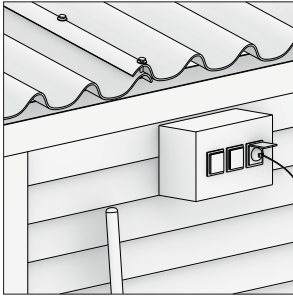
Ladder
Steel

Rejection



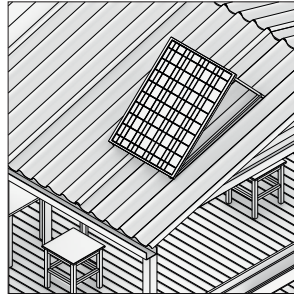
Gate
Steel

Dependance



Inlet
Plastic, Electrical wiring

Autonomy



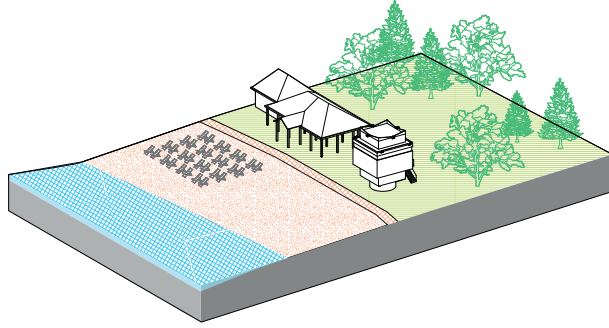
Solar Panel
Silicone, Aluminium, Acetate

Figs. 24-31

The combination of oil barrels, lightly attached to the platform structure with rope (regeneration), specifically expresses the aforementioned regenerative capacity of these structures. Flexible connections enable a more constant negotiation in the face of uncertain dynamics between water and splav.

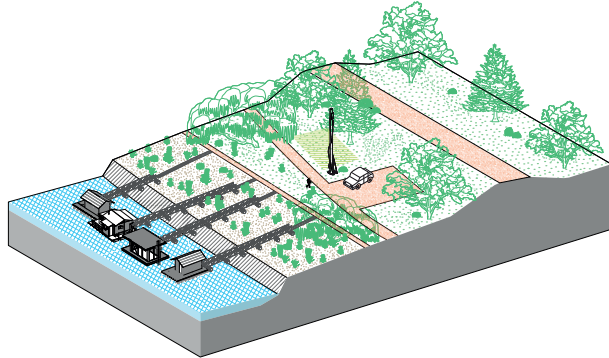
Ada Ciganlija - South Coast

Fig. 32 The southern edge of Ada Ciganlija is home to an artificial lake, which functions as the recreational epicenter of the city, it is immensely popular in the warmer months attracting up to 300,000 visitors every weekend.



Ada Ciganlija - North Coast

Fig. 33 The north side of this peninsula is located on the Sava river. To protect the mainland from flooding, this edge is reinforced with dikes. The area is populated primarily by residential splavovi which are accessible by dirt roads and footpaths.



The diversity of edge conditions and infrastructural presence inform the use of this boundary and enable users to create diverse relationships with the land and each other. This larger scale of assembly speaks to the versatility of the ‘splav’ as an architectural object which can be implanted in a diversity of settings and in return re-shape these edge conditions.

Ada Medjica

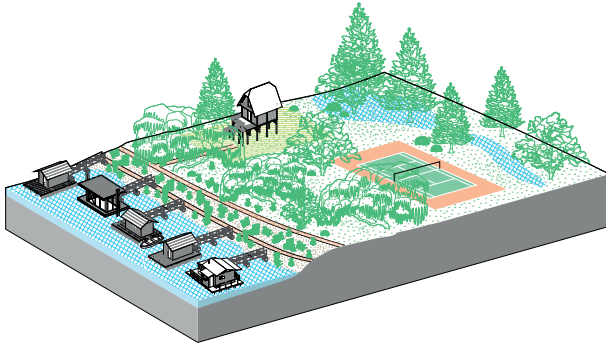


Fig. 34 This fluvial island is home to around three hundred stilted houses. It is densely forested and disconnected from all infrastructural networks, only reachable by boat. Small residential spavovi are moored here to the natural and shallow edge.

New Belgrade

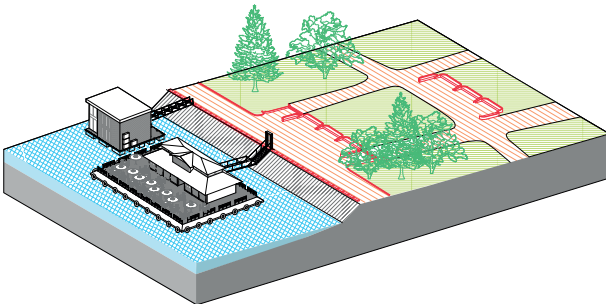


Fig. 35 This edge is mainly home to splavovi for commercial use, which depend on connections to the city to function. The water edge is formally defined by footpaths and patches of greenery which are for the most part scarcely maintained.

In New Belgrade a transformation of the edge can be observed in the privatization of the view, which completely changes the experience of using the riverside promenade (fig. 35). This means that this public space, which is typically a destination, becomes redefined by its transitional use and the multiplication of offered experiences.

COOPERATION

Alliances and patterns of interaction

Cooperation is often understood as “the action or process of working together to the same end”. How can the identified assembled interfaces used by multiple owners and users also form a common language and therefore foster cooperation? As stated by Richard Sennett in his book *Together : the rituals pleasures and politics of cooperation* we also wanted to include “a demanding and difficult kind of cooperation; One that tries to join people who have separate or conflicting interests, who do not feel good about each other, who are unequal, or who simply do not understand one another.”. The “challenge”, he says, “is to respond to others on their own terms”.²

**2. Sennett, R. (2012).
Together: The rituals,
pleasures and politics
of cooperation. Yale
University Press.**

Cooperation is legible in the everyday use and interactions between people but also embedded in objects and architectural forms. Looking at splavovi’s liquid interiors (fig. 36) shows how they are also defined by the domestic objects that occupy them: their defining scarcity, and sometimes makeshift nature, express the owners’ decision to bring a limited number of items from the city and to let go of a certain comfort and luxury.

At an urban scale the linear patterns of aggregation (fig. 37) also explain how each element depends on the cooperation to maintain accountability and a sustainable coexistence. The apparent absence of hierarchy and intense proximity puts an emphasis on the multitude of links connecting the units themselves rather than their convergence towards a finite number of centers.

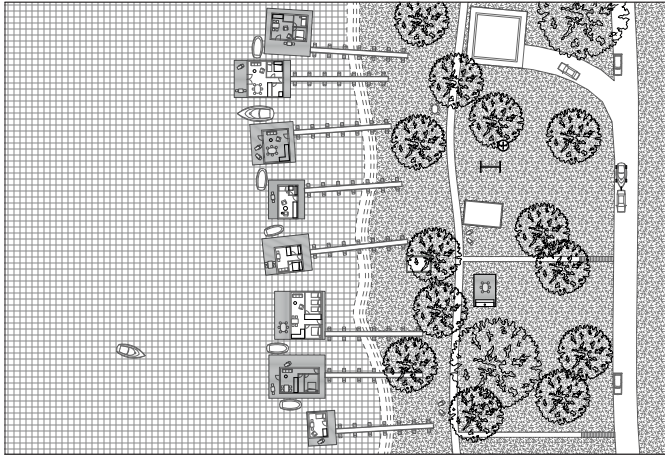


Fig. 36 Liquid interiors

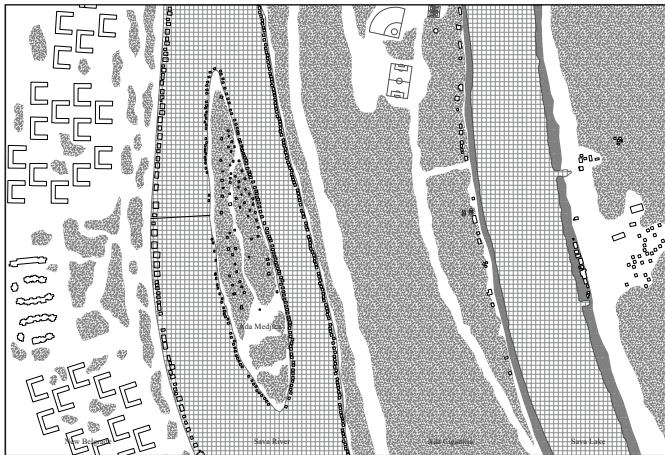
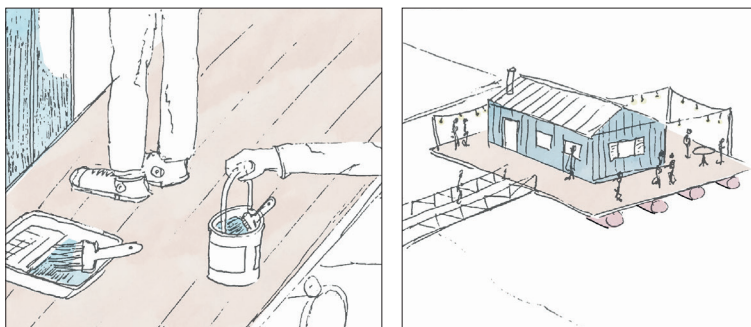
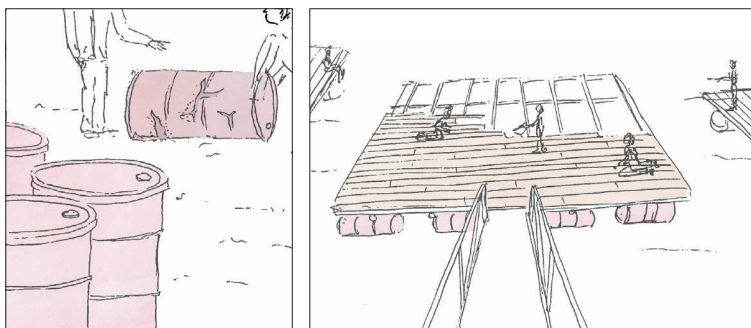
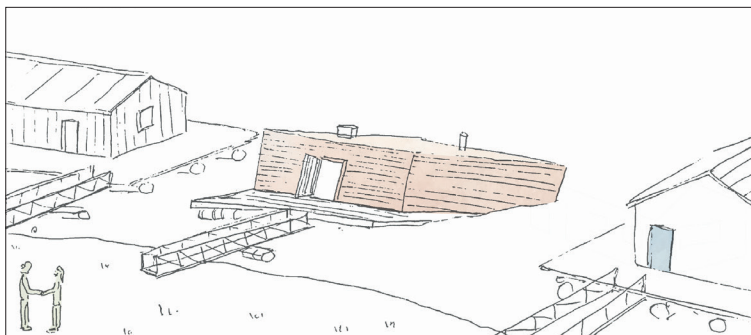


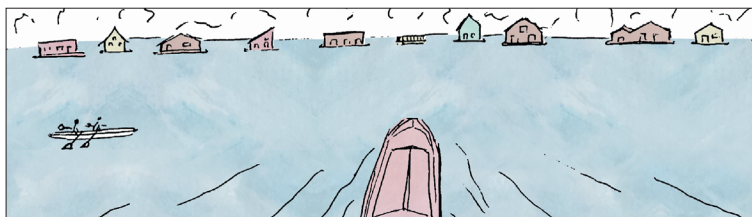
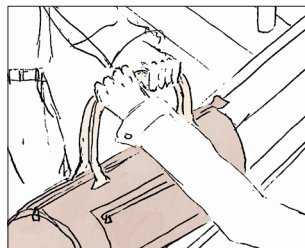
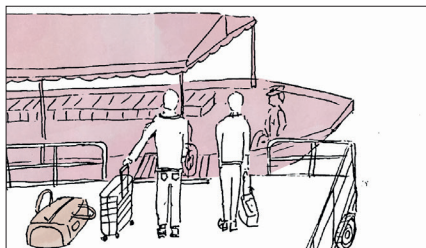
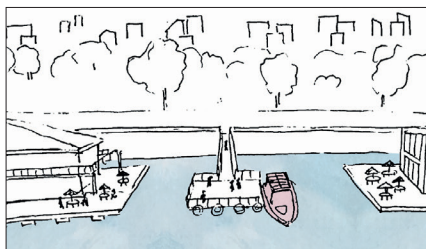
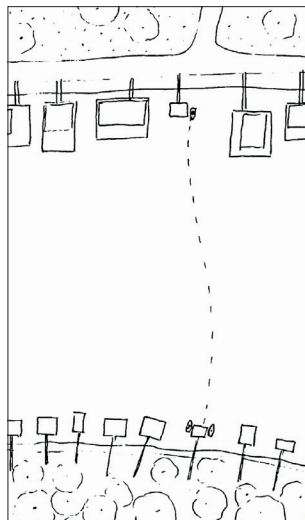
Fig. 37 Urban aggregates

“What to keep?”



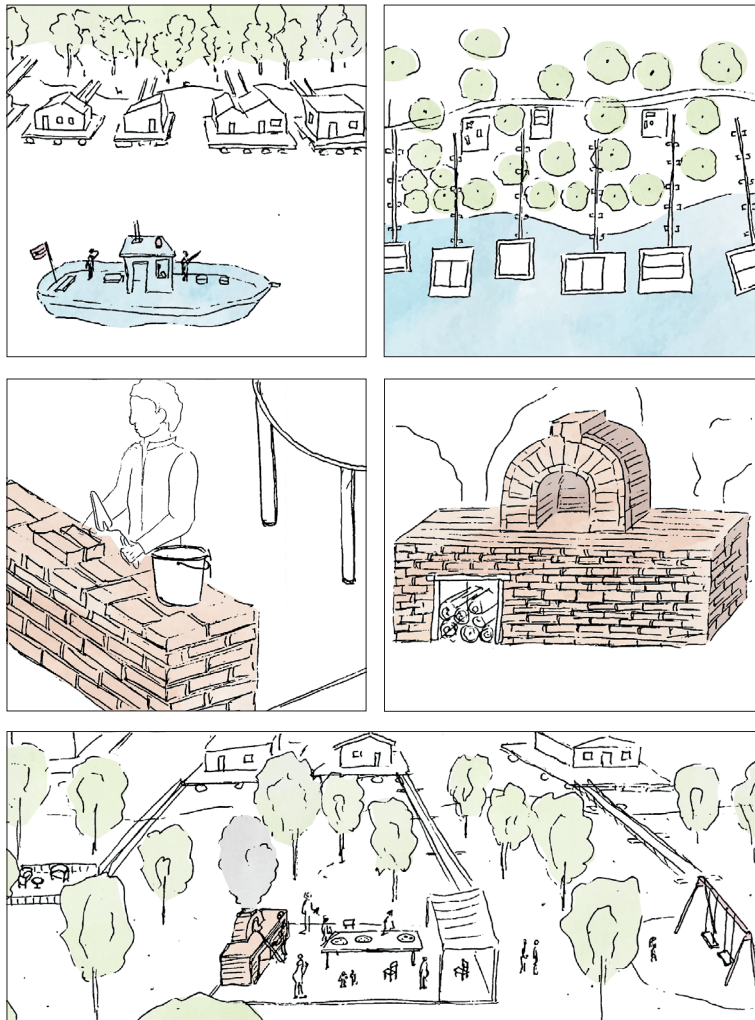
Splavovi owners rarely start from a blank canvas. As all legal mooring points have already been assigned by the authorities, the best way to acquire a splav is to buy an existing one which boasts of a more or less healthy condition.

"From Belgrade to Belgrade"



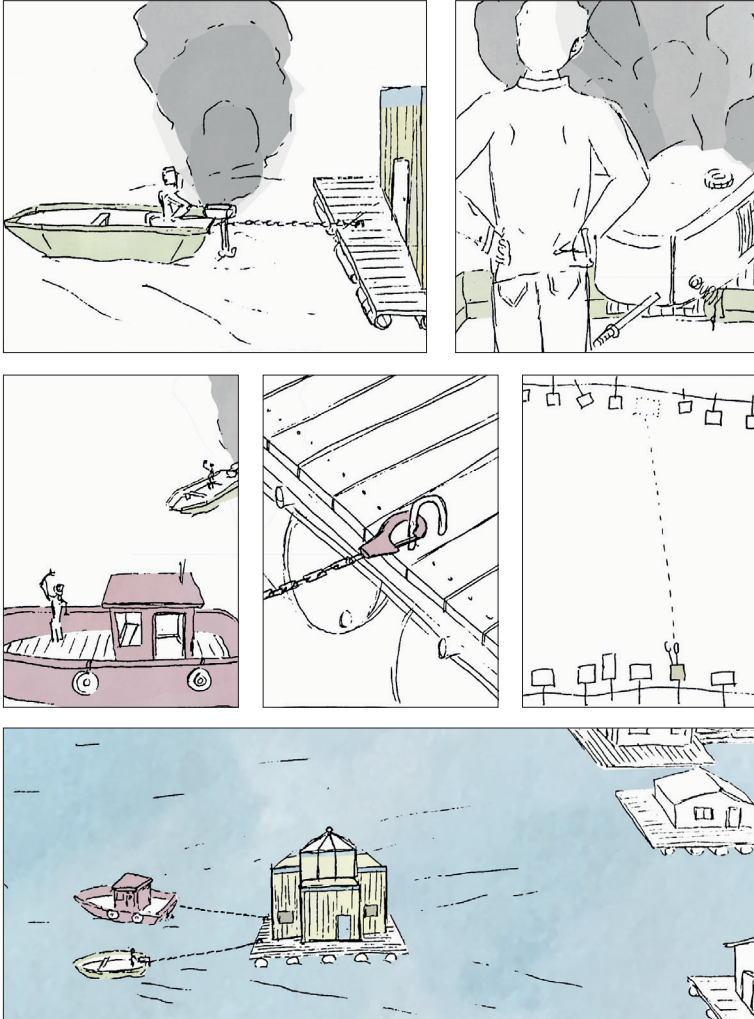
Everyday, a boatman ensures the connection between New Belgrade and Ada Medjica. For a few dinars, weekend goers, guests or permanent residents can cross the river, to finally become an island within the city.

"The Invisible pizza oven"



Since splavovi can be hard to access from the land (especially on Ada Medjica and Ada Ciganlija), authorities often check for proper compliance with regulations by boat. Things happening behind the splavovi or on the land sometimes go unnoticed or get easily tolerated.

"Splav of the world"



Most splavovi only remain theoretically nomad. However, some of them will be arduously displaced across the tumultuous waters of the Sava in order to reach another piece of land.

Floating

It creaks, I freak
It wobbles, I stagger
It shakes, I'm shook
It works, I move

I toss, it floats
I slide, it shoves
I'm dazed, it rotates
I wanted so I made

Because I swing, because I hop
Because I dive, and drift, and bathe, and bob
Because I drink, adore, life on shore
Because I dream, because I
dream

Fortunately, there was a river
Fortunately, there was a bank
Fortunately, there was a pole, plank, pivot, pin, barrel, bond, buckle, bridge,
screwdriver-tip-replacing-set, neighbors and a word I don't know yet

To eventually do
what I want to do

**Poem: Illustration
of what it feels like
to stand on fluid
grounds, the dynamic
interrelations it entails
between user and
architecture**

These collages attempt to re-assess the value of order and freedom. The scenario of total control questions whether its enforcement and the ensuing the absence of chaos are really desirable, or if they endanger the qualities we have highlighted so far (fig. 38). On the other hand, complete chaos does not seem fully advantageous either, as it might amplify individualism thus inducing further introversion within this system (fig. 39). What we suggest with the final collage is a more nuanced vision where a certain mediation between order and freedom would allow for autonomy and collectivity to be simultaneously achieved, based on mutual trust between the different actors.



Fig. 38 A scenario of total control



Fig. 39 A scenario of total freedom



Fig. 40 A (temporary) scenario of a mediation between order and freedom

CONCLUSION

In contrast to that of the unified whole, this research on Belgrade's floating culture highlighted the power of parts and more precisely the power of the multitude. In the case of the splav, the aggregation of numerous and identifiable small fragments – the way they meet, overlap, or remain separate from one another – can foster appropriation, and contribute to the resilience of the system as a whole. Going beyond the simplistic labeling of splav as escape and symbol of freedom for its users, we recognize in it a high degree of latent qualities and embodied potential which is not always fully exploited. The nomadic potential of the splav, for example, very often remains theoretical as most of them stay attached to the same mooring point throughout their whole existence. Therefore it is actually this latency, this mirage of possibilities and these new imaginaries that can be seen as truly liberating and empowering for the users.

This research suggests three main lines of inquiry for future developments in Belgrade beyond the space of the river. Can the relations between user, architecture and land be defined following other logics than that of productivity and profitability in order to generate alternative ways of taking care of land? The work also pushes us to think of forms of architecture that can, from both configurational and functional points of views, be constantly re-adjusted over time by its users with a certain economy of means. Finally, we observed that despite instances of cooperation, every splav seems to be an experiment on its own, an isolated laboratory producing its own knowledge. We would like to think of an architecture that tolerates and encourages autonomous experiments while requiring a certain commitment to the group and a contribution to a common knowledge.

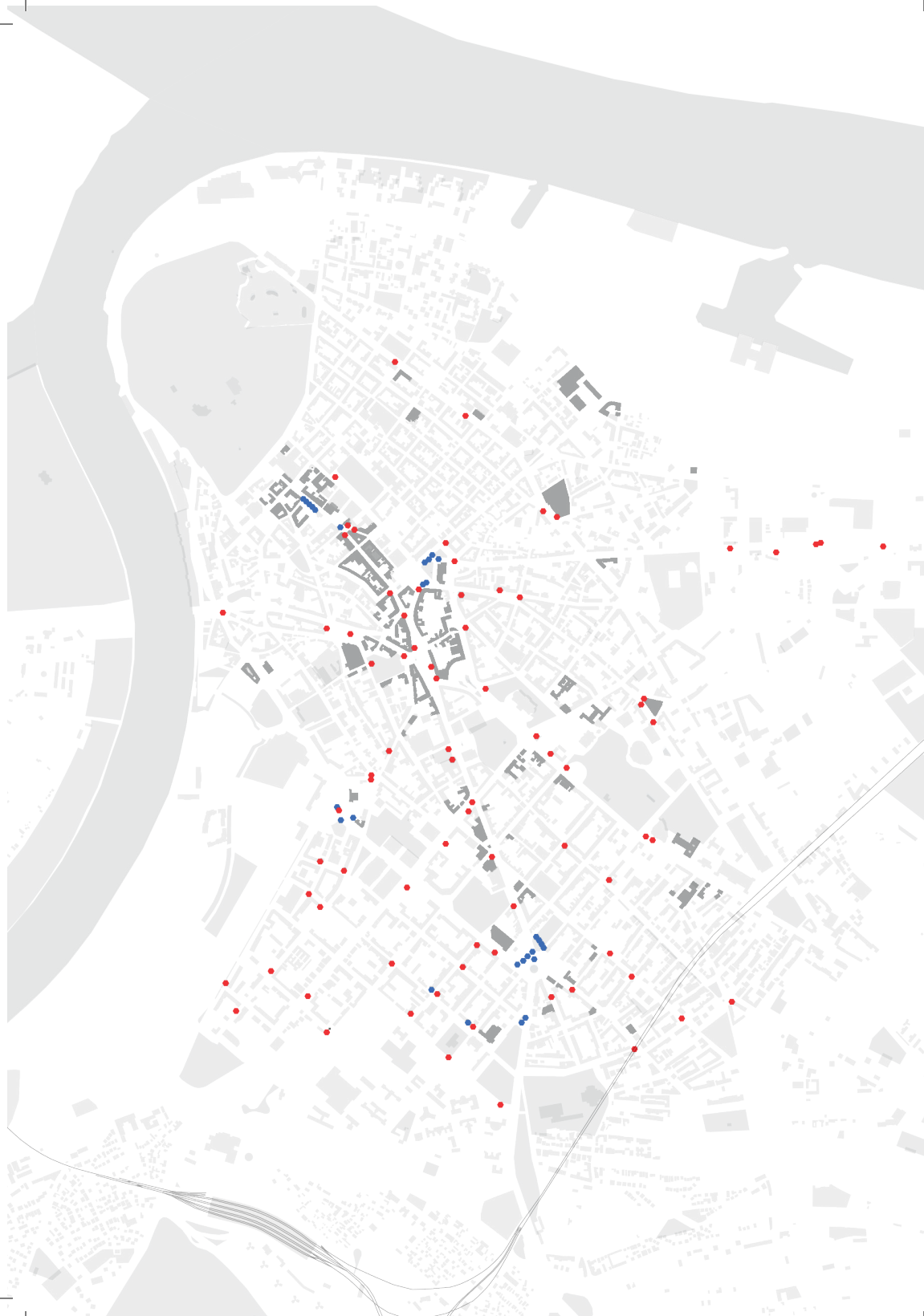


**Fig. 41 Ada Medjica's
floating objects in times
of high water**



*David van der Blonk
Kelly Lai
Wesley Lijkendijk*

KIOSK



INTRODUCTION

Reading Belgrade

This study focuses on understanding and defining the typology of the kiosk, which can be seen throughout the whole of Belgrade. The kiosk, or 'small open-fronted hut or cubicle from which newspapers, refreshments, tickets, etc., are sold' (Oxford languages), is mostly placed directly on the street and serves people who want to quickly buy goods in passing. An active kiosk, in this way, alters the function of the street from a traffic space into an area of idle and commercial activity. When observing the kiosk it seems, no matter where it appears, to act in a more or less similar way. So then, when is a kiosk a kiosk?

Rather than a thread of the city, we like to see the kiosk as a sentence. A sentence of the text called Belgrade, that is composed of a set of word classes. Linguistics became a way of dissecting this sentence. So what happens when looking to the kiosk not only as a noun, but also as a verb and an adverb? Through this method, it then becomes apparent that the kiosk is not just an object (a noun), but one which is implanted in a certain context (a verb), and even something which can transform this respective context (an adverb). Our definition of the kiosk relates to the specific interplay of these three. The adverb modifies the spatial potential of the context through the object of the kiosk. So, the larger the adverb, the more kioskly a kiosk kiosks. Reading the city like this helps to both understand situations as they are, with the current noun and verb, but also in imagining and developing a different narrative. Try to make a different use of the potential of a location by designing a different noun. This method helps us to advance from reading Belgrade to finally, rewriting Belgrade.

Fig. 1
Location of existing kiosks and kiosks recently removed from central Belgrade



2.early 20th century
location: Republic Square



Fig. 2 Zukov, n.d.
Fig. 3: Unknown, 1938

3.year: 1938
location: Terazije Square

When looking at the kiosk through history, we see how the existence of the kiosk is synchronized with the economical and political situation, in resulting quantity of kiosks, its appearance, and the type of supply of goods. From the more classical appearance in the beginning of the century (figs. 2-3), the kiosk evolved to the standardized functional design of the K67, spread throughout the Eastern Block (figs. 4-5). During



4. year: 1967



5. year: 1986



6. year: 1990s
location: Slavija Square



7. year: 2002
location: Slavija Square



8. year: 2010s
location: Terazije square



9. year: 2017

Fig. 4 Mächtiga, 1967
Fig. 5 Unknown, 1986
Fig. 6 Unknown, n.d.
Fig. 7 Unknown, 2002
Fig. 8 Unknown, n.d.
Fig. 9 Ullstein bild, 2017

the war-torn 1990s the streets became blurred with ‘wild’ kiosks due to the large number of licenses that were handed out to curb unemployment (fig. 6). Eventually this resulted in large clean-ups that halved the amount of kiosks compared to the peak (fig. 7). These days many kiosks are corporation-owned and strict requirements regarding the appearance have been instated in order to get a more recognizable city identity (figs. 8-9).

to kiosk

verb

**to qualify the absolute recognized
spatial potential**

TO KIOSK

The kiosk as a verb.

When is it possible for a kiosk to kiosk? Regarding the kiosk as a verb that describes an occurrence, action of state, we see the kiosk as a process in a context, from which the recognized spatial potential can be qualified.

To get insights into the locations of the kiosks, both in relation to other common functions in the city, as through time, we made maps. It became apparent how the locations of the kiosk strongly relate to other functions. Also an intervening higher controlling power became visible through time.

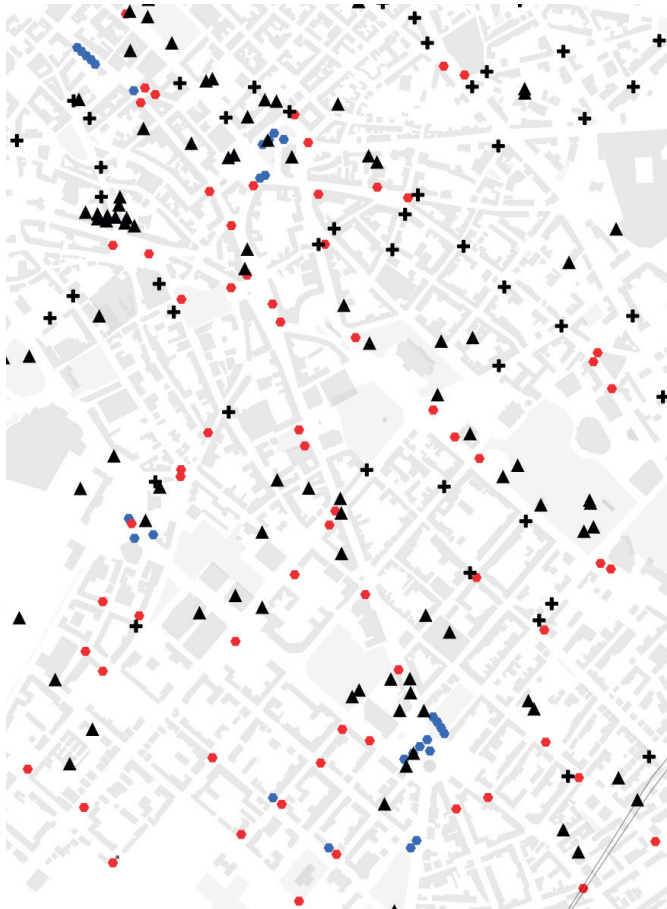
Since we see the kiosk as a process on the street, one way to really understand the different influences surrounding the existence of the kiosk, was to make a game out of it. In this game, the search for the most profitable locations became apparent. Different parties with different interests are involved. Further, the Change Cards introduce unexpected influences that in the end can turn the whole game upside down. But the most important takeaway is that all the parties are interrelated and are together creating the context.

To understand in what type of environment the kiosk can function as a kiosk, it is placed in extreme contexts. What if the kiosk is placed in unexpected locations? What influence does this have on the spatial potential of this place?

Fig. 10
Definition of the kiosk
as a verb



Fig. 11
Location of existing
and removed kiosks in
relation to Belgrade's
central commercial
district



+ convenience stores ▲ bus stops

Fig. 12
Location of existing
and removed kiosks in
relation to bus stops
and convenience stores

The way in which the location of the kiosk relates to other functions in the city, is illustrated by a map showing the area from roughly Terazije Square to Slavija Square. It is visible how the density of kiosks is higher in commercial areas (fig. 11). Also, quite often kiosks are placed near bus stops (fig. 12). Further it is visible that in areas where there are convenience stores, barely any kiosk can be found (fig. 12). At last, the intervening municipality becomes apparent through big clusters of kiosks that are removed through time.

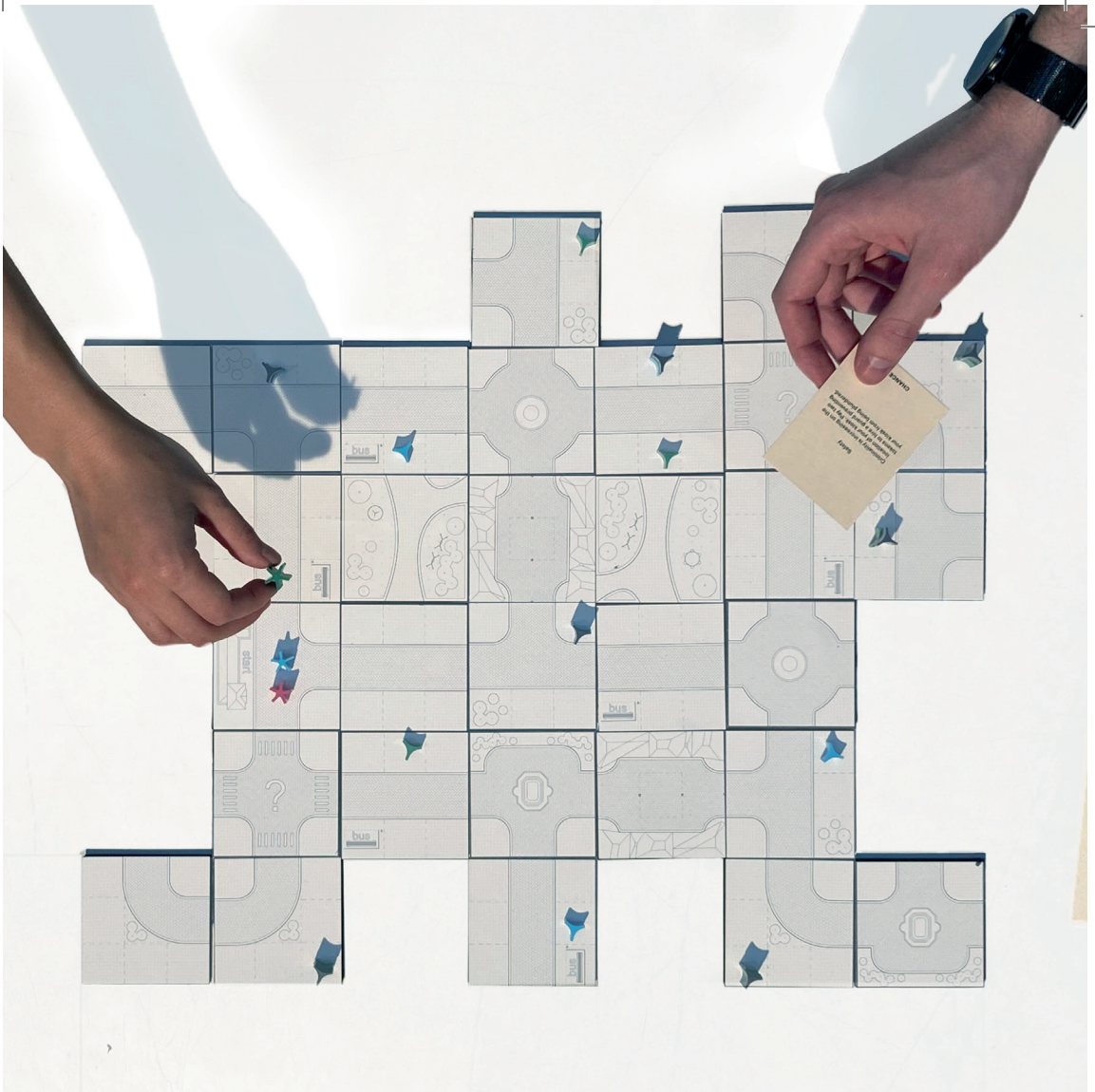


Fig. 13 (1-8)
Game elements

1. corporate kiosk
2. wild kiosk
3. worker
4. money

5. goods
6. dice
7. chance card
8. game chart

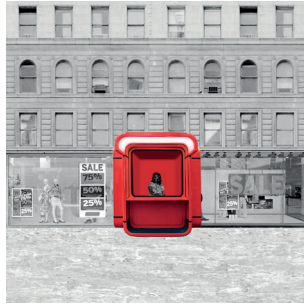
The game aims to illustrate the process of establishing and running a kiosk in an abstract way. Three parties are involved. The corporation establishes kiosks and hires employees. The individual can apply or quickly set up an illegal ('wild', not approachable by many architects and planners*) kiosk. The government tries to regulate. On top, there are social-, safety-,



economy- and politics- related Chance Cards. For instance: 'The Corona virus erupted, there is an urgent need for face masks, the wild kiosks can quickly anticipate by selling them'. The goal of the game is not to dominate the playfield, instead to win as a team by having as little unemployment as possible and fulfilling your own goals as well as possible.

Fig. 14
Demonstration of the
process of playing the
game

what if

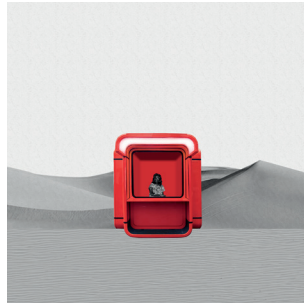


15. the kiosk were placed in a commercial district



16. the kiosk were placed on a mountain

what if



18. the kiosk were placed in the desert



19. the kiosk were placed in a cemetery

Figs. 15-20

To obtain rules about the environment in which the kiosk can function as a kiosk, the kiosk is challenged. It is placed in extreme contexts which show how in certain locations there is more potential for the kiosk 'to kiosk' compared to other locations. For instance, 'What if the kiosk were placed on a mountain?'. How much potential does the context offer for



17. the kiosk were placed in a super-market



20. the kiosk were placed in a tempo-rary market

the kiosk to function? How many people are interested in the services offered by the kiosk? How much competition does the kiosk have to deal with? Although this gives an insight into the potential of locations, to objectively answer if the kiosk can kiosk or not is not yet possible.

the kiosk
noun

**given affordances of a collection of
material existences**

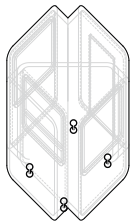
THE KIOSK

The kiosk as a noun.

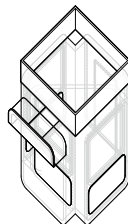
What if the kiosk were just an object - an identification of things? What elements should it be composed of? Regarding the kiosk as a noun, an identification of a class of people, places or things, we are investigating it as an object which embodies different meanings, elements and uses for different individuals.

Firstly, the most common typologies of kiosks that have existed in Belgrade are researched and dissected. In order to discover the crucial elements for the kiosk to function, this exercise focuses on deconstructing the kiosk into individual components. What are the elements that are encouraging human interaction? Thereafter, these specified elements are abstracted in the kind of use they offer, what are their affordances? Referencing the theory of James Gibson, who posits that daily life is about engaging with and enacting the action possibilities of the environment, which he calls affordances. Affordances are possibilities for action offered by the environment - an environment which, in the case of humans, is to a large extent designed. So what are the affordances that are crucial for the kiosk's functioning? We found its shell to be crucial, as it affords a clear distinction between vendor and customer, private and public. Equally important is the counter in affording vendors to, despite the enclosure, still interact with consumers and making the exchange of goods possible. The display of goods is important as well, allowing the vendor to show what is sold, and to provide a visual interaction with the objects. Finally, using this knowledge, we challenged the design of the kiosk object in several hypothetical what-if scenarios. What does it mean if you stretch its counter size, its width or shell design to its limits? Are the important affordances still present?

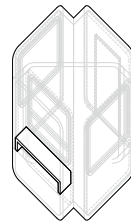
Fig. 21
Definition of the kiosk
as a noun



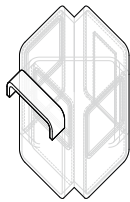
foot stand



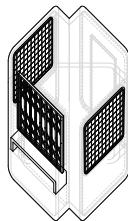
advertisement



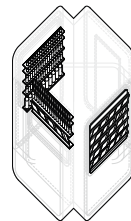
counter



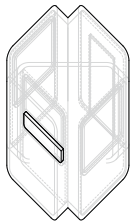
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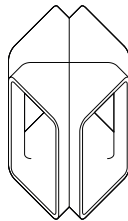
security



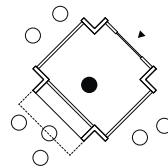
display goods



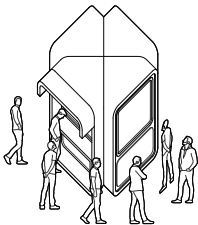
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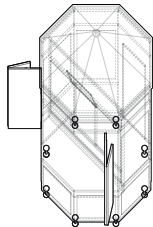
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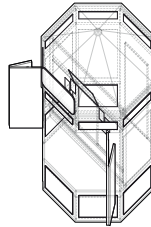
floor plan



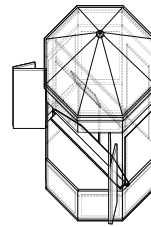
K67
unified eastern block design



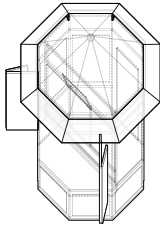
foot stand



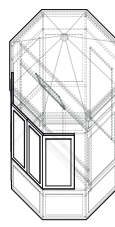
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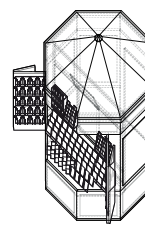
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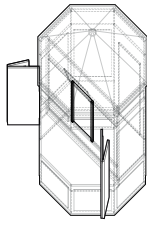
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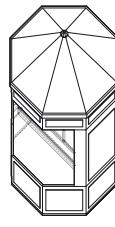
security



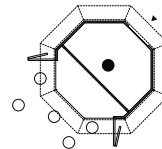
display goods



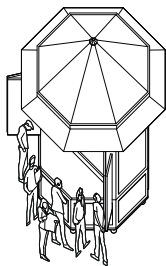
trading



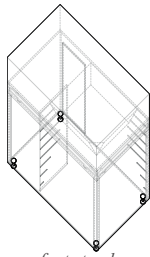
enclosure



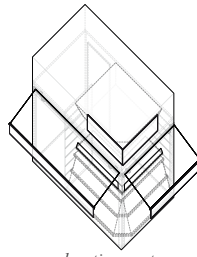
floor plan



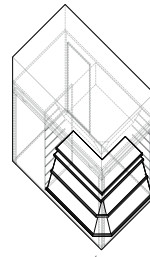
Hexagonal kiosk
modern take on the original kiosk



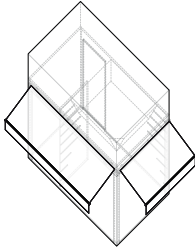
foot stand



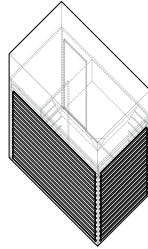
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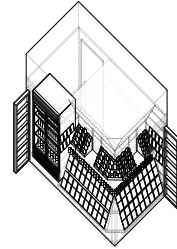
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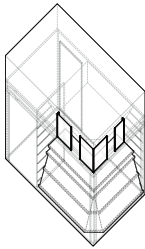
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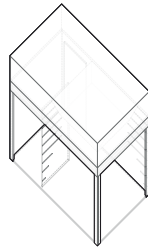
security



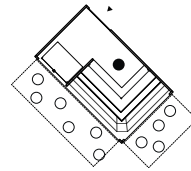
display goods



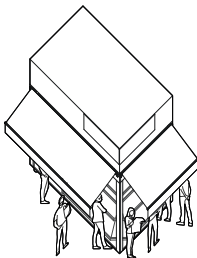
trading



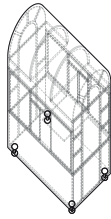
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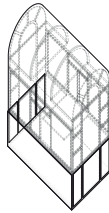
floor plan



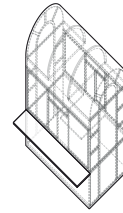
moj kiosk
the unified black box kiosk



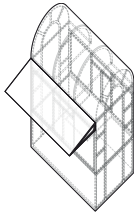
foot stand



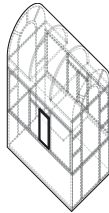
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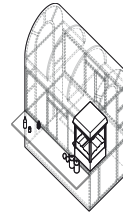
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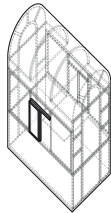
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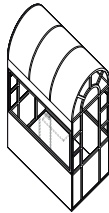
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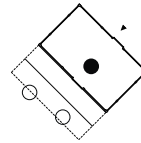
display goods



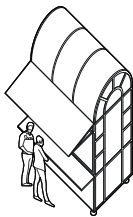
trading



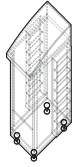
enclosure



floor plan

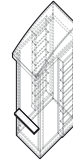


arched kiosk
modern popcorn stand

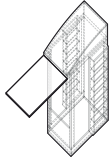


foot stand

advertisement



counter



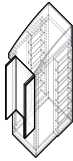
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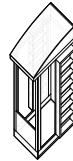
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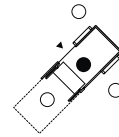
display goods



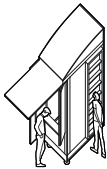
trading



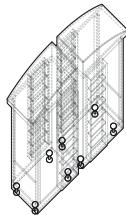
enclosure



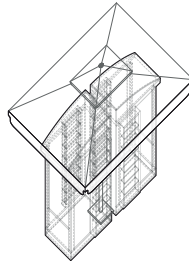
floor plan



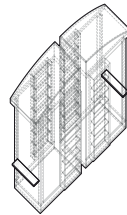
stall
unified souvenir stall



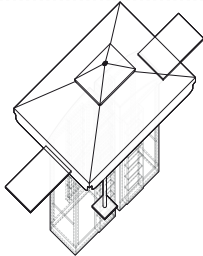
foot stand



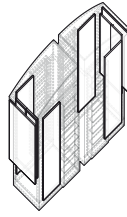
advertisement



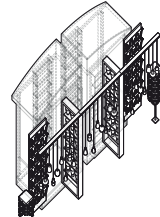
counter



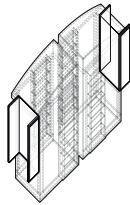
canopy



security



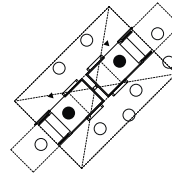
display goods



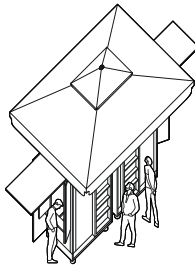
trading



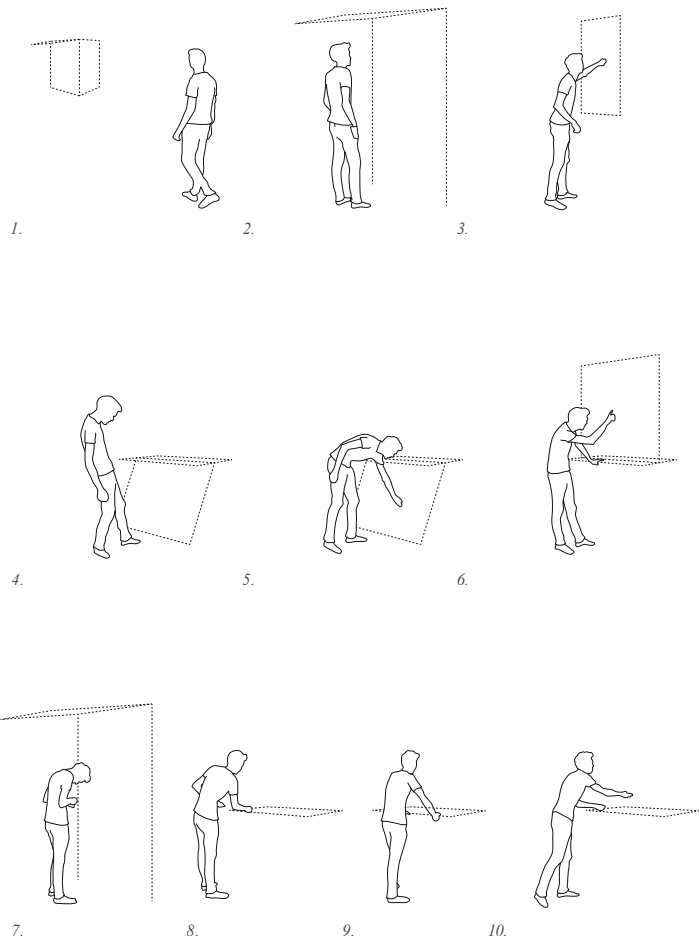
enclosure



floor plan

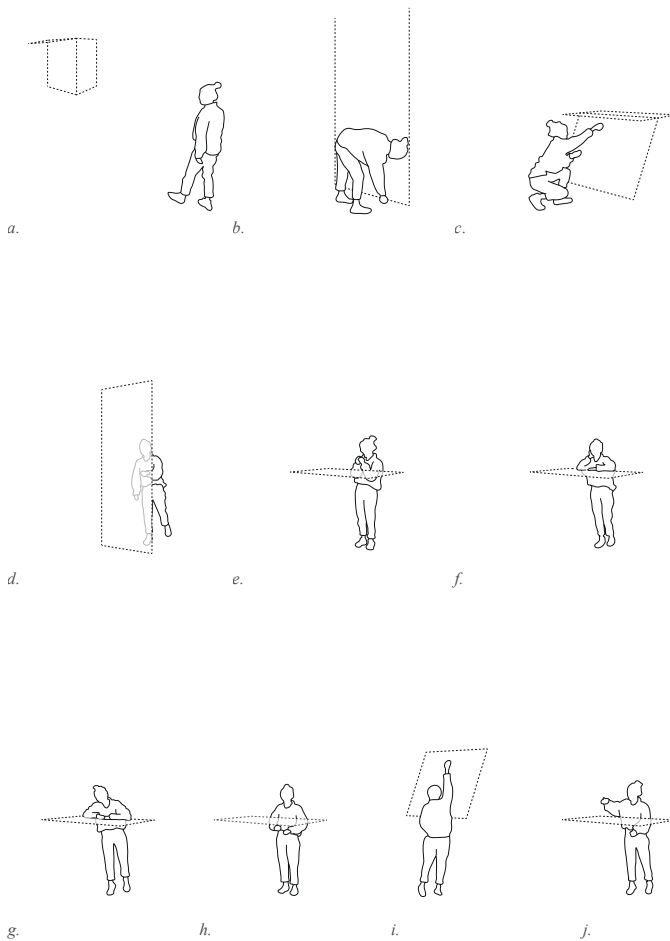


umbrella stall
souvenir stalls with umbrella



Figs. 22 (1-10)
Process of using the
kiosks from consumer
perspective

The first narrative is from the perspective of the consumer; from approaching the kiosk (fig. 22.1), finding shelter underneath the canopy (fig. 22.2), reaching to the necessary goods (figs. 22.3-6), to putting money on the counter (fig. 22.7). The second narrative is from the routine of the vendor; from opening the kiosk through lifting its shutters (figs. 23.a-



b), placing goods (fig. 23.c) or leaning on the counter waiting for next consumers to arrive (figs. 23.e-h). Even though these two actors exist within the same environment, they are never coming into real contact with each other. Only when the actual trade happens, afforded by the counter space this interface for exchanging both goods and money can appear.

Figs. 23 (a-j)
Process of using the
kiosks from vendor
perspective

what if

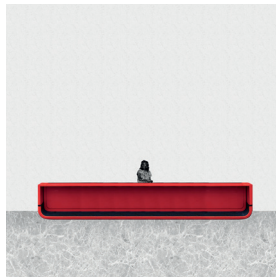


24. the kiosk were a tent



25. the kiosk were floating

what if

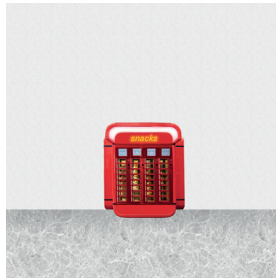


28. the kiosk were a stretched counter



29. the kiosk were stretched horizontally

what if



32. produce were sold out of a machine



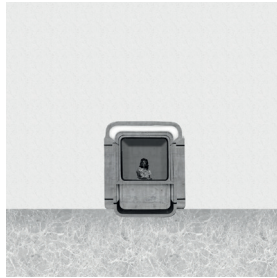
33. the sold produce were apparent

Figs. 24-35

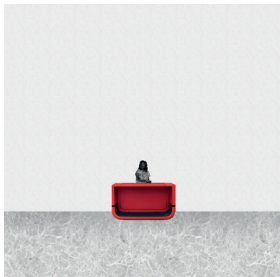
Following the affordances that are needed to function as a kiosk, many of the (some extreme) what-if scenarios turn out to still objectively function as a kiosk. A kiosk that is made out of concrete for example (fig. 27), still provides a certain enclosure, counter space and display of goods. A kiosk that is just a counter (figs. 28-31) however, only provides one



26. the kiosk were a blanket



27. the kiosk were made out of concrete



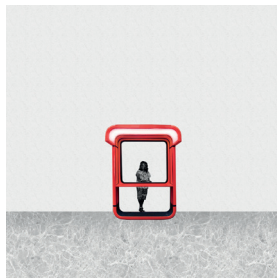
30. the kiosk were just a counter



31. the kiosk had a partial counter



34. produce were not to be carried



35. the kiosk were just a shell

of these affordances and - in our view - does not afford the proper ways of interacting with the object. Thus, even if the object is skewed in an extreme way but still possesses these three affordance characteristics, it does not matter how it is precisely designed. As long as the interactions that come with them can be executed.



kioskly
adverb

**modifies spatial potential through
affordances of the noun**

KIOSKLY

The kiosk as a adverb.

What is the relationship between the kiosk as a noun and the kiosk and verb? What does it mean if one regards the kiosk as an adverb? Looking at the definition of the adverb; what happens if we look at the kiosk as something that modifies a verb and expresses a relation, cause or degree? In order to investigate such a potential relation, the what-if scenarios were used to further investigate their spatial potential; to examine the possibilities for such a modification to happen. For this, the hypothetical framework of Stanford Anderson¹ was used and reinterpreted in a simplified manner.

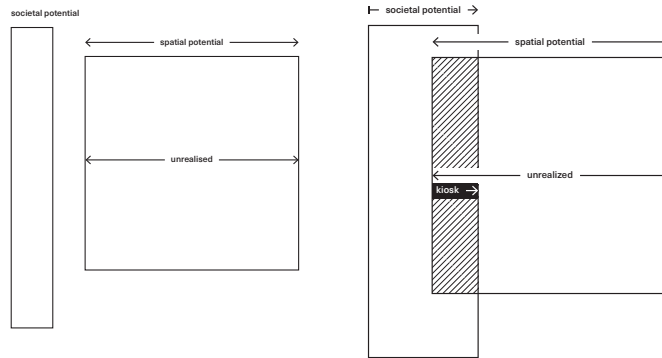
Every environment has a social system of societal values and norms that defines and structures the way people will use and react to the physical environment. A societal potential deals with a selection of actions and interpretations to become reality. However, a physical environment also yields certain potentialities in itself; a spatial potential entails all potential actions and interpretations that can take place. The part of the total spatial potential that overlaps with the societal potential - the part that is actually realized - is the effective environment. However, not all spatial potential might be realized. The part of the spatial potential that is not realized although recognized within the societal framework is a latent potential. Similar to how an adverb modifies or expresses a relation with the verb, this latency allows for societal change without physical change. This knowledge was used to determine whether such a latency, this potential that allows for change is present in the what-if scenarios. For an adverb to appear, the right amount of recognized unrealised potential and proper affordances of the object need to be aligned in order to act kioskly. Which can then be defined as modifying spatial potential through affordances of the noun.

Fig. 36
Definition of the kiosk
as an adverb

1. Anderson, Stanford,
"People in the Physical
Environment: The
Urban Ecology of
Streets," in On Streets,
ed. Stanford Anderson
for the Institute for
Architecture and Urban
Studies (Cambridge,
MA and London: the
MIT Press, 1986 [1978]),
1 - 11.



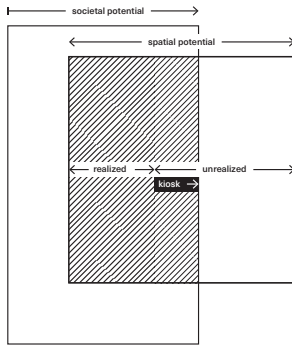
37. an interactive thinking and overlaying with different spatial potential



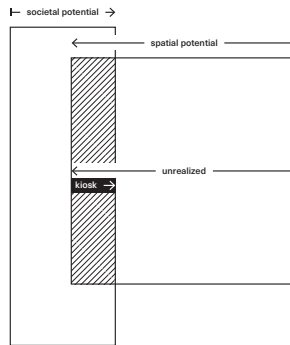
38. the kiosks were placed in the desert

39. the kiosks were placed on a mountain

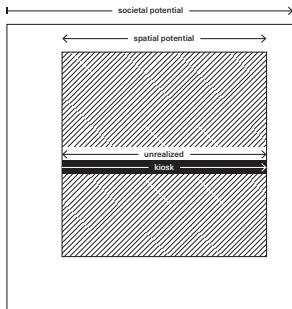
Figs. 37-43 In the case of the desert (fig. 38), one could argue there is a lot of available spatial potential, however, socially, there are few ways people will use and react to the environment. Since spatial- and societal potential do not overlap this means there is no latent potential to take care of. The kiosk as an adverb would therefore not be able to exist, it would just be an object



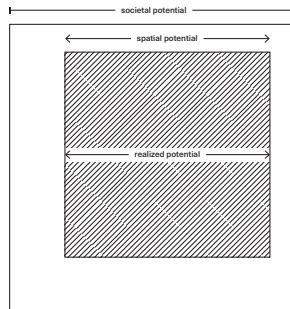
40. the kiosks were placed in a commercial district



41. the kiosks were placed in a cemetery

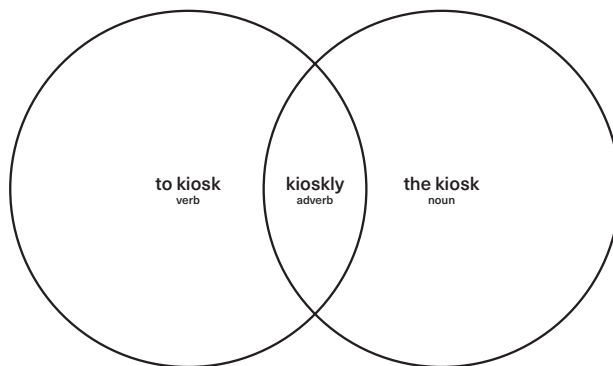


42. the kiosks were placed in a temporary market



43. the kiosks were placed in a supermarket

in a desertous context. This is different in a commercial street (fig. 40), where much more societal potential is available. So much - that besides the present shops there is spatial and societal potential on the street for selling goods. There is a latent potential for a kiosk to make use of, a way to act as an adverb.



CONCLUSION

(re)-Writing Belgrade.

In researching the notion of kiosk, the linguistic approach proved to be quite productive and presented us with unexpected results. The hypothesis of regarding the kiosk as a sentence turned out to be indispensable on how the kiosk should be viewed. It is not just an object (a noun), placed in a certain context (a verb) or something that changes this respective context (an adverb). Our definition of the kiosk relates to the specific interplay of these three. If there is no verb, then the kiosk is just an object. If there is just a verb, then there is merely a situation that is not taken advantage of. And for the adverb to even appear, both the verb and the noun are crucial. We have represented this in a graphic way (fig. 44) where the overlap between noun and verb corresponds to the amount of recognized unrealised potential for the given affordances of the noun. The larger this overlap, the larger the adverb and the more kioskly a kiosk kiosks. In other words, the more recognized unrealised potential that is used - or altered through - the object of the kiosk. Could this way of reading the kiosk also be applied to other elements of the built environment in Belgrade?

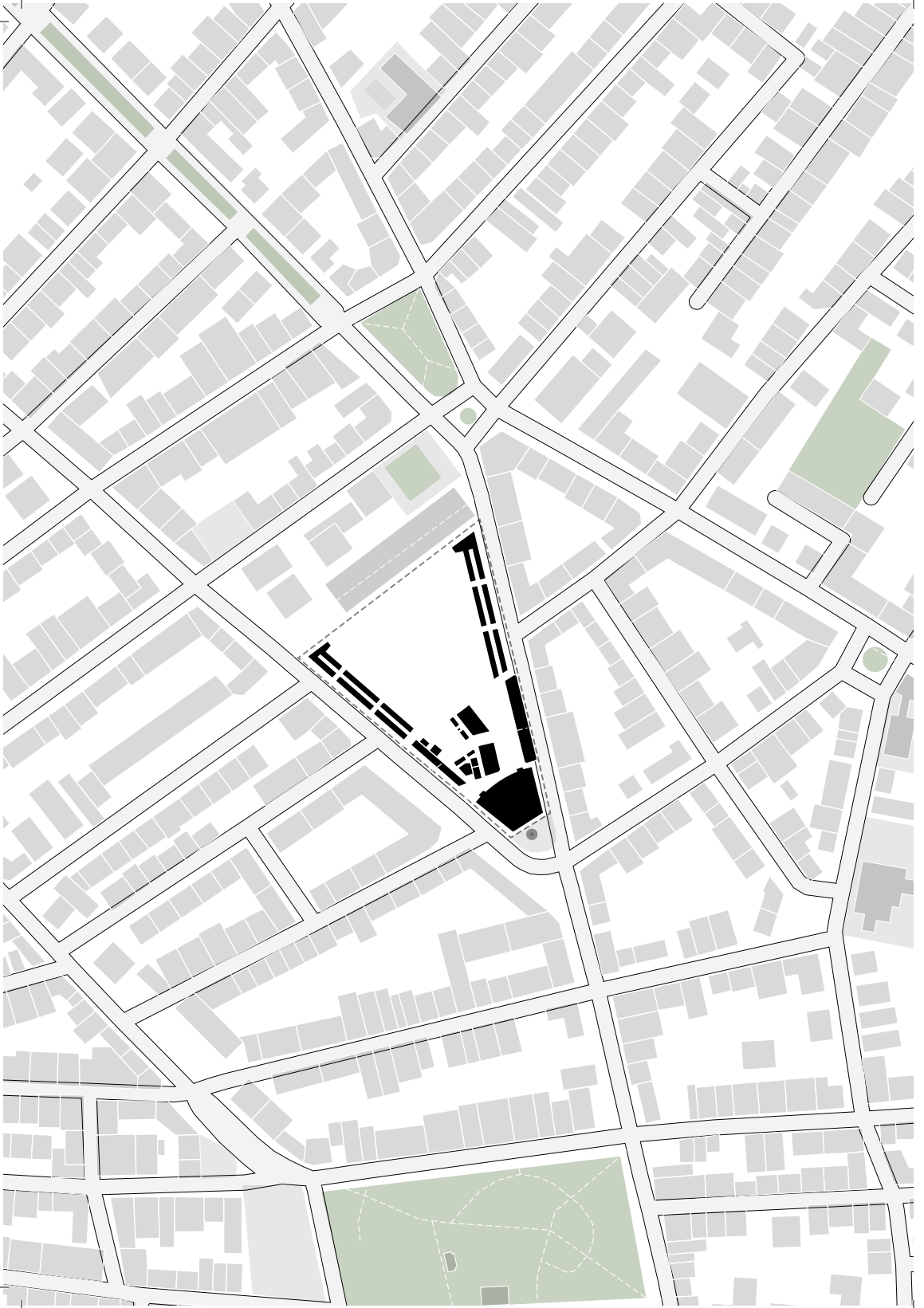
Reading the city like this can help to both understand situations as they are, with the current noun and verbs, but also in developing a different narrative. Revealing the possibilities for reimagining the current potential through designing a different noun. A way to examine the existing situation by dissecting the built environment into linguistic elements and subverting those. All in all, a tool, a method to advance from reading Belgrade to rewriting Belgrade. This proves to be crucial in developing an intervention for the city. One should not just find a suitable potential in a context (verb) and design a proper object for this (noun); but rather focus on how it could change the context (adverb) for it to become meaningful.

Fig. 44
Relation between the
kiosk as a verb, noun
and adverb



*Coen Gordebeke
Jan Panhuis
Mohan Yuan*

MARKET



INTRODUCTION

Latency in the Kalenić Green Market

In 'People in the physical environment: the urban ecology of streets', Stanford Anderson proposes a model for investigating the physical environment, in order to enable the articulation of "(...) explanatory and projective capacities within human ecology."¹ His model shows the full range of influential environments people are subject to, both physical and societal. For this architectural study, we chose to investigate the physical environment.

In Andersons model, the physical environment is described as the actual material environment that surrounds people. "It is characterized by limits of activity (...)"¹ It allows for all people to use and/or appropriate it in their own way. It is subdivided into the *effective environment* and the *latent environment*.

The effective or influential environment is the environment that is effective for a person. It is "(...) the actually observed pattern of use and meaning."¹ It consists of exploited potential and recognized but unexploited potential in an environment. The latent environment contains as of yet unrecognized potential. The latent environment is the environment that "(...) allows for societal change without physical change."¹ If the use/meaning of a particular physical environment can change without its form changing, the environment possesses latency.

From this model, we particularly wanted to investigate the latent environment of a place. Our object of investigation is the Kalenic market, one of the main markets in Belgrade.

First, the physical environment was mapped in its current reality through three different investigations; an analysis using G. Cullens strategy of experiential representation; a disciplinary study using G. Sempers theory of the four

Fig. 1 Kalenić Green Market and its direct surroundings

1. Anderson, Stanford, "People in the Physical Environment: The Urban Ecology of Streets," in On Streets, ed. Stanford Anderson for the Institute for Architecture and Urban Studies (Cambridge, MA and London: the MIT Press, 1986 [1978]), 1 - 11.

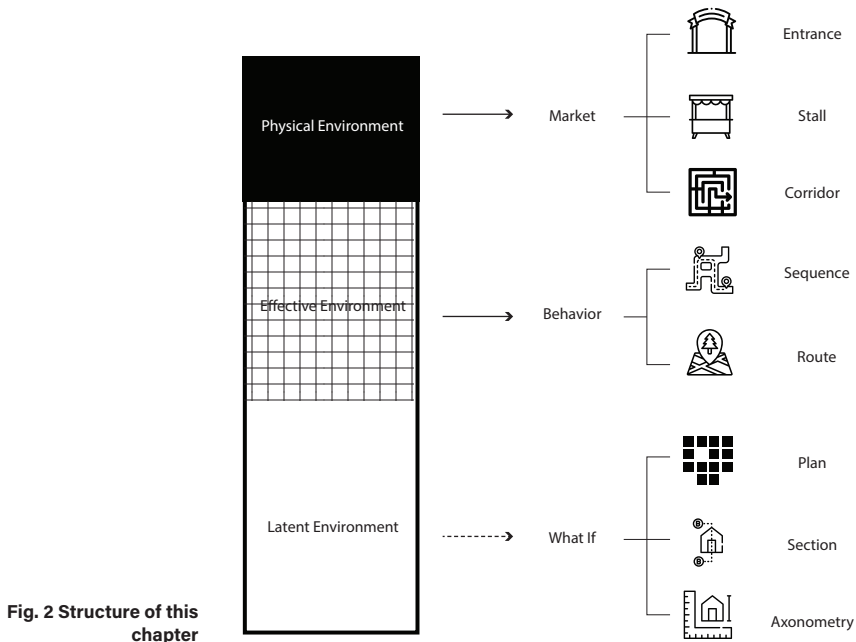


Fig. 2 Structure of this chapter

elements of architecture; and an exploration of corridors in the market. Secondly, the effective or influential environment was examined. These analyses are based on people’s behaviour as we could observe it from online photographs. We then looked at how people use the market’s space throughout time; different uses in different types of market space; and did a comparative what-if study. The third analysis, about the Latent Environment, consists of another what-if study, aimed at finding unrealized potential.

In the conclusion we will summarize the three kinds of environment in relation to the Kalenic market.

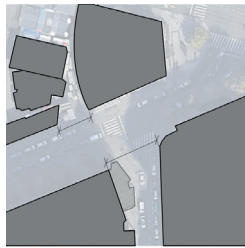
PHYSICAL ENVIRONMENT



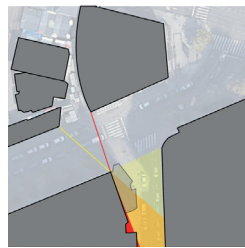
Fig. 3 Map of the market with approach directions

Entrances and approach. To analyse the different ways in which the effective environment of the markets' perimeter indicates the presence of the market to pedestrians, we have analysed the progressive visibility and architectural characteristics of the approach routes and the entrances in six ways. The findings are summarized in a paragraph with the accompanying number indicating which plan /perspective image is referred to:

1. In plan the width of the approach route and entrance are given.
2. In plan the area from the entrance route is established from where one or both sides of the gate are visible.
3. In plan the average route pedestrians use to approach the site is indicated.
4. An eye level perspective indicating the field of view from the approach.
5. An eye level perspective indicating the field of view of the entrance.
6. The entrance legibility is further elaborated on using a Gordon Cullen style sketch.



1.



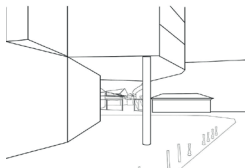
2.



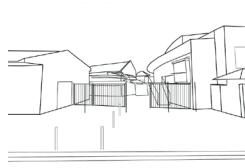
3.



4.



4a.



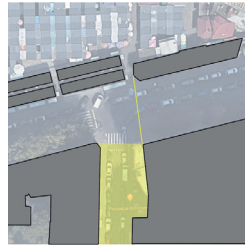
4b.

Fig. 4
Entrance A

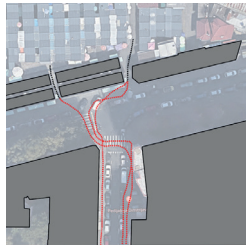
Walking from this approach street, the entrance isn't identifiable as such due to the width of the entrance (1). Both sides of the entrance will only be visible when getting into the area marked as yellow (2). This causes a person to have a frontal view of the entrance at least at one point if they keep on walking this route (3). The width of the approaching street ensures a line of sight to the entrance by the bend in the left side of the entrance route (4a). The width of the entrance makes it easily identifiable as such, it's the widest entrance to the market (4b).



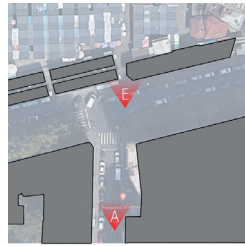
1.



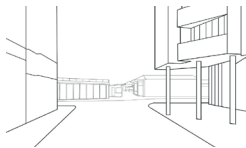
2.



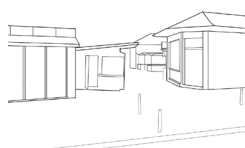
3a.



4.



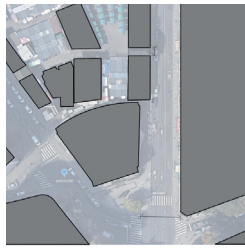
4a.



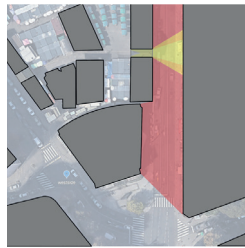
4b.

**Fig. 5
Entrance B**

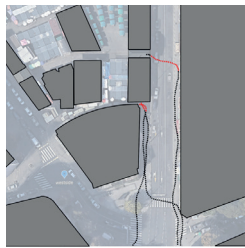
We see that the entrance is visible along the entire entrance route (2,4a,4b). the eventual routing becomes somewhat diverged from the frontal, since people are led to a zebra across the street, which is directed towards another entrance (3). the small width of the entrance ensures that it is visible as such from a distance (1), unlike in case A. The entrance qualifies as a break in the perimeter, as the right and the left side have a different architecture (4b). From the entrance one can look deep into the pot exposing the heart of the market via an organic winding route (3,4b).



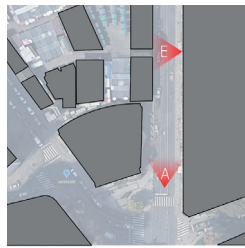
1.



2.



3.

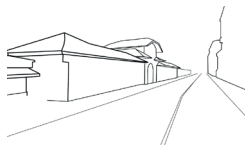


4.

Fig. 6
Entrance C



4a.



4b.

In this case the window of entrance is largely invisible from the route due to its oblique angle (2). The building containing the entrance nonetheless attracts attention, for its projected roofs (4b). This entrance thus competes with the narrow alleyway on the left, barely identifiable by the break in the block, yet being the shorter route into the market (3). The width of this alleyway is too narrow for multiple people to go through at the same time.

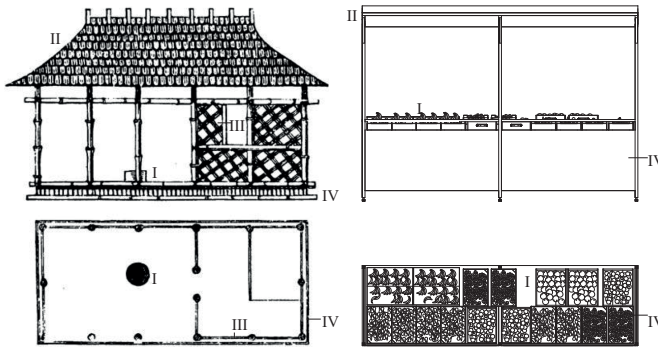


Fig. 7
 Left: Sempers Caribbean Hut
 Right: Market Stall

‘The four elements of architecture’ is a universal theory for architecture coined by Gottfried Semper in 1851. According to this theory, all architecture consists of four basic elements:

- I. The Hearth
- II. The Roof
- III. The Enclosure
- IV. The Mound

The hearth stands for the fire around which early human gathered after the hunt to rest, warm themselves, and prepare meals. This element predates the establishing of the hut. The three other elements were grouped around it in order to protect it from “hostile elements of nature”.²

Depending on local climates, societal relationships and views on property, the exact combination of the four elements change. This results in some elements being further developed and others being less developed or even abandoned. The Semperian elements of a Kalenić market stall are as follows; The origin of any market is the exchange of goods. It is its nucleus. Without the need for people to exchange their goods, the market would not exist. The goods and exchange of them predates a built environment specifically made for the exchange. Semper’s fire needs to be protected from the weather, and so do the market’s goods. They are to the market what the hearth is to the hut.

2. Semper, G. (1851). *Die vier Elemente der Baukunst: ein Beitrag zur vergleichenden Baukunde*. Brunswick, Germany: Friedrich Vieweg und Sohn. p. 55

I. The Hearth

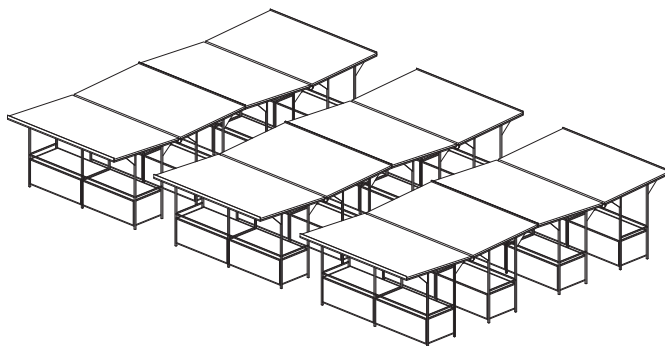


Fig. 8 Grouping of stalls

- II. The Roof** The roof of a market stall is an almost horizontal surface that protects what is under it from the weather. A single roof is not very effective. It cannot provide shade for all the products and the vendor. Only when multiple stalls are grouped, connected back to back, do the roofs provide enough shelter.
- IV. The Mound** The mound of a market stall is its display. This display is made up of two big metal cabinets that can open on the side of the vendor. They are used for storage of surplus goods that don't fit on the display.
- III. The Enclosure** There is no enclosure around the goods, it is the only Semperian element missing. There are three reasons for a vendor to put their goods out in the open: they need to prove their goods worthy of a customer's money; they need to elicit an exchange; and they need the exchange to not be frustrated by physical barriers. An enclosure would be detrimental to all three. Therefore, a market stall has no enclosure.

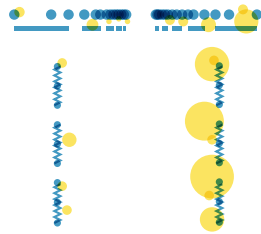
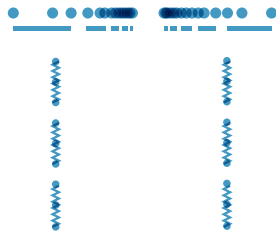


Fig. 9 Corridor

Top Left
Corridor first outline

Top Right
Corridor second outline

Bottom Left
Rhythm first outline

Bottom Right
Rhythm second outline

The first outlines of the market corridors are drawn by sequences of stalls. The repetition of a physical element - the stall - makes up the base rhythm of corridor space. The movement quality of the empty corridors space give users a strong guidance to walk through the market from one section to the other.

The attachments to the space as second outline of the corridor become the difference of rhythm and soften the strong indication of moving along the space which may leads the users linger around stalls. The composite rhythm of the corridor in the market which specify the behavior possibilities.

Those physical elements like stalls, goods, parasols,etc result in a complete corridor space which influences the behavior of users through its physical qualities.

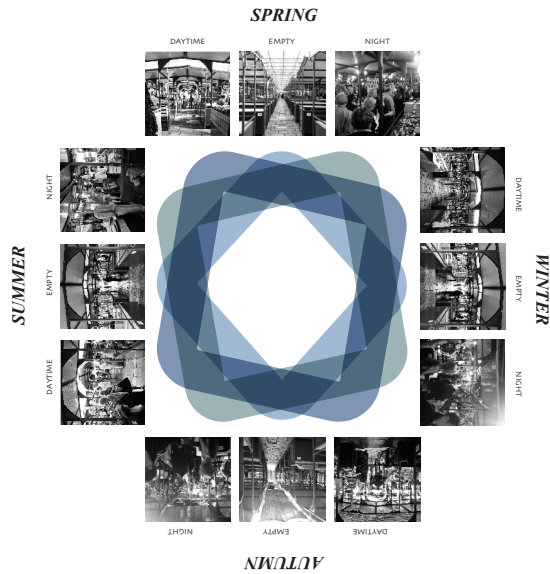


Fig 10. Behavior shifting over time

Using time as a measurement of the corridor movement can help to understand the behavior possibilities of the corridor space.

The diagram shows that daytime-empty-night scenarios in market corridor space. During the night the market not only serves as a market but also holds events and performances sometimes. On such occasions, the space can be much more crowded than usual daytime. When there is no trade people can also meet here have other behavior possibilities like playing chess. The arrangement of the space almost remain the same, but still the behavior taking place in the space keep shifting. The use of market space are not strictly limited by the spacial arrangement but more related to the way users recognized the potential of the arrangement and take advantage of it.

EFFECTIVE ENVIRONMENT

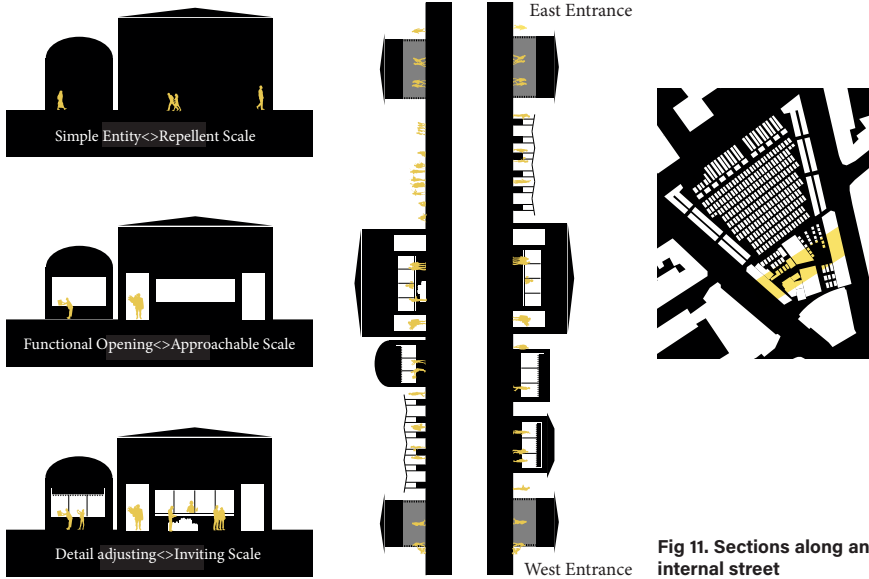


Fig 11. Sections along an internal street

The market can be considered as a combination of several types of corridor. Each corridor-like space is related and comparable to the other, resulting in one coherent spatial sequence, that the user experiences while moving through the market.

The combination of physical elements in sequence allows various behavior possibilities like playing chess, holding performances, having handcraft workshops, playing music instruments, etc. The market space appears to have more social activity scenes than trading goods. It becomes a more comprehensive space for social and gathering use.



Fig. 12 Market

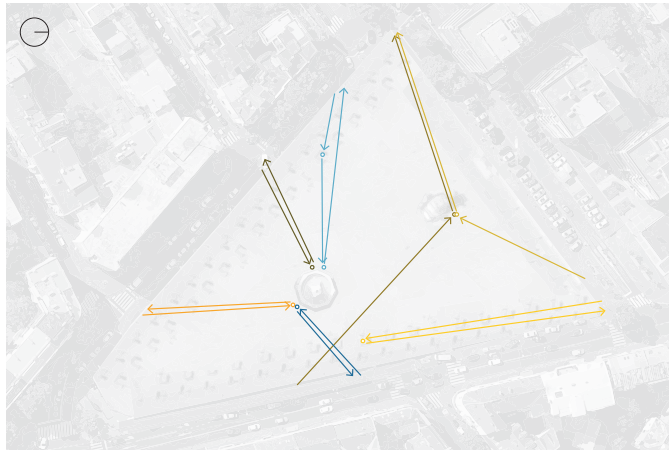


Fig. 13 Square

In this exercise we investigate paths of movement and moments of stillness of market visitors. By comparing them to the movements and stillnes on a square projected onto the same plot, we can characterize how the architecture and program of the market influence the use of this space.

Seven imaginary people are given a different color line representing a path they have taken in these two public spaces. They have moved about on the market and on the square for

these spaces' core functions; they were there for exchange of goods in the market or for recreation on the square. The lines are interspersed with dots. A line represents movement, a dot represents a person being still. Reasons for being still in the market can be inspecting or exchanging goods and on the square people can sit down on the edge of a fountain to rest or meet a friend.

Although there is an equal amount of lines on both plans, there is a much higher number of dots on the market plan, meaning there are more moments of stillness in a market. This is because inspecting and exchanging goods in a market happens many more times than sitting down or standing still happens on a square. There would be no goods out on display and there would be no exchanges without vendors. And vendors are static. The stillness of vendors is the main reason that visitors of the market stop so often.

The lines on the square are almost all straight because there are virtually no obstructions in this space. There is most often just a single stop on a person's path. The path of a person moving about on the market is very alternated. There are multiple stops on a single path because not every kind of product is sold at every stall or store. There is also a lot to see and inspect in detail within a small radius which can halt a person on their way.

Because the market has a lot of obstructions, its lines are closer to one another than on the square. They also cross over much more. Although the crossing of two lines does not necessarily mean that two people meet, the major amount of paths crossing does increase the likeliness of people meeting. When we look past the planned use of the market - exchange of goods and inherent accompanying encounters between customers and vendors - there is another realized potential for unplanned encounters. Spatially, these encounters are enabled by the many obstructions and many paths that the market has. Programmatically, unplanned encounters are enabled by the static vendors and their dense spread throughout the market.

LATENT ENVIRONMENT

Anderson says that the unexploited possibilities of an environment are best described by investigating the “(...) physical environment in and for itself (...)”¹

1. Anderson, Stanford, “People in the Physical Environment: The Urban Ecology of Streets,” in On Streets, ed. Stanford Anderson for the Institute for Architecture and Urban Studies (Cambridge, MA and London: the MIT Press, 1986 [1978]), 1 - 11.

We do not think this means one needs to describe a physical environment without ascribing a program or use to it at all. This would only yield dimensions and compositions expressed in numbers. Such measurements would not mean a thing if they were not related to a use. What we think Anderson means is that when one prescribes programs other than the actual use to a particular environment, keeping this environment itself as-is, possible latencies can come to light. We therefore did a what if-exercise in which we assigned programs other than a place of trade to the Kalenić market. Patterns of use relating to these programs were projected onto the market. All three programs are investigated through a plan, a section and an axonometry. The three programs that were prescribed are:

- Field Hospital
- Campsite
- Museum

The reasons we chose these programs are: that a campsite has similar relationships between inside and outside to those of a market; that a field hospital requires a clear organization as can be found in the market stalls’ configuration; and that a museum has visitors that move in a way similar to a market’s visitors.

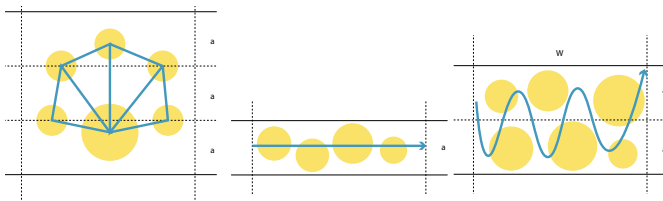


Fig. 14 Latency in plan view



Left
Field Hospital
Middle
Campsite
Right
Museum

Latency Analysis 1

In the plan view, to consider the potential of space requires looking at the space on a larger scale as a whole. At this level of scale the circulation or the space arrangement is crucial. By replacing the plan of market with different possible programs, we notice the arrangement of space and connection among function parts can be the important perspective to identify the use of space. When space has proper width and depth it can serve more possibilities of spatial arrangement for various use and obtain spatial latency.

Fig. 15 Latency in section view
Field Hospital



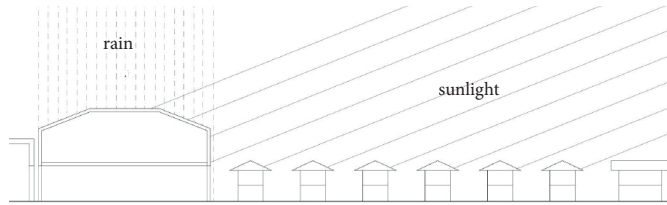
Campsite



Museum



Fig. 16 Climatic diagram



Latency Analysis 2 The Climatological diagram shows the latencies inside the market's buildings, being sheltered from the elements. The open market space surrounded by singlestorey buildings exposes the latent environment for any activity that does not need to be sheltered from the elements, yet takes advantage of the maximum amount of light per day.

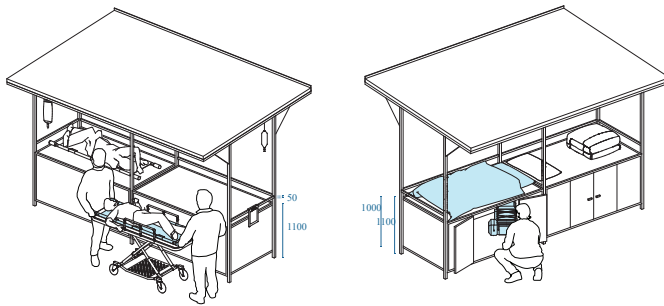
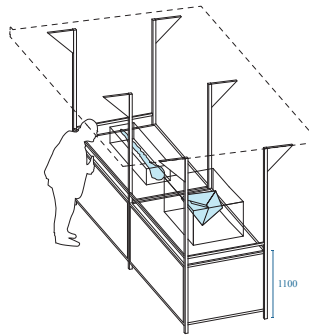


Fig. 17 Latency in isometric view



**Top Left
Field Hospital**

**Top Right
Campsite**

**Bottom
Museum**

Latency Analysis 3

For a field hospital, a market stall could serve as an impromptu stand for stretchers with patients on them. The dimensions of a stall display allow for easy placement of a patient on it. The height is pretty much the same as a stretcher cart so personnel doesn't have to bend over or lift the stretcher very high. The metal bars that support the roof can serve to hang IV drips from. A patient's chart can hang at a comfortable height of 1.2 meters, from a 5 centimeter steel bar. This steel bar also prevents a stretcher from falling off the other end when placing a patient and pushing them further onto the stall. The potential we see here are that of comfortably placing and hanging things from.

CONCLUSION

Considering the market as a place for temporary stay, like a hotel or campsite, we find that, in a similar vein to the field hospital, a person can lie on the display of a stall. Each stall can serve up to two people. There is a lot of safe storage space for travelers' luggage. The potential we see here are that of storage and lying down on.

The museum program can fit quite well into the market. Imagine moving through a museum; you walk, you stop to inspect something, you walk, you stop to inspect something etc. This is very similar to the way one moves in the market. The displays are a comfortable height for inspecting a piece of art in detail. So the potential we see here is that of display. In summary, the potential uses of the market stalls are comfortably placing, hanging things from, storage, lying down on and display. The majority of these actions already take place in the market. Only lying down on is an unrealized potential use.

What can we conclude from this? Maybe this tells us that the actions that already take place in an architecture this simple are also its unrealized potential. The latencies are different iterations of the existing use. The realized and unrealized potential overlap. The market stalls' specific dimensions and configuration are then both part of the influential environment and the latent environment.

We described the market and its physical reality; an architecture with strong rhythm and little enclosure except for the buildings forming the market's perimeter. The openings in this perimeter vary in legibility as entrances to the market.

We then analyzed the realized potential of the market's architecture which describes the market as a site for various social

activities such as trade, playing chess and performing.

Finally, we projected other programs onto the market which illuminated certain qualities of this architecture that endow this site with great potentials of use.

It showed us that the dimensions of the market's central space allow for many different internal configurations and as such can accommodate a range of possible uses. The low heights of the buildings in the market allow for sunlight to get into the central market space throughout the day. A moveable market stall can be instrumental in creating different configurations, thus creating latency. Its ability to easily change position makes for different widths of the internal market corridors. Considered separately, a market stall's latencies overlap with its realized potential due to it being such a simple architecture.

The site accommodates a lot of different uses in present day and because of its latencies can accommodate other uses in the years to come.



*Andrea Ferrarini
Linda Kronmüller
Susanne van de Pol*

CEMETERY



INTRODUCTION

Memories and Narratives alive in the City

“Like *Laudomia*, every city has at its side another city whose inhabitants are called by the same names: it is the *Laudomia* of the dead, the cemetery. [...] And to feel sure of itself, the living *Laudomia* has to seek in the *Laudomia* of the dead the explanation of itself, even at the risk of finding more there, or less [...]”¹

Italo Calvino

Belgrade’s architectural production of the last century embodies a variety of visions about Serbia and its capital. The cityscape accounts modernistic buildings and brutalist towers, as well as elaborated palazzos and corporate office blocks. Recent history has marked such complex urban tissue with scars which are still visible as ruins, urging for reflection and elaboration on the city’s past. Seemingly contrasting forces act today in Belgrade. On one hand the government relies on foreign investors as developers and planners, imagining its riverfront as a glamorous cluster with international ambition. On the other hand, the project for a monument to Serbia’s medieval ruler - Stefan Nemanja - is the evidence of an attempt to predicate a solid national identity, by-passing the layered history of the country.

In thinking about possible futures, Belgrade has to cope with a complex history as well as different narratives which interweave with it. Because of the variety of memories alive in the city, the perspective of forming a homogeneous identity seems insensitive and ungenerous. Having in mind the goals offered by the studio - meaningfulness, appropriation, inclusion - we wonder: how do memories and narratives participate in the process of forming a city’s identities? Looking for tangible presence of memories and narratives, we enter the cemeteries of Belgrade.

1. Calvino, I. (1974). *Invisible cities*. Harcourt Brace Jovanovich, New York.

Fig. 1 New Cemetery (red) in Belgrade

THE CITY, THE CEMETERY

A chapter about dichotomies

“There is no culture without a tomb and no tomb without a culture; in the end the tomb is the first and only cultural symbol.”²

Renè Girard (1987)

2. Girard, R. (1987). Things hidden since the foundation of the world. Stanford University Press.

Belgrade’s territory counts nowadays (2020) nine cemeteries spread throughout the city, and its fabric is in some way shaped by the traces left by the cemeteries over time. The first planned cemetery in Belgrade was ,Novo Groblje‘, the New Cemetery, located in the Ruzeltova street, district of Slavujev Venac, at the end of the 19th century. Initially located out of the urban fabric, the plot was connected to the city via a dedicated tramline. Today, the New Cemetery is an enclave in the city, as Belgrade grew around its wall.

Because of the size and diversity of it sections, the New Cemetery provides a rich and representative ground to reflect on Belgrade’s history. Since its founding, the cemetery site was extended steadily. Following the general plan for the burial ground, the arrangement of the plots of land also happened through processes of public planning. Some sections belong to specific religions or groups: There are a large number of graves for citizens of Belgrade. Some sections are dedicated to victims, heroes and soldiers of different wars. These specific areas are taken care of by the respective nation. Several other areas are reserved for meritorious citizens of Belgrade; politicians, intellectuals, scientists etc. are buried there. Spread over the cemetery are memorials which are often built by famous artists and present both figurative and abstract features in their expression.

Fig. 2
From absence (in)to presence

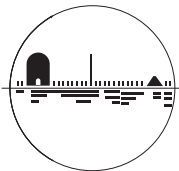
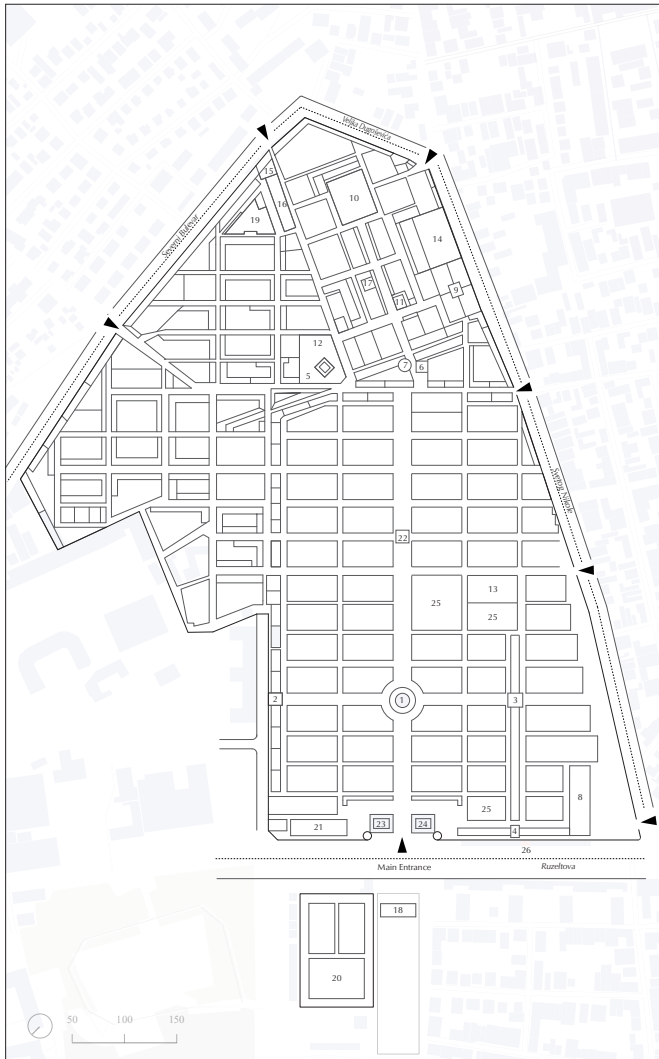


Fig. 3, next page.
Sections plan New Cemetery (M 1:8000)



1. St. Nicholas Church
2. Memorial Ossuary Serbian Soldiers
3. Alley of the Greats
4. Arcades
5. Serbian Ossuary WW1
6. Russ. Ossuary WW1
7. Russian Chapel
8. French Military WW1
9. Italian Military WW1
10. Austro- Hungarian Military WW1
11. Bulgarian Military Cemetery - WW1
12. Alley of the National Heroes
13. Alley of Fallen Patriots (1941-1944)
14. British Military WW2
15. Memorial Victims Air Strikes 1941
16. Memorial Victims Air Strikes 1944
17. Monument Warriors Front of 1945
18. Memorial park Liberators of Belgrade 1944
19. Garden of Remembrance
20. Jewish Sephardic Ashkenazi Jewish
21. Chapel Field
22. Marshal R. Putnik
23. Farewell Chapel + Square
24. Administration
25. Alley of the Meritorious Citizens
26. Meritorious Citizens
27. Flower Kiosk



**Fig 4. Cemeteries
in Belgrade'**

**3+4. Perez-Gomez, A.
(2018). Built upon
love. Architectural
longing after ethics and
aesthetics. MIT press.**

**Rothko, Mark. (around
1960).
Black on Blue.**



Cemeteries are places where the living remember their ancestors and loved ones and experience a connection with the past. The relation of Belgrade and the New Cemetery seems based on a strong dichotomy. Life and Death encounter. In Eastern religions, such as Taoism, opposites are seen as relative: “There is nothing that is not this; there is nothing that is not that. Life is life in relation to death. And vice versa. Affirmation is affirmation in relation to negation. And vice versa.”³ Pérez-Gómez refers to Baudelaire and Surrealism when talking about ,the necessary coexistence of opposites for a poetic work.⁴ Following the line of a strong city-cemetery dichotomy, Rothko’s painting ,Black on Blue‘ becomes a figurative example for a line of inquiry; two worlds meet along a blurred line that allows for an exchange between the two. What happens where the black encounters the blue?

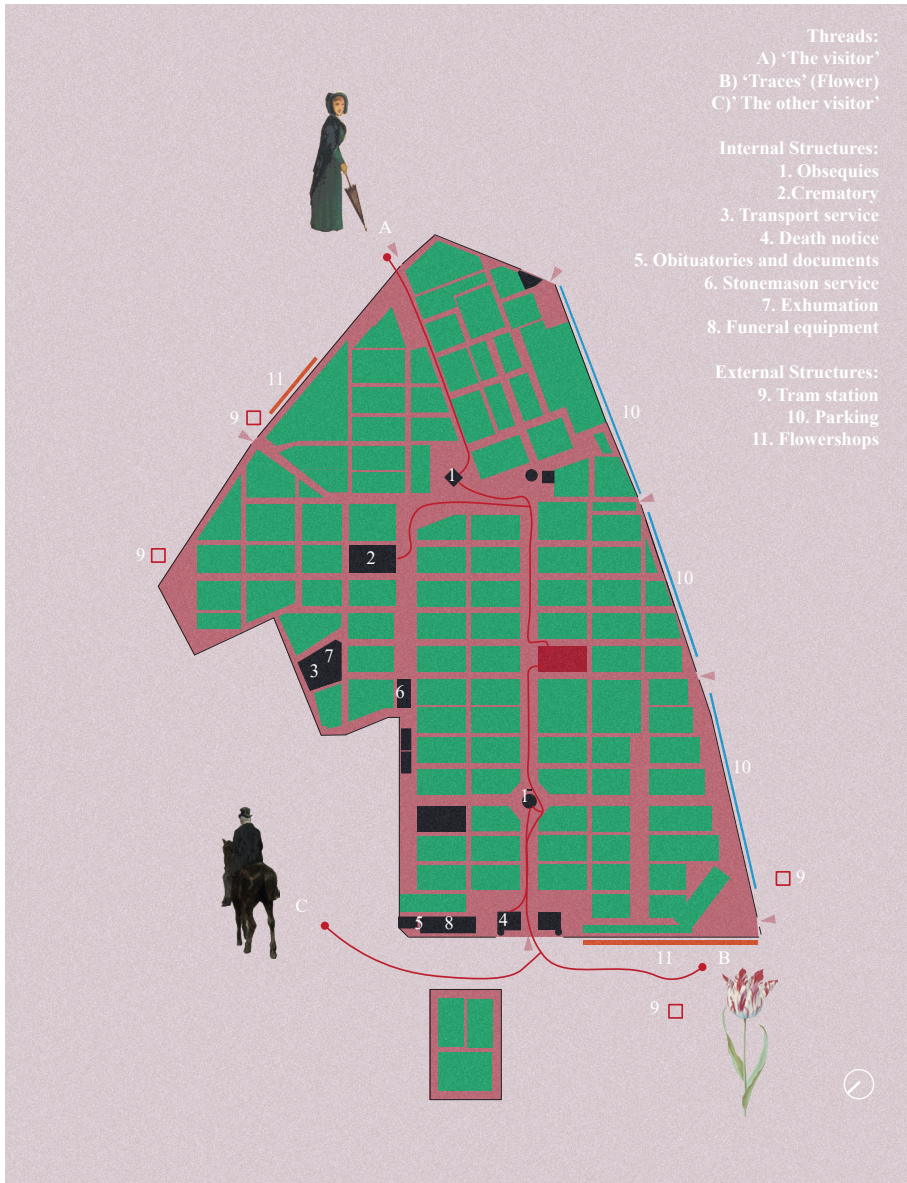


Fig. 5 Infrastructure plan New Cemetery, Belgrade: Visitors using internal/external structures and intertwine (threads).

RE-PRESENTATION

*The cemetery giving physical presence to something absent
- The Monument -*

In his Idea of the Via Appia, Gian Battista Piranesi portrays a surreal space crowded with monuments that accumulate on top of each other; overwhelming traces of the past surround and surveil the small human figures that walk along the street. The actual via Appia, perhaps less dramatic than Piranesi's upscaled vision, was indeed populated by funerary monuments and prestigious homes. In the ancient Rome the proximity to tombs was considered an inspiration for everyday life, so that public space was permeated with presences from the past. This way, memory was kept vivid, as tombs along busy roads would be never neglected and passers-by would pay homage to otherwise forgotten monuments.

Piranesi, G. B. (1756).
Via Appia.



The duty of giving matter to Belgrade's past is largely entrusted to the New Cemetery which, despite having been built out of the city walls, is now an enclave in the urban fabric. Within the cemetery the opposite terms of seeming dichotomies meet and the cemetery itself portrays such tension diagrammatically. The landscape of the cemetery, the ground we walk on, is the surface that splits and unites past and present, the dead and the living. When visiting its territory, the object of the visit, be it a loved person who passed away, an ideal, an event, concealed to our view, is absent, past. Instead, before us stands a representation of it, the aim of which is to give matter to the absence and make it present before us. The past, the hidden, becomes visible and present as death and life meet in the cemetery through a logic of re-presentation. The etymology of representation offers a chance to go back to its root: re - present, i.e. to give presence to something absent, to make something that is bound to another time present.

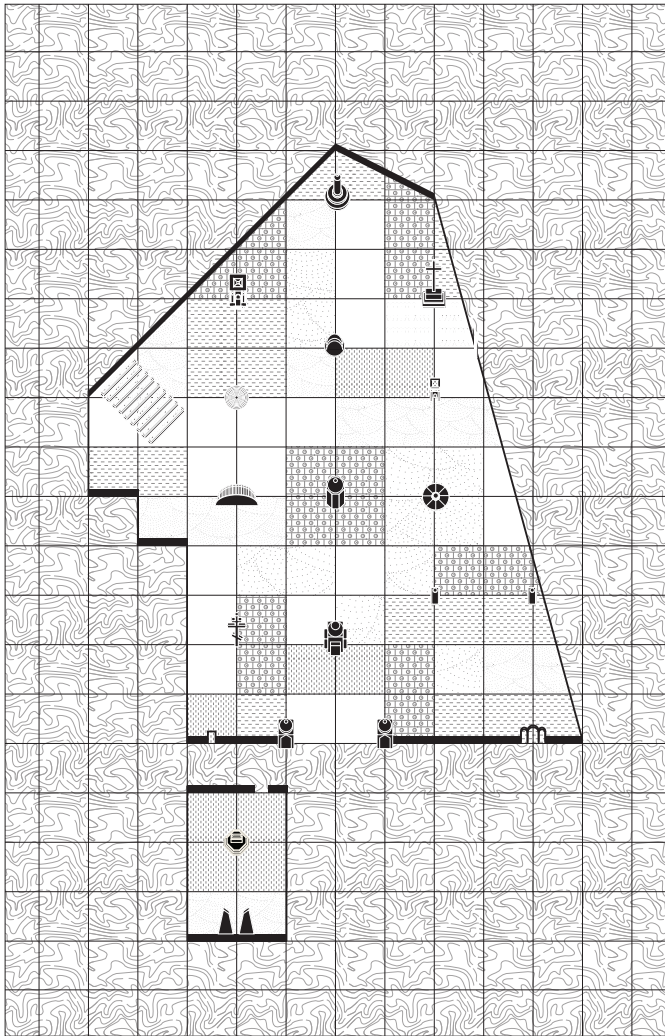
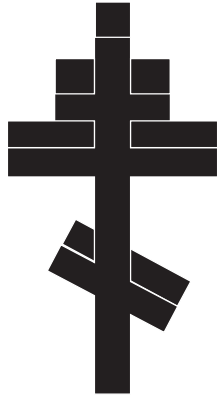


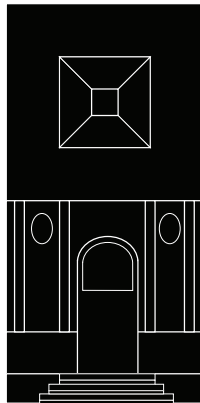
Fig. 6
The New Cemetery,
landscape of
monuments



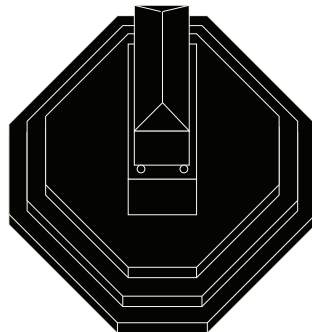
7. Russian Orthodox Cross found in the Russian Necropolis



8. Tomb in the Sephardic Jewish Cemetery. The star and the earth are present features



9. Iverskaya Chapel, built after the destruction of the original chapel in Moscow in 1929



10. Tomb for thirteen Rabbis and professors, once buried in the old Palilula Cemetery

The gear that allows such mechanism to operate is the monument.

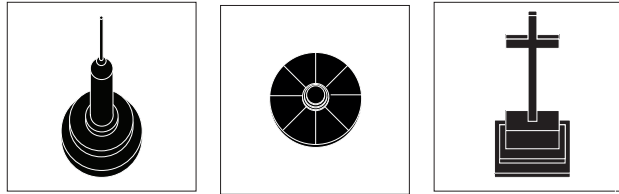
The monument offers the present a chance to look into the past and learn about possible futures. Its double nature is rooted in the etymology of the word that roots back to *monere*, Latin verb that means 'to remember' as well as 'to warn'. The potential meaningfulness of the monument is realised when visitors are able to recognise a value in the built form. Heavy and eternal, monuments are shaped to stand against time: they represent of past events and people and support present identities by preserving a trace of their roots.

The New Cemetery is populated by monuments that communicate according to different semantics. Descriptive monuments - as the Russian Ossuary - are figurative representations of the events and characters they celebrate. Symbolic monuments - as the Crosses in the Italian cemetery - relate to the language of a specific group, or religion. Abstract monuments are free from group-specific semantics and open up to subjective appropriation. These languages can interweave into a single object as the Memorial to victims of Fascism in the Jewish Sephardic Cemetery, which is shaped as an open form and marked with symbols from the Jewish tradition.

Within the wall of the cemetery, individual and collective monuments are ordered, organised, connected and separated. The land is divided in plots and sectors, pathways and alleys, gates and squares define relations and hierarchies into a city-like territory. Within the wall, the silent landscape of the cemetery offers eloquent narratives about the past of the city.

**Figs. 7-10 + next page:
Monuments in the
New Cemetery**

Figs. A-C
Collective Monu-
ments in the Russian
Necropolis, Italian
Military Cemetery and
Alley of Meritorous
Citizens.

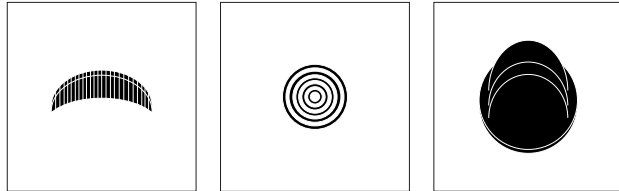


A

B

C

Figs. D-E
Landscape elements in
the Alley of Meritorous
Citizens

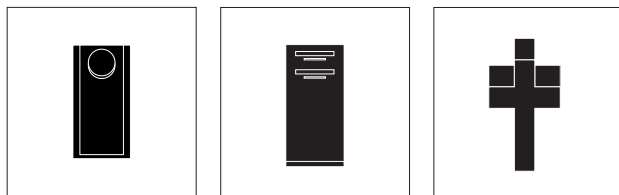


D

E

F

Figs. G-I
Individual funerary
monuments in the
Alley of Meritorous
Citizens, the Sephardic
Jewish Cemetery and
the Italian Military
Cemetery



G

H

I

Figs. 11-14, next page.
Documentation of
models.



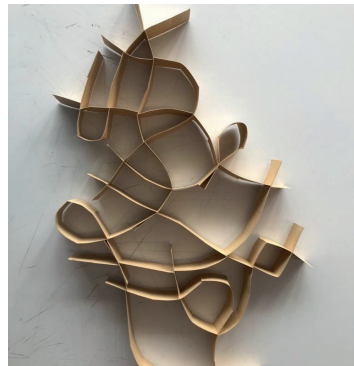
11. Abstract model of B. Bogdanovic Memorial in the Jewish Part of the New Cemetery



12. Flowers and Stones...



13. Collection of figures



14. Sketch model, internal structure in the New Cemetery

AFFECTION

The life of the city performing ordinary gestures
- Flower Kiosk -

Carnevale, F. (1467).
The birth of the virgin.



Funerary monuments charged with memories, contrast with the idea of what we call ‘‘everyday life’’. In *The birth of the virgin*, Fra Carnevale illustrates a new born baby coming to the world in imposing architectural setting. Our eyes strive to observe the building, decorated with reliefs derived from Roman sculpture. However, when shifting our viewpoint from the monumental to the human scale, the depiction the virgin being bathed by midwives has the character of a genre scene and is embroidered with engaging details from everyday life. By changing our viewpoint and looking to the cemetery from a human perspective, we see a thick wall separating the cemetery from the city. Exploring the cemetery from street level, we see several flower kiosks hiding the wall of the cemetery. Funerary monuments coming from the cemetery are visible behind the fragile, temporary kiosks. The temporality of the kiosks is made visible by the light wooden constructions, covered by thin corrugated metal sheet as roofs. In daytime, boxes full of flowers decorate the kiosks’ façades. Despite their close relation with the cemetery, their fragility and temporality give ordinary city life the opportunity for casual encounter. Although, when the night comes, the flower boxes are stored and the kiosk turns into a silent spot along the street. By covering the thick, robust wall with light, fragile materials, the kiosks seem to act as thresholds connecting the city and the cemetery. A pink flower kiosk catches our eyes. The flower kiosk, performing light, fragile and temporary, maintains the everyday life of the city.

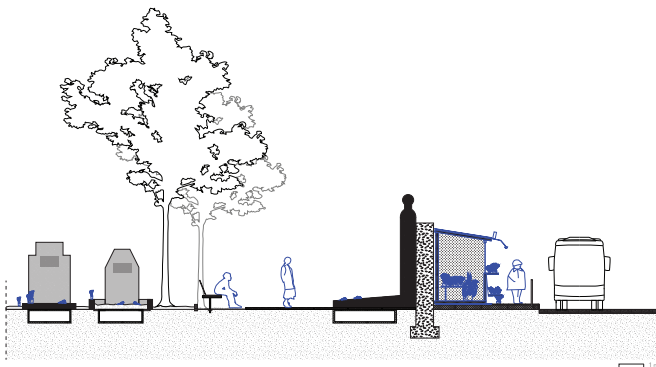


Fig. 15
Section Flower Kiosk

People pass by, buy flowers, enter the cemetery and give own meaning to places by laying the transient flowers they bring from the outside. ‘To pour our freshest odors o’er the dead’². Referring to Hannah Flagg Gould’s Poem, we tend to offer small objects, to appropriate and give life to formal spaces in the cemetery.

In-between eternal and temporary, architectural objects speak to us through representation. We, the subjects, respond through affection to those objects. Affection, stems from the old Latin word ‘Afficere’, ‘do something to’ or ‘act on’. The act of buying a flower and laying it onto a gravestone, allow us to appropriate the space. With no one listening to the stories, a cemetery would be a silent place. By having no one to affect, the New Cemetery would lack its purpose.

Fig. 16 + 17
Day scenario:
someone comes by
for a little chat



*16. The street, the kiosk,
the wall, the New Cemetery*



*17. In-between the wall of the
cemetery and the busy street*



*18. The street, the kiosk,
the wall, the New Cemetery*



*19. At night the flowers are
stored in the kiosk*

Fig. 18 + 19
**The Flower kiosk closed for
the night**

Fig. 20 + 21
Everyday life flows
by the kiosk



20. Spotted from the tram



21. On a windy day



22. *A little chat in the morning*



23. *Waiting for closing time*

Fig. 22 + 23
A day at the pink
flower kiosk

FLOWERS AND STONES

How the two worlds touch

Through the study of the two sides of the dichotomy, one can conclude that, without the visitors the New Cemetery is useless. Imagining representation and affection as materialised matters, flowers and stone seem to be a clear image. Flowers, light, fragile and temporary. Stones, in the opposite, cold, heavy and enduring. The thresholds between the two worlds lay in the moment of touch between them. The city affects the cemetery by performing gestures from the living world within its monumental scenery.

Such gestures range from ritualised to intuitive (eg. leaving a rose/ leaving a cigarette), from collective to individual, from formal to intimate (eg. minute of silence/pray) and from ephemeral to resilient. The two terms of the seeming dichotomy come together in the moment of touch and the opposites meet through actions of love.

The Old Greek word for love is *agape*, which translates as ‚an act of charity‘, *Caritas*, more than ‚love‘ as originated in the Latin *amor*. Gestures describe an act of care and leave a trace for others. When a visitor leaves a trace it becomes visible for others beyond his visit. By leaving a trace, the action makes human relations visible.

Alberto Pérez-Gómez states in ‚Built upon love‘ that ‚modern aesthetic rituals and aesthetic function are often understood as separated attributes.‘ He describes the relation between architecture and ritual as intertwined since the aesthetic quality of architecture stems from its ritual function: ‚Architecture is a poetic representation of significant human action.‘⁴⁵ Through its architecture, the cemetery opens up a scenery for a multitude of actions. Some anticipated, some intuitive.

5. Perez-Gomez, A.
(2018). Built upon
love. Architectural
longing after ethics and
aesthetics. MIT press.
p.129

Michelangelo di
Buonarroti. (1512)
The Creation of Adam.

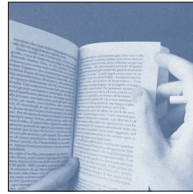




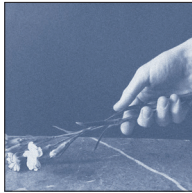
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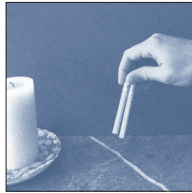
B



C



D



E



F

**Figs. A-I
'Gestures of Care'**



G



H



I

Figs. A-I
'Gestures of Care.'
Descriptive text

<p><i>The gatekeeper of the Italian Military cemetery, Mrs Smilja, cares for the roses in the graveyard. There is one rose shrub per each cross, aligned in rows inbetween narrow pathways and linear bushes. She notes that the strong heat as well as the heavy rain damage the flowers.</i></p>	<p><i>A silent moment to remember the greats of the First World War. Wreaths were laid for the last resting places. Holding one's own hands, as a sign of respect.</i></p>	<p><i>Taking a rest on a bench during a walk, while enjoying the environment in it's peacefulness. „I said to my ‚Kuma‘ (my Serbian godmother), that I have never spent so much time in a graveyard as I do in Serbia. She laughed, but it is such a beautiful place‘.</i></p>
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A

B

C

<p><i>Flowers, being fragile and organic, are layed on the gravestone by loved ones to give own meaning to the place. The heavy, stone material now contains a light lively material to take care of. In the meantime the flowers are keeping trace of the visitors who left a trace behind.</i></p>	<p><i>“It was a common ritual of my childhood to go to Novo Groblje with my grandma and mom, to pay respects to most of my maternal ancestors, and continue the family tradition of having “chats” we with them to update them about the familial goings-on and leave a cigarette or two for the deceased smokers’.”</i></p>	<p><i>“Dragan gave me the heads up about an unusual custom before we walked through Novo Groblje to visit the grave. So, I wasn't surprised to see a couple sitting on the marble slab of their relative's grave having a light meal. A table cloth was placed on the gravestone and ručak (lunch) was laid out!”</i></p>
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D

E

F

Figs. 24-27
Traces of gestures

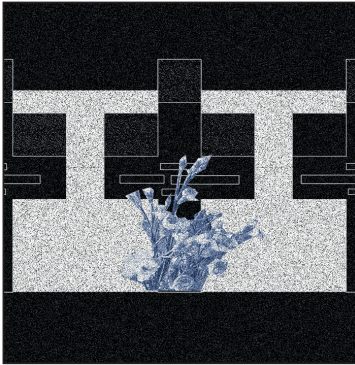
<p><i>Jewish traditions don't include the gesture of laying flowers on tombstones, the reason is uncertain, perhaps linked to the decay of flowers and the will to avoid embellishments. Traditionally visitors to a cemetery lay small pebbles on the stones, which they pick from the ground. The pebbles sometimes accumulate on the stone, keeping trace of the visitors who left a trace behind.</i></p>	<p><i>„Zadušnice' (the day of prayers for the souls) occurs four times a year in Serbia. It is customary for Serbs to visit their loved ones' graves, light a candle and say a prayer. One of our relatives is buried in Novo Groblje, so we decided to pay our respects..</i></p>	<p><i>Some flowers are bundled and placed in vases. The guard-keeper will take care for all of them in order to contain life and beauty around the cemetery.</i></p>
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G

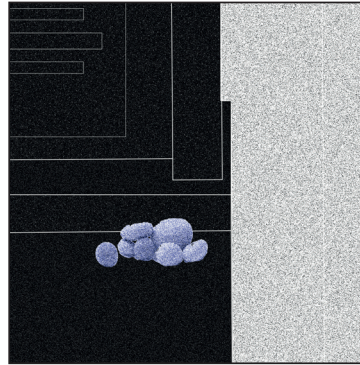
H

I

Individuum

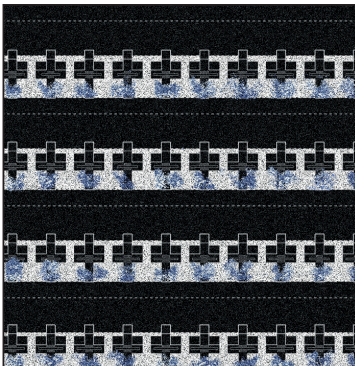


24. Mrs Smilia cares for the roses in the Italian Military cemetery. One rose shrub in front of each cross.

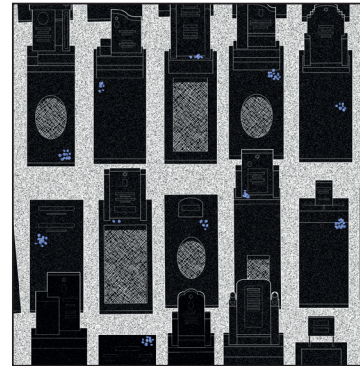


26. As it's tradition in Jewish cemeteries, someone left small pebbles on the levigated surface of a tomb stone.

Community



25. Her attention is visible in the whole plot. Every tomb bears a trace of the carer she takes everyday.



27. Small piles of pebbles and stones reveal the passing by of a whole community that visits its graveyard.

CONCLUSION

The city through the cemetery; Reconsidering the dichotomy

„When successful, architecture allows for participation in meaningful action, conveying to the participant an understanding of his or her place in the world. In other words, it opens up a clearing for the individual’s experience of purpose through participation in cultural institutions“.⁶

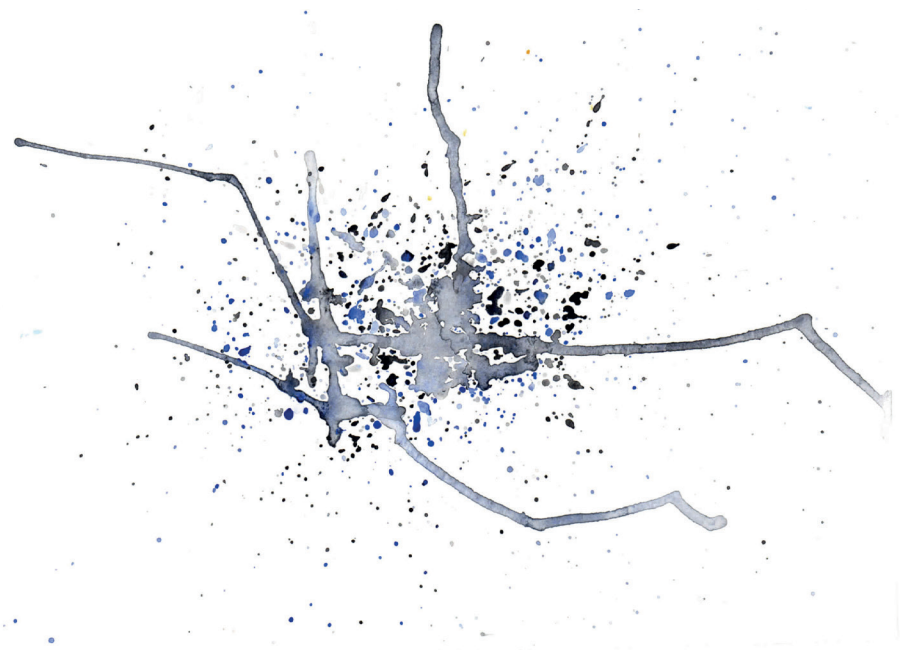
Alberto Pérez-Gómez, ‘Built upon Love’

6. Perez-Gomez, A. (2018). Built upon love. Architectural longing after ethics and aesthetics. MIT press.

A walled presence in the urban fabric, a scenery for human action. Without the city interacting with it, the New Cemetery would lose its purpose. In this light, the cemetery doesn’t act as a city in the city. It rather dialogues with Belgrade, allowing visitors to appropriate its space by affecting it and, in turn, being affected.

Memory is elaborated through ordinary acts from everyday life; collective and intimate gestures keep past characters and events alive. The simple action of touching the objects nurtures feelings of proximity, to the world of absences that the cemetery intends to eternize.

Visitors affect the stone landscape by leaving traces behind; flowers in a pot, cigarettes on a grave, small stones placed on top of each other. Seen as a whole, the traces turn into a fragile landscape of care and love. By overlapping to the cold landscape of the cemetery, such landscape is visible for others to see and offers a collective frame for individual action.

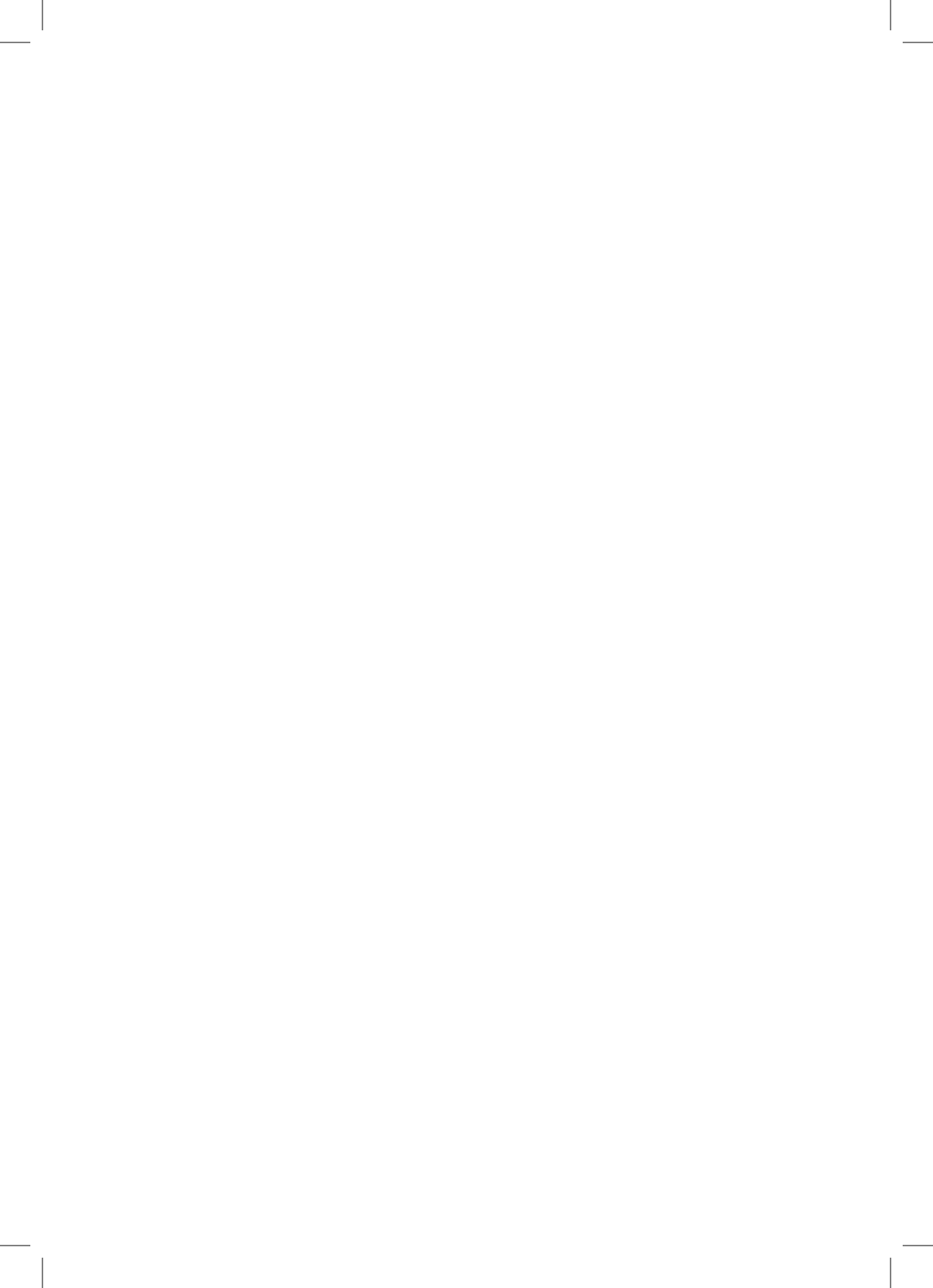


Belgrade and the New Cemetery are interwoven. So tight, you almost oversee.

Long threads span over the city and beyond. Small knots are tied together with care and form a discrete net throughout the city.

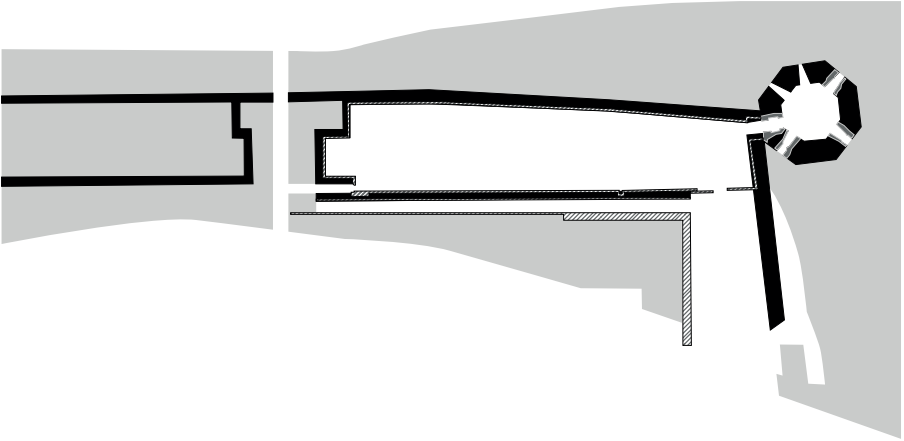
Silent yet visible, such thin web forms a loving motif into the stone tapestry of the cemetery. Delicate yet consistent, each thread leaves a trace into the fabric, renewing the vivid tones of the tapestry day by day.

Fig 28.
Aquarell: Abstracted version of the interwoven Belgrade and New Cemetery



Andrea Baulil
Jan Panhuis

NEBOJŠA TOWER



N

NEBOJŠA TOWER

History's witness

Nebojša Tower is one of the oldest towers located on the northern rampart of Kalemegdan fortress facing the Danube river, with a history that can be traced back to the Hungarian rule of Belgrade in the 15th century.¹ The tower and its architecture are marked by its many uses, from fortification bastion to dungeon, and ultimately as a museum and monument to the Greek revolutionary and poet, Rigas Feraios, who was executed on the premises during Turkish rule.¹ The tower as it now stands is already in its second fruition - its predecessor was burnt in 1521 and thus rebuilt.² However the tower has also faced the test of time and been further repaired over time. Originally referred to as the “white tower”, it is said to be the only remaining medieval construction among the buildings of the fortress.

For this reason, the starting point of this investigation was to map out the material traces of time on the facade of this building. These are placed in relation to the means of production and construction methods to determine and correlate these to local and global geopolitics of space. For repairs made to the structure in the early 20th century, brick was used in order to contrast with the original limestone, thus showing due reverence to its heritage. On the other hand these techniques can also be explained by its riverside positioning, allowing for much of the brick laying to happen in its vicinity. Finally, presumably in an effort to make Greco-Serbo reparations, the most recent expansion was carried out in in-situ concrete paneling. With these subsequent repairs we observe the refining and reducing of the material grain, a choice which emphasizes the contrast – both texturally and in terms of means of production – between the old and the new.

1. Website:
kulanebojsa.rs

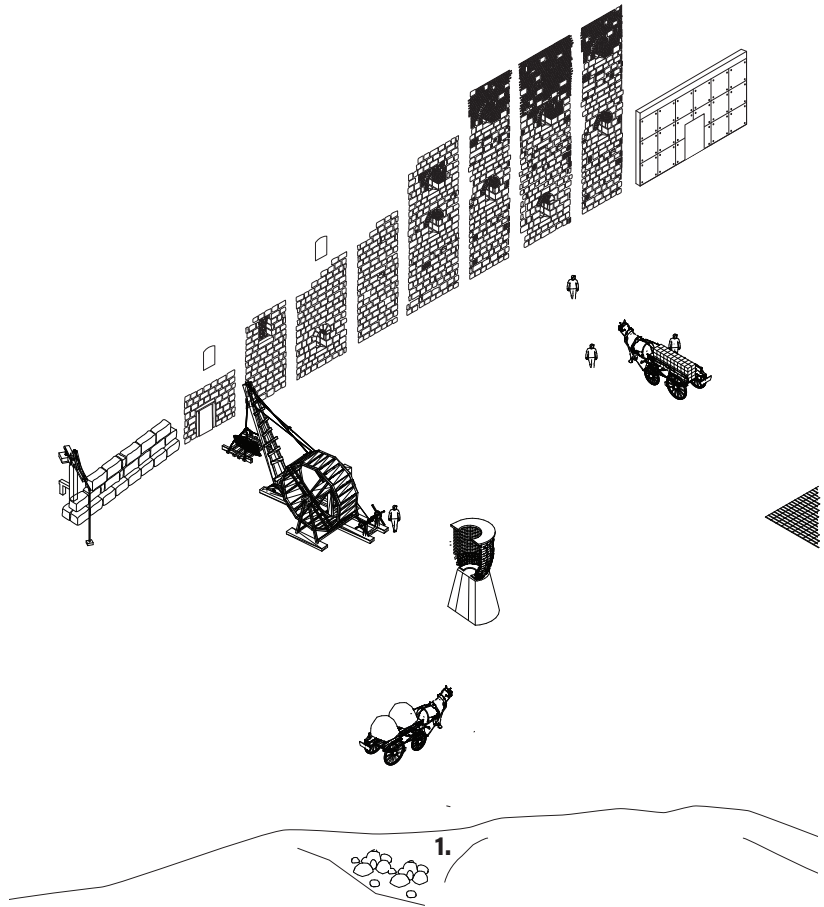
2. Popović, M. (2006).
Beogradska tvrđava
(The Fortress of
Belgrade), (Zemun:
Birograf)

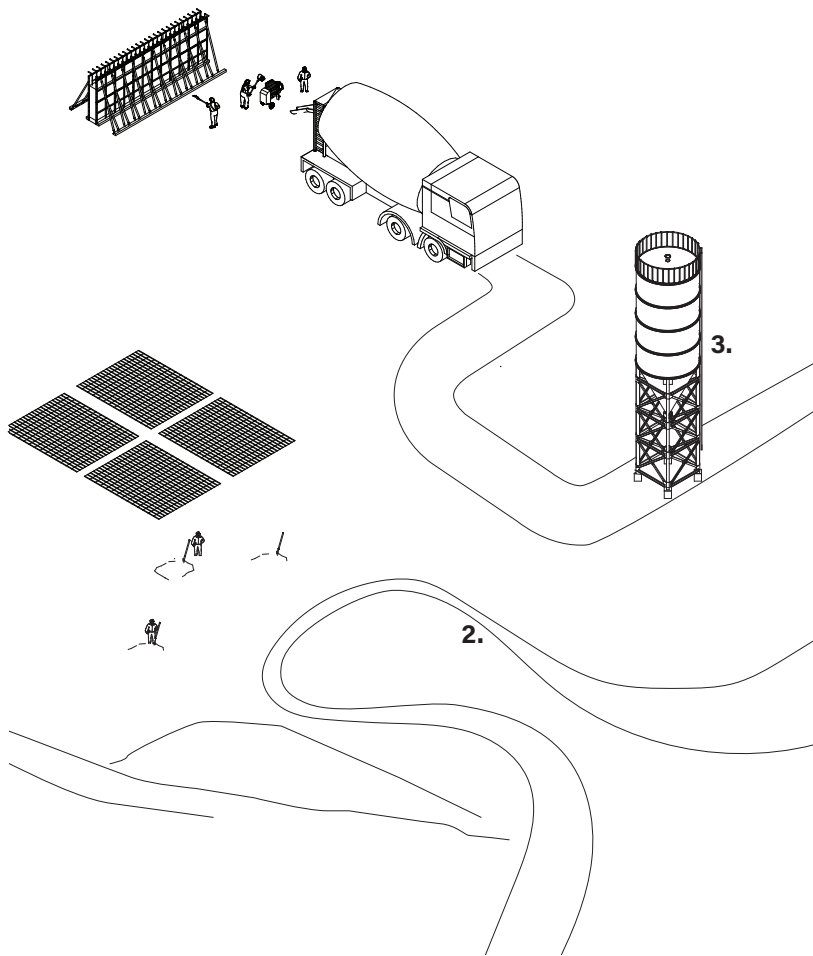
1. Lime is a prevalent stonetype in most of Eastern Europe. The lime is used in a two fold manner. First, blocks of lime are carved out of the mine. The rubble from this process is also collected.

The Blocks are transported to the fortress by horse. The rubble is heated in a kiln to create a type of mortar called quicklime. Wooden cranes are used to assemble the limebricks onto the fortification. The seams are filled with quicklime to unite the wall.

2. Workmen dig a small hole in the clay and turn in the water, straw is worked into the mud by stamping it with bare feet. After the mud is tramped to the proper degree of firmness it is shoveled into open moulds and packed down. Then the coulds are lifted off and the bricks are allowed to bake in the sun until thoroughly dry.

The bricks are transported to the site by horse and carriage. Bricks were widely used to restore the deteriorated and damaged parts in the fortification.





3. Cement is manufactured by heating a precise mixture of finely ground limestone, clay and sand in a rotating kiln at temperatures reaching 1450°C. This results in the production of cement clinker, an intermediate product in the manufacture of cement. Transported to the site by a continuously rotating cement truck. Poured and cast in place into a wooden formwork wherein lies a steel wiring. The scaffoldings are removed after drying.

Fig. 1 Bastion

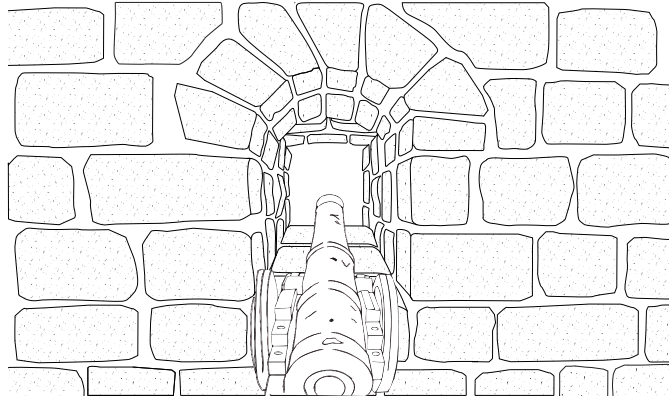


Fig. 2 Dungeon

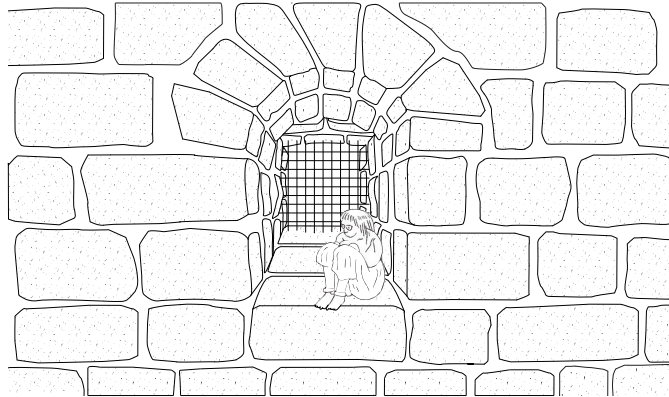
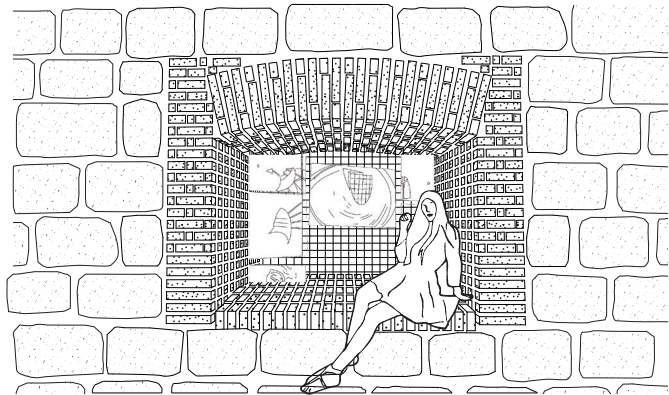


Fig. 3 Exhibition



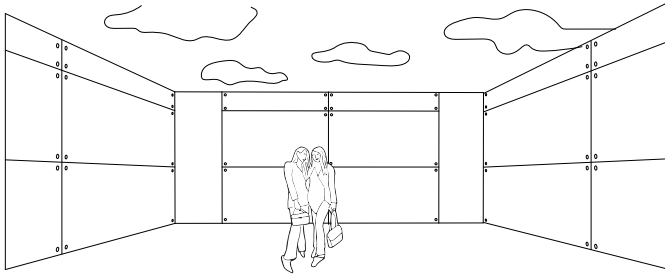


Fig. 4 A new window to the sky

The form and articulation of the windows themselves also tell the tale of time: originally dedicated to the use of artillery, to spot and fend off any potential threat, these apertures and their subsequent uses are symbolic of the psychology of space; the influence that architecture has on its audience (figs. 1-4). As Juhani Pallasmaa put it in *The Eyes of the Skin*:

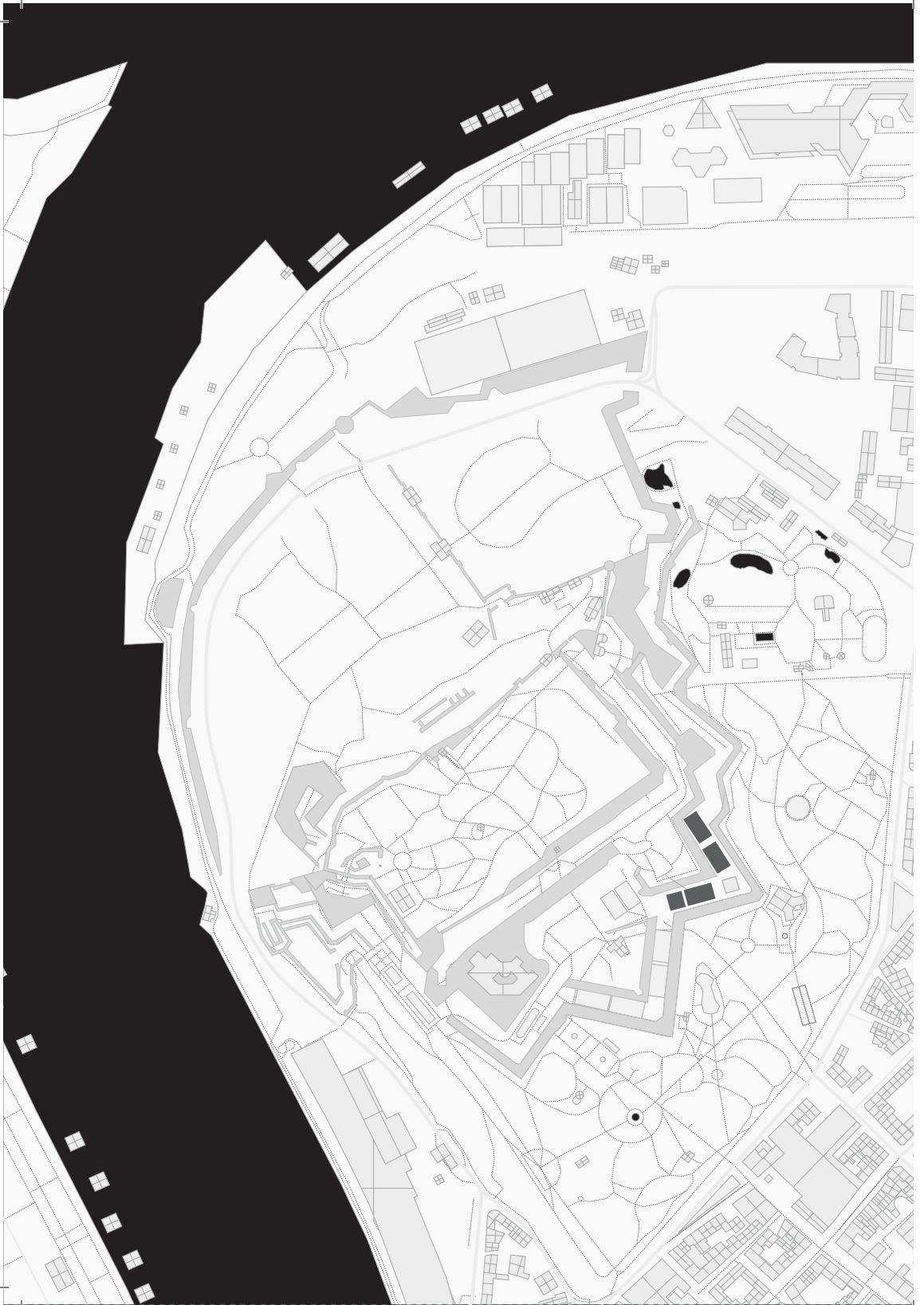
“[t]he tactile sense connects us with time and tradition: through impressions of touch we shake the hands of countless generations.”³ In this case the tactility of the architecture is heavily influenced on the one hand, by the choice of how to deal with its history as bastion and dungeon. On the other hand, these openings seemingly communicate opportunities of appropriation by exhibition visitors (fig. 3). There is additionally a contrasted textile and textural evolution of these materials also informs how users interact with this environment. Finally, the choice of execution for the recent tower expansion sets the tone on how to regard the controversial past of this building. A new “window” is the most substantial offering to its viewers, a moment to contemplate the structure and the sky - a role reversal of sorts where one can empathize with the experience of being seen from above.

3. Pallasmaa, J. (2005). *The Eyes of the Skin*, John Wiley & Sons.



*David van der Blonk
Linda Kronmüller*

KALEMEGDAN FORTRESS



ENCOUNTER OR ENCLOSURE?

Potentiality of the Kalemegdan Fortress

Kalemegdan Fortress is the core and the oldest section of the urban area of Belgrade¹. For centuries, the city population was concentrated only within the walls of the fortress, and thus the history of the fortress, until most recent times, reflects the history of Belgrade itself. The site consists of two general areas. Kalemegdan Park, developed in the area that once was the town field, and Belgrade Fortress itself. Together they represent a cultural monument of exceptional importance (from 1979 onwards) and constitute the area where various sport, cultural and arts events take place¹. Interestingly, this area which was once walled off and used for defensive purposes, now turns out to be a space for gathering as well. The moat is used for attraction parks, festivals and sport purposes. In terms of sport - basketball specifically - the fortress has played a leading role.

At the end of WWII, the Red Star sports society was founded and built their club grounds inside the walls of Kalemegdan.² Later the same year, the Partizan sports society was born inside the fortress walls, separated only by a small fence. The games between Red Star and Partizan always drew big crowds (fig. 1) that filled stands carved out the fortress walls. By the late 1940s and early 1950s, Kalemegdan had turned into a special place. The idea of a 'Night of the Stars', basketball and live music, attracted the elites of the city. Kalemegdan became a chic place that everybody had to visit². So what does this tell us about the potentiality of the Fortress and especially the wall? What are the possibilities of using the built environment in ways beyond defense?

1. Belgrade Fortress.
(n.d.).



Fig. 1 Basketball Game at Kalemegdan (2018)

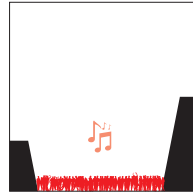
2. Stankovic, V. (2018), Kalemegdan, cradle of Serbian basketball



Concerts and festivals



Location

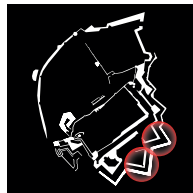


Abstraction

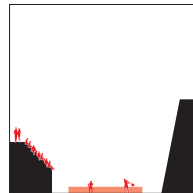
Events



Basketball and tennis



Location

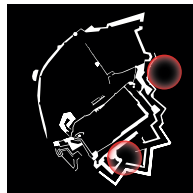


Abstraction

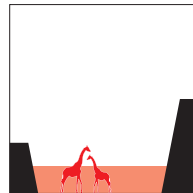
Sports



Zoo and dinosaur park



Location

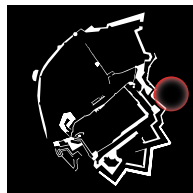


Abstraction

Attractions



Parking space



Location



Abstraction

Infrastructure



Fig. 3 + Fig. 4
"Sports-moat with
basketballfields and
sports elements."

Fig. 3
Basketball court with
stone tribune, flexible
wooden tribune and
baskets.

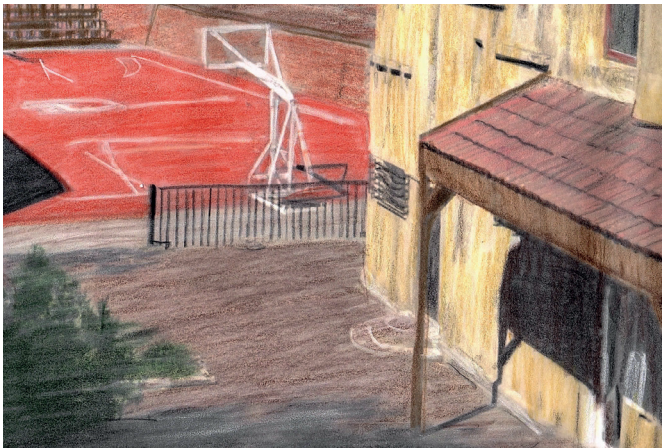


Fig. 4
Clubhouse
Basketballclub "Red
Star Belgrade"

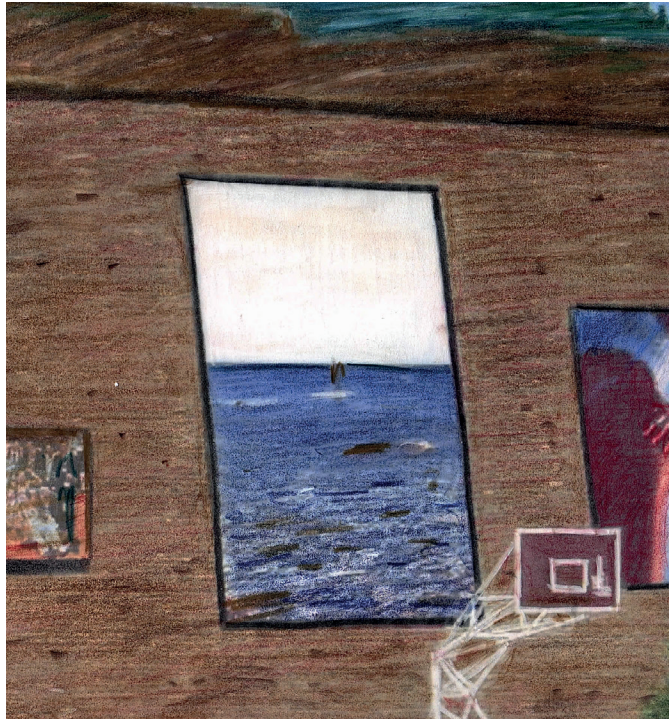


Fig. 5
Historic wall with Sports
advertisement

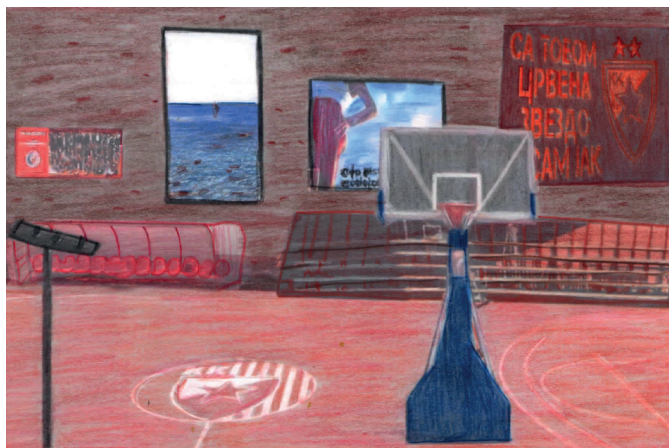


Fig. 6
Conclusion of Figs. 3-5:
Collection "Furniture"
for the moat

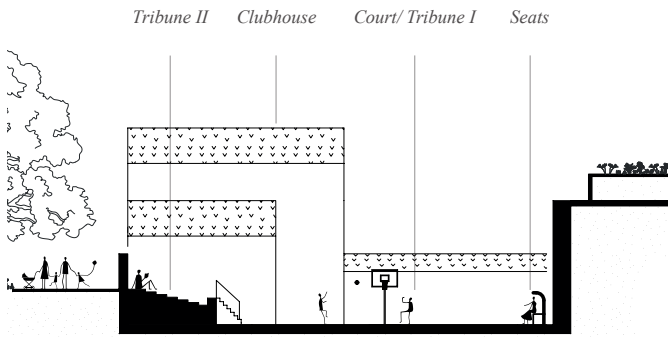


Fig. 7
Section basketball-
moat" with "furniture"
and zones

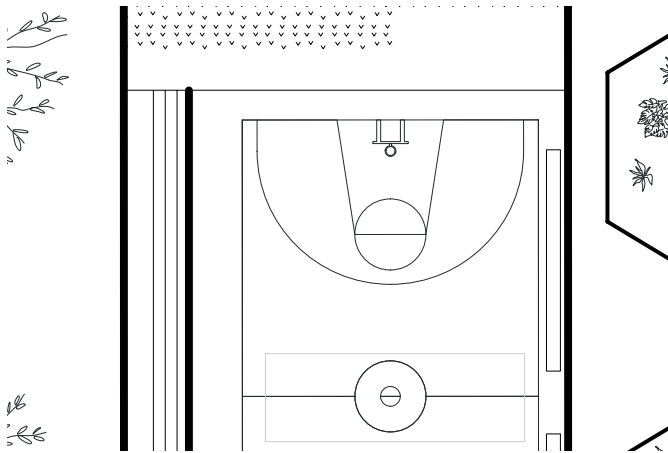


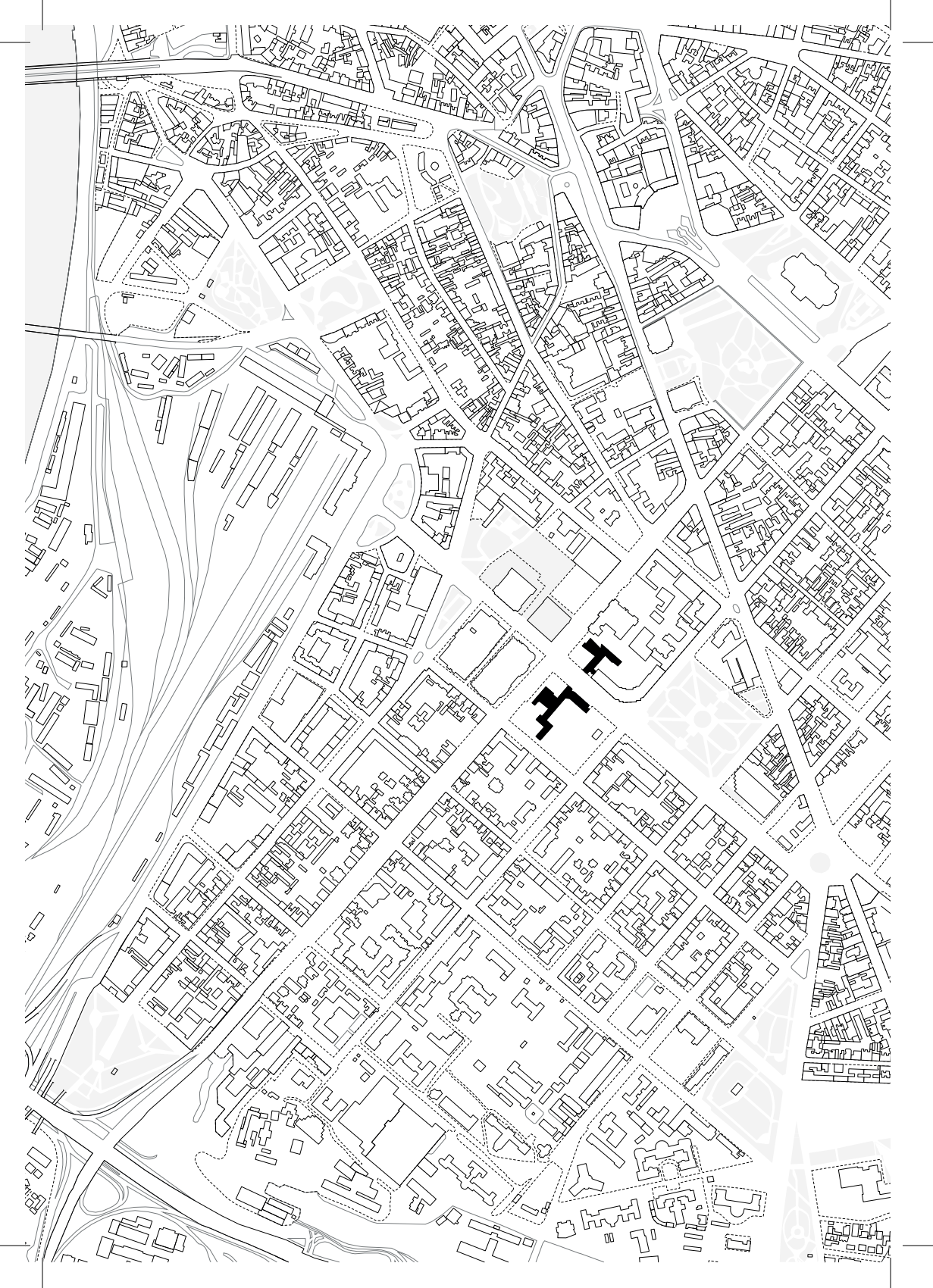
Fig. 8
Top view basketball-
moat with field and
tribunes

The outer walls and moats changed from their initial function as an element of defense (*enclosure*) in the past to an area that celebrates life and offers the possibility for hosting different programs (*encounter*); A kind of 'public living-room' for the citizens of Belgrade which they can individualize with 'furniture'. In doing so, the moats do not only function as touristic heritage, but also provide a 'democratic', communicative and interactive space for all kind of groups in the city.



Kelly Lai
Susanne van de Pol

GENERAL STAFF BUILDING



GENERALŠTAB COMPLEX

Through its “enduringness of materials”, urban space is a mediator between events and memory.¹

**1. Ricoeur, P. (2004).
Memory, History,
Forgetting.**

The Generalštab complex was targeted by NATO bombing in 1999. The building was considered the crowning jewel of Belgrade’s modern architecture. The NATO bombing turned the Generalštab complex into one of Belgrade’s ruined urban spaces. Recent past of the Yugoslav wars changed the relationship between urban space and the citizens memorial engagements. If we see urban space as a mnemonic device, architecture acts in the process of shaping memory. Understanding urban space as mediator between events and memory, how did the bombing of 1999 change Generalštab’s language towards the city, in material and form?

The site of Generalštab is not only linked to events happened in 1999. The meaning of the ruins is thus multi-layered, referring to different visions of the past, associated with different political visions. In 1953, Nikola Dobrovic won the competition for The Generalstab complex, which was finished in 1964. He designed the complex on the intersection of Nmanjina Street and Kneza Milosa, two major avenues in central Belgrade. The building was divided into two, the Military Headquarters, building ‘A’, on Nemanjina street and the larger building on the other side as Federal Ministry of Defense, building ‘B’.

After the bombing in 1999, many citizens, politicians and architects debated about the future of Generalstab. After some speculations and debate about the site to be open for developers, Government decided to put on the list for protected monuments. Although, the building is currently undergoing further destruction for alleged structural stability reasons, the extent of overall demolition including questions to do with re-construction have still not been determined.²

**Fig. 1
Location of the
Generalstab complex in
central Belgrade.**

**2. Nikolina, B. (2017).
Belgrade (de)void of
identity: Politics of time,
politics of control and
politics of difference.**

Before 1999 / NATO
Bombing

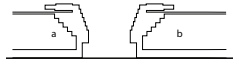
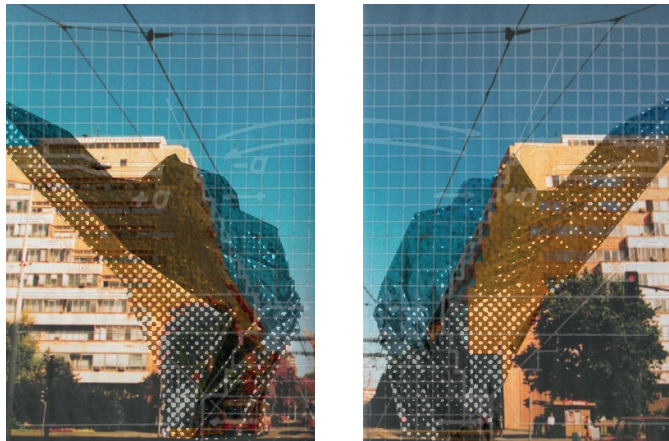


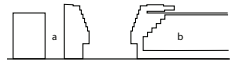
Fig. 2
The image shows the
design concepts of the
Generalstab building: a
symbol of the battle of
Sutjeska, and the void.



Name: symbol of Sutjeska canyon and the void
Location: Nemanjina street

3. Bergson, H. (1911).
Creative evolution.
London: Macmillan.

Dobrovic utilized the event of Case Black, the battle of Sutjeska happened during 1943. By dividing the two buildings with street, he symbolized the canyon of Sutjeska river and gate of Belgrade. Dobrovic also referred to the French philosopher, Henri Bergson's (1911).³ Bergson claimed that we tend to see an absence -void- where we do not find what we may expect or want. Instead of being an isolated static object, Dobrovic attempted to create an illusion of motion in dynamic visual relationships between each other.



After 1999 / NATO Bombing

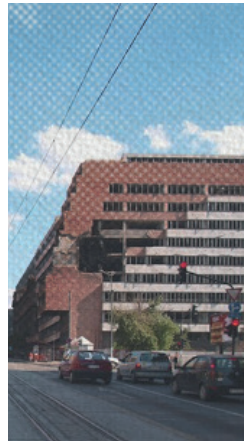
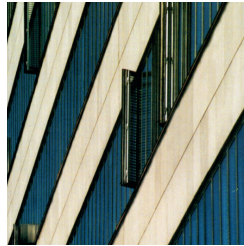


Fig. 3
In 2015, the city reconstructed the Generalstab building, took down the middle part of building A, created a nother void to be remembered.

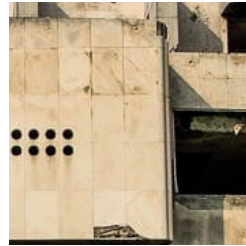
Name: 'which void to remember?'
Location: Nemanjina street

Dobrovic emptied the space in between, transforming it into a celebration of the spatial void. After 1999 the questions arised, do we reconstruct, deconstruct, demolish? In 2015 it was determined to take down the middle part of building A and do a restorative reconstruction according to the original design. By taking down the middle part, a new void was added to the one Dobrovic designed.² The dilemma of many is about which void to identify with, which void to remember.

Smooth - light



4. Glass and ribbon window

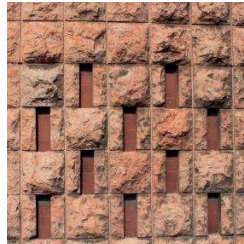


5. Marble tile



Rough - massive

Figs. 4-8
There are two different kinds of material used in the Generalstab building. And they can be divided into two categories - rough (massive) and smooth (light)



6. Red stone tile



7. Stone



8.

4. Bogdanović, J. (2003). Architect Nikola Dobrović—A Member of the Heroic Generation.

The contrasting use of materials turned the architecture into a tectonic clashes, which represents the complex metaphor of the Yugoslavia (figs. 4-8). With stone rising from the ground, Dobrovic wanted to represent people's uprising, but still connecting with the soil and its roots. The red stone denoted the massive bearing structure, white marble is the light supported membrane (fig. 9).⁴

closed skin



9. Clashes in materials

open skin



10. Attractive forces disturbed

Fig. 9 + 10
The membrane of the building before the bombing and after the bombing in 1999.

The bombing in 1999 crashed the flow of the two materials and symbolically disturbed the metaphoric language of the genesis of Yugoslavia (fig. 10). The smoothness of materials shifted in composition, at the same time materials from inside became visible. In material and time the movement of two political systems changed.

AN OPEN WOUND

Conclusion



Fig. 11
Vicente, F. Vanitas Y
Venus Prints on paper
Illustrated skin has
been open, flesh
and skeleton been
revealed.

Bombing of NATO in 1999 changed Generalštab's appearance. By crashing the structure of the building, the building's skin, always used as a tool to represent its symbolism, opens up. The skin does not cover any longer the stories inside the building. An open wound is created.

As outsiders, now we are able to see what is inside, in materialization, and in stories. The building has to rethink its function and therefore its symbolization. The former metaphorical language of two attractive forces is suddenly disturbed. The disturbed composition of materials changed the urban space, while in meantime the narratives beyond the building changed in time.

We wondered, what could be behind the empty spaces? What if the empty spaces would be filled with nature, offering a place for humans to act among other species within the urban fabric. Or the empty spaces could be filled with remembrance of former Belgrade, focusing on the national architecture. Or places for exploration, further development, an area as experimental public domain. What if the space was open for discovery about future possibilities for the city of Belgrade. These are a few assumptions on treating the open wound of the Generalštab. Is the void to be furtherly deconstructed for structural safety? Or could the open wound be a change for exploring Belgrade's possible futures?

closed skin

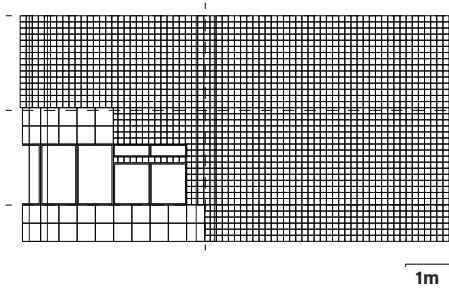


Fig. 12
A partial facade
technical drawing
before the bombing.

open skin

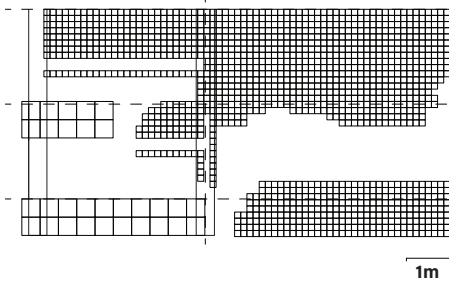


Fig. 13
A partial facade
technical drawing
after the bombing.

empty spaces

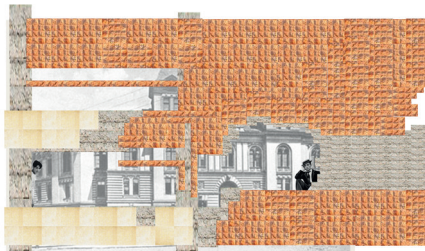


Fig. 14
Drawing shows the
empty spaces could be
filled with remembrance
of former Belgrade.

empty spaces

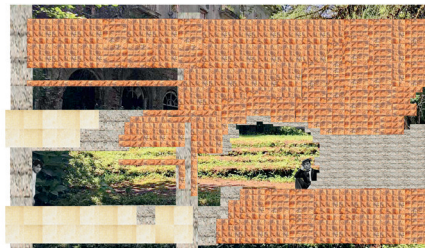


Fig. 15
Drawing shows the
empty spaces could
also be filled with
nature.



Andrea Ferrarini
Mohan Yuan

BELGRADE FAIR, HALL 1



NEW FAIR OF BELGRADE

RIVER SAVA

BELGRADE FAIR, HALL 1

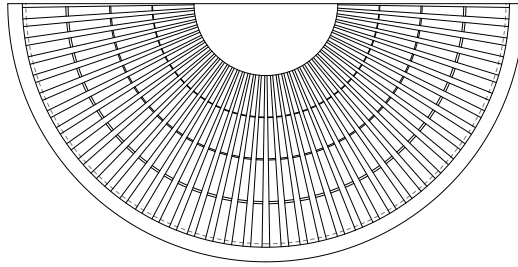
The unbearable lightness of prestressed concrete domes.

The project for the New Fair of Belgrade responded to the need for the 1950s Yugoslavia to build an exhibition venue that could represent the country in international fairs and events. As the foreign relations were intensified in post-war Yugoslavia, the old Fair of Belgrade, which had been used during the last years of the war as a concentration camp, could not serve a representative purpose anymore. The aim of a new fairground, was not limited to its programmatic features: its architecture was a tool for presenting the most cutting edge technology fostered by Yugoslavia, as well as the achievements of its progressive socialist society. Architects Vladeta Maksimović and Milorad Pantović won the competition for the New Fair master plan in the area of Bara Venecija, by the shore of Sava River, in 1953. Milorad Pantović then designed halls 1 2 and 3 with engineers Branko Žeželj and Milan Krstić. Later additions of buildings into the plot, led the fair to grow through time. The original master plan is still visible in the main axis of the plot as well as in the dominant concrete domes that hosted the original event, the international Fair of Technology in 1957. The three main halls are conceived as concrete domes realised in different techniques. Halls 2 and 3 are based on load bearing curved surfaces, while Hall 1 employs a pre-stressing concrete technology. This innovative technique patented by engineer Branko Žeželj was developed in the FMI institute in Belgrade. The main element of the hall is the pre-stressed concrete ring that bears 80 prefab concrete semi-arches which meet in the middle of the dome and connect to a cast-in-situ central slab. The 94 metres wide ring is lifted from the ground by eight V pillars and allows for an unprecedented span of the dome, reaching a diameter of 106 metres.

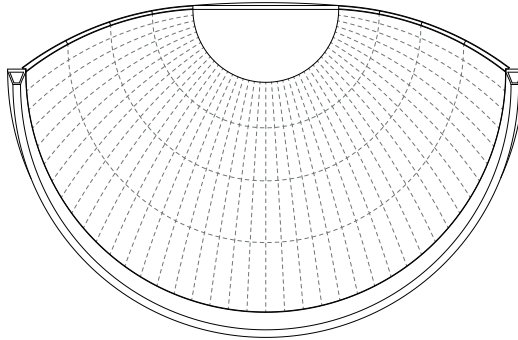
Fig. 1
IMS Institute. (n.d.). IMS
Institute.



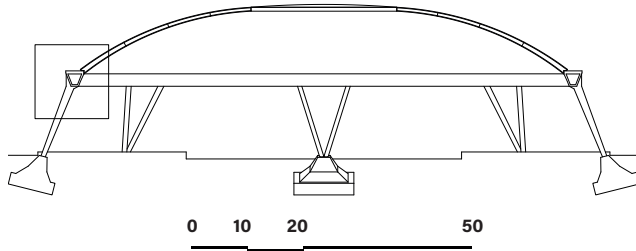
*Branko Žeželj in front on the
1:10 test model for Hall 1*



Plan of the dome



The dome over the ring



Section of the dome

A hundred years before the construction of Hall 1, Sir Joseph Paxton designed the Crystal Palace for the World Expo of 1851, in London. Since then, the typology of the exhibition hall challenges the current state of technology, questioning the possibilities of new materials and techniques from time to time. While the Crystal Palace solved every function of its program through a modular system of cast iron and glass, the Hall 1 employs different building techniques and expressions.

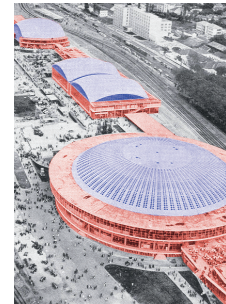
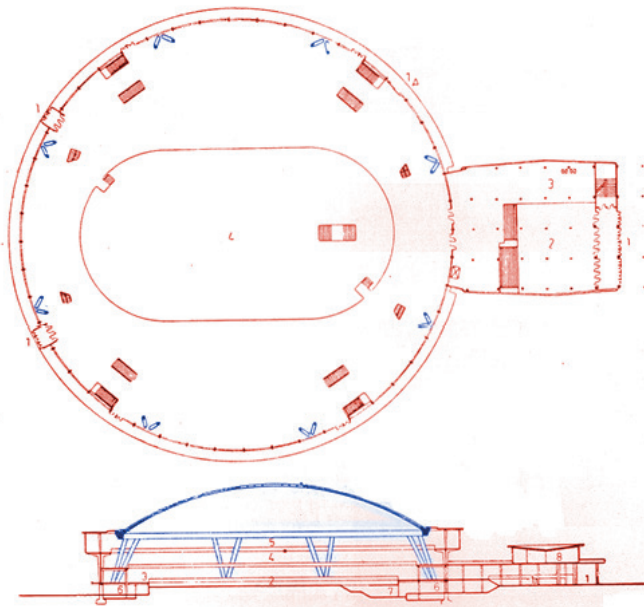


Fig. 2

Section of Hall 1

The most immediate distinction can be operated between the dome and the galleries of the hall. The first covers the exhibition space by spanning from side to side and celebrates the achievements of Yugoslavian research in structural engineering with its impressive scale. The galleries, on the other hand, present a more common column structure. By wrapping around the base of the dome, the galleries mediate between the dome and the human scaled demanded by the program, allowing for circulation and distribution. The duality of the structure is clear in the section of the building: the gallery connects to the impressive concrete ring that seemingly bears the sky over the dome. Throughout its life, the hall has hosted diverse programs, as the galleries and floor allowed for a certain degree of adaptation of the generous space. The dome sheltered with its presence the changing programs, always untouched by them.

Hall 1



3. The dome



4. The gallery

Trading Fair



5. Trading Fair

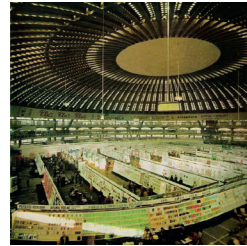


6. Trading Fair

Exhibition



7. Car Fair



8. Book Fair

Figs. 3-10
Belgrade Fair. (n.d.).
Retrieved December
13, 2020, from [http://
architectuul.com/
architecture/belgrade-
fair](http://architectuul.com/architecture/belgrade-fair)

Fig. 10
(n.d.). Retrieved
December 13,
2020, from [https://
www.bloomberg.
com/news/photo-
essays/2020-03-27/
the-political-week-in-
photos](https://www.bloomberg.com/news/photo-essays/2020-03-27/the-political-week-in-photos)

Other



9. Fashion Show



10. Emergency Hospital

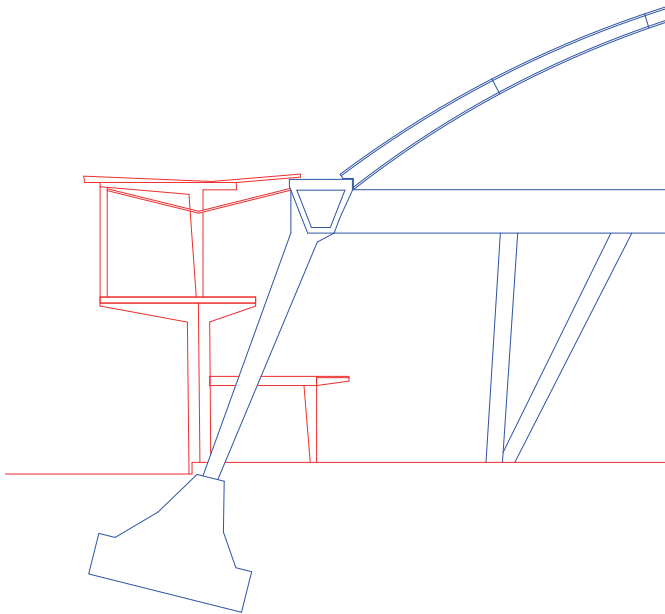


Fig. 11

Gallery Part Section

The lifted prestressed concrete ring seemingly detaches the dome from the every-day of the hall, pushing it into the sky. The ring is the central invention of Hall 1, the innovation that allows its incredible span. Despite the key tectonic role it plays, the designers kept a certain degree of mystique around this element. From the ground of the hall, the landings of the arches on the ring are hidden from view. From the outside, the slender galleries lean on the ring and somehow conceal its charged presence. The concrete of the ring is dematerialised by a white panelling that, on one hand, conceals the heroic structural effort of bearing the load of the dome; on the other hand, carries logos and commercial messages. In this way, the white line that defines the horizon of the hall turns the main structural element into a communication tool, a media-loop that dominates the events taking place below.



Fig. 12

Figs. 2, 11, 12
(underlayers)
Belgrade Fair. (n.d.).
Retrieved December
13, 2020, from [http://
architectuul.com/
architecture/belgrade-
fair](http://architectuul.com/architecture/belgrade-fair)



Benoit Marcou
Wesley Lijkendijk

BLOCK 19A



BLOCK 19A

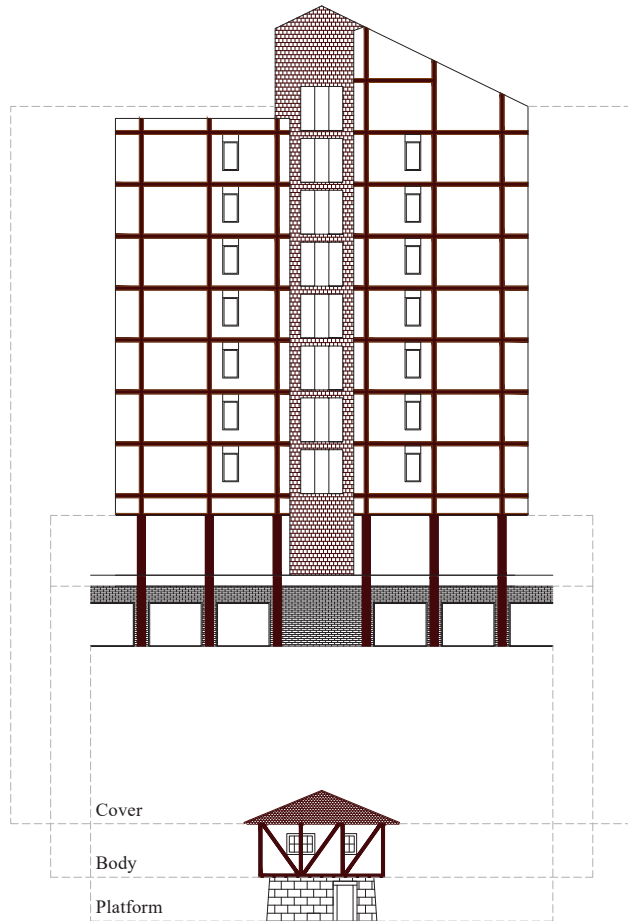
Patterns of inhabitation

Block 19a was designed by M. Lojanica, P. Cagić and B. Jovanović and built in New Belgrade between 1975 and 1982. This block is described as both the last socialist residential block in Belgrade and as one of the first postmodern buildings in Yugoslavia.¹ The general orientation of the block is different from that of its neighbors which follow the orthogonal grid of New Belgrade's masterplan. Block 19a's implantation operates a slight rotation towards the Sava river, showing its ambition to mediate the relation between New Belgrade's rigid pattern and the geography of the site, and to establish a virtual connection with the old city on the other side of the river. Our analysis proposes to look at Block 19a through the notion of pattern as an architectural tool transcending scale and conveying different meanings depending on its domain of application (structure, ornament, configuration, circulation...).

In Block 19a the architects made explicit their will to reference Serbian vernacular architecture and to step away from the CIAM principles driving most of the design decisions in New Belgrade. The combination of flat and pitched roofs in the block is a good illustration of this oscillation. Moreover, the brown orthogonal pattern covering the facades of the buildings and marking the divisions between prefabricated concrete panels echoes vernacular timbered houses of rural Serbia. Some of these houses are characterised by the exterior expression of their dark wooden structure. The pattern, as an expression of the 3600x4200mm structural grid, transcends the division between exterior and interior and becomes a driving force in the configuration of the domestic spaces. It also spreads over the floor of exterior spaces, becoming an enveloping three-dimensional pattern.

**1. Lujak, M. (2010).
Spatialization of social
process vs singular
object of architecture.
Spatium International
Review No. 23**

Fig. 1
As a reference to
vernacular timbered
houses, the pattern
communicates about
the
structural system and
the transmission of
loads.



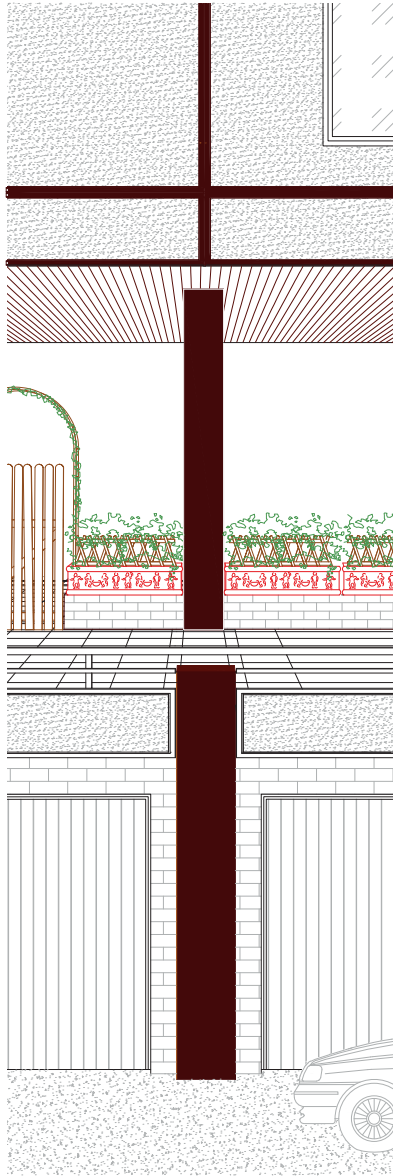
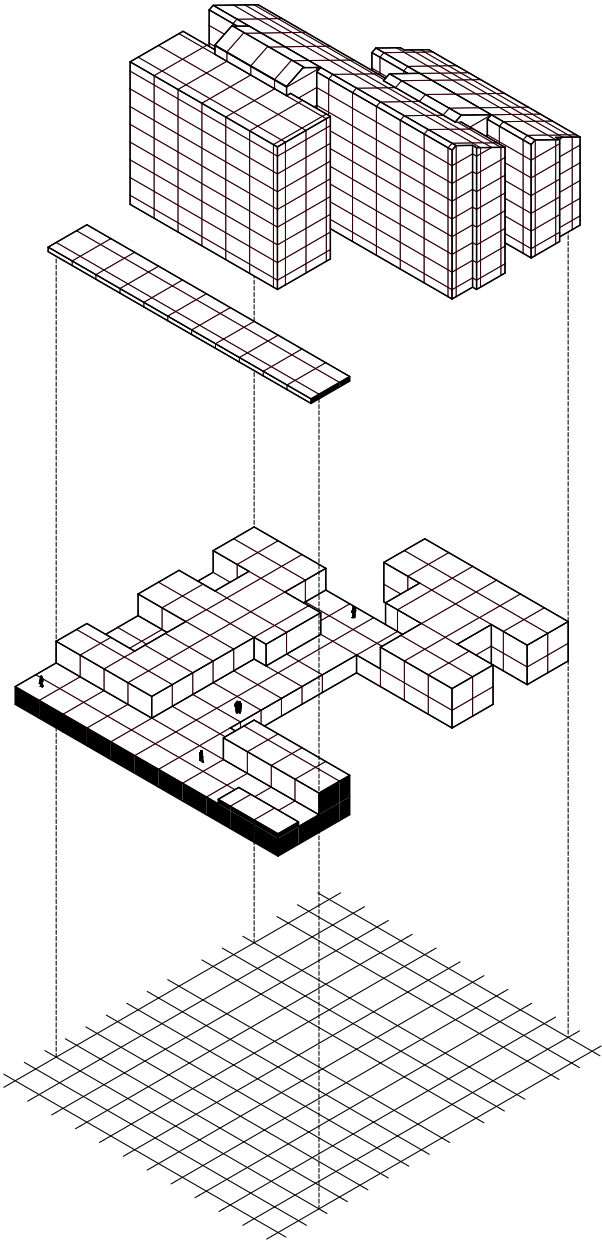


Fig. 2
Within the rigidity of
the pattern, creative
appropriation by the
users take place.

Fig. 3
Both the parking level and the building plinth adjacent to the pedestrian area follow the pattern. In the upper floors more freedom has been taken, here it is the visual pattern that retains unity



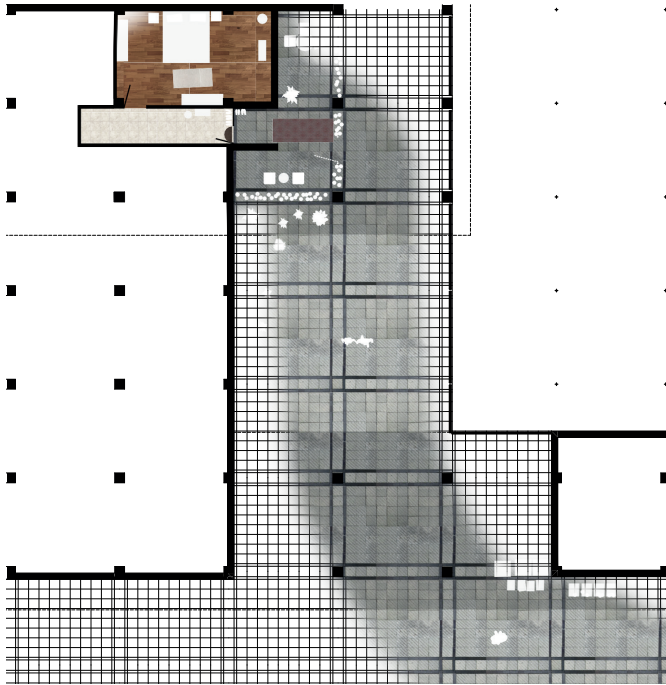


Fig. 4
The pattern binds atmospheres. It leads the user from the public space, through types of thresholds, towards the private space. It also maintains a coherent appearance despite user interventions.

Following Edward R. Ford analysis of the detail as order,² this reading of Block 19A poses the question of the blurred separation between structure and representation. The overabundance of brown paint and the spread of the grid in multiple directions at times seems to go beyond ornamentation and becomes a decorative attempt at articulating the fragmented parts of Block 19A.

The architects seem to acknowledge the need of a pattern in getting an idea built. And they take advantage of this understanding by applying this principle to the fullest, both physically and conceptually. As Christopher Alexander mentions: “No pattern is an isolated entity. Each pattern can exist in the world only to the extent that is supported by other patterns: the larger patterns in which it is embedded, the patterns of the same size that surround it, and the smaller patterns which are embedded in it.”³

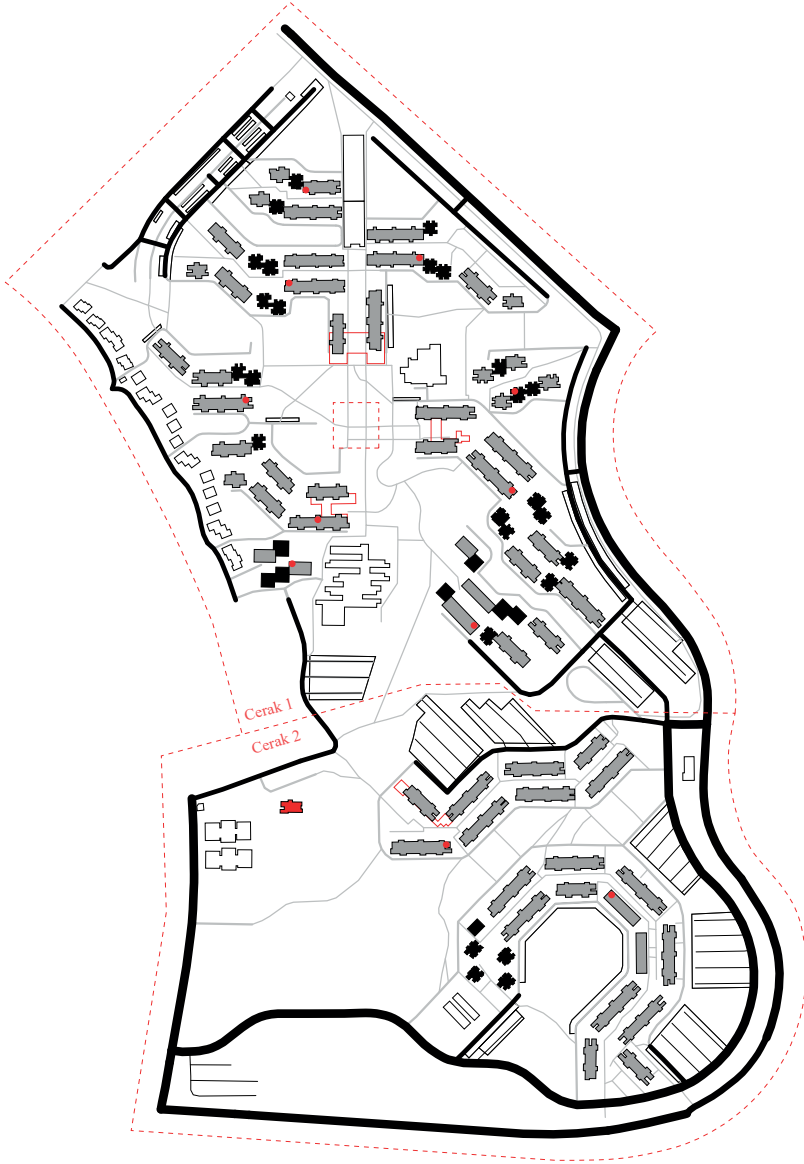
2. Ford, E. (2011). The Architectural Detail. Princeton Architectural Press. p. 30




3. Alexander, C. (1977). A Pattern Language: Towns, Buildings, Construction. Oxford University Press. p. 13

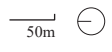


*Coen Gordebeke
Emiel van der Vlies*

CERAK VINOGRADI



- | | | | |
|---|-----------------------------------|---|--------------------------------|
|  | community centre (never realized) |  | residential type 1 |
|  | neighbourhood centre |  | residential type 2 |
|  | street council |  | Experimental Exhibition Centre |



THE FARCE OF CERAK

Story Then, Story Now

The rigidity of modernist urban planning in New Belgrade had by the mid-70s proven that people living there could not appropriate their environment. Having proposed alternatives to these principles in a plan for part of Blok 61, the architects Darko and Milenija Marušić eventually landed their ideas in the design for Cerak Vinogradi.¹

Cerak Vinogradi is a residential neighbourhood built between 1979 and '87. The project was funded by the Yugoslav People's Army and the Belgrade Housing Community. The investor's program - strongly influenced by governmental policy - defined construction technique and maximum floor area per apartment.^{2,3} The settlement was built using the IMS Zezelj prefab system. The buildings are four to ten stories high, depending on location and inclination, with Cerak 2 paying particular attention to its terrain. The architects also undercut the strictness of modernism in their use of brick and sloped roofs. In 1982 the Experimental Exhibition Centre was built on site as a place to experiment with construction methods and for architects and residents to meet.^{2,3}

Collective self-management was one of the cornerstones of the socialist agenda. The architects designed Cerak to have three levels of community integration aimed at creating active communal life among residents.^{2,4} With the placement of communal buildings, the architects had expected residents to undertake collective action if their spatial needs were not met. Instead, residents started to individually make illegal changes to the buildings as early as 1982.²

The architects fought nail and tooth to prevent these alterations. Investors and local government ignored the architects' pleas for prevention, further solidifying a tacit understanding between residents and authorities based on the latter broadly organizing society and the former turning to individual actions within this system.^{2,4}



The Marušić Couple

1. Marić, D. M., & Lazar, M. V. (2017).



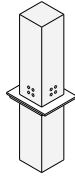
Experimental Exhibition Center

2. Kušić, A., & Janković, N. (2017)

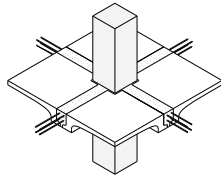
3. Vesković, I. (2015).

4. Blagojević, L. (2013).

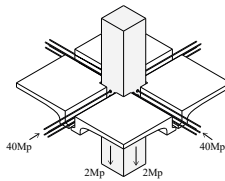
Fig. A-C IMS system



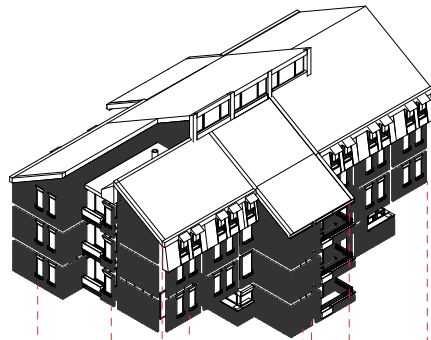
A. Prefab concrete columns are fitted with temporary steel supports.



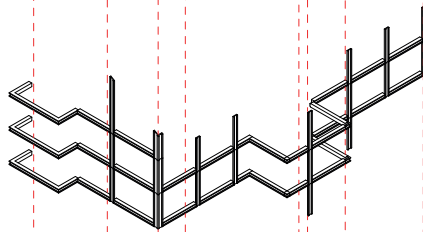
B. Floor slabs are placed, post-tensioning cable is run through gaps.



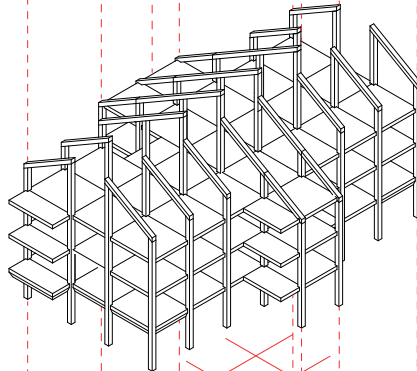
C. Gaps are filled with cement, cables are tensioned and anchored.



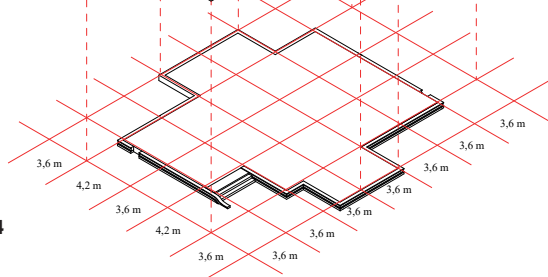
1



2



3



4

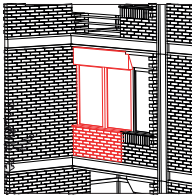
Figs. 1-4 Exploded view

- 1. Infills
- 2. Girders
- 3. Structure
- 4. Grid & Base

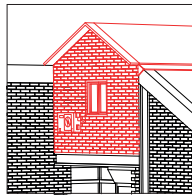




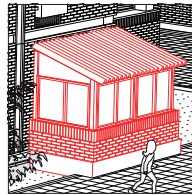
Changes



*Balcony enclosure
- infill of an open vertical plane.*



*Rooftop extension
- vertical addition to apartment*



*Ground floor extension
- horizontal addition to apartment.*

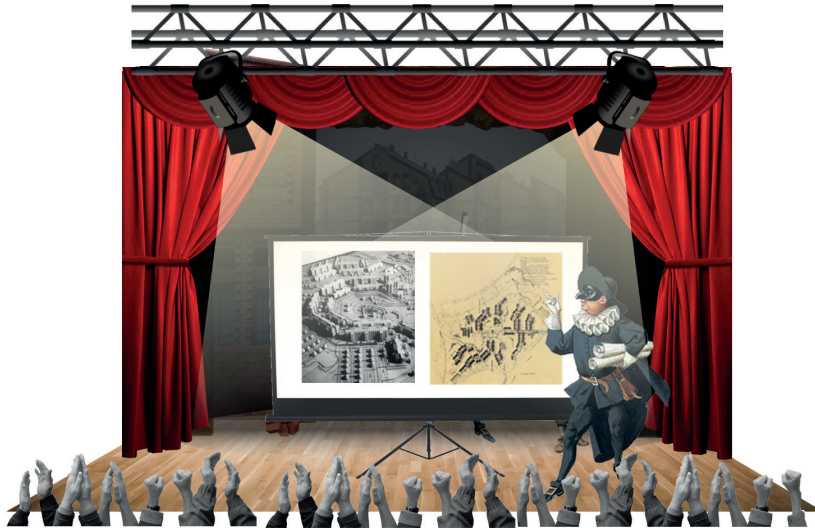
Figs. 5-7



Figs. 8
Story Back Then

2. Kušić, A., & Janković, N. (2017).

When Cerak Vinogradi was devised and constructed, the residents acted reactionary and opportunist, making use of socialist bureaucracy's blind spot to further their own agenda, denying *'the very concept of participation'*.² The investors and government acted authoritative but lax, trying to impose their ideas on society but not following through on them. The architects were in the middle of this, strongly opinionated but ultimately ignored by the other two parties who operated under a tacit understanding of each other's roles.



Figs. 9
Story Right Now

Although many alterations have been made by residents over the years and the current state of the buildings is deplorable, Cerak Vinogradi was declared a cultural monument in 2019. The recognitions of its value by the MoMA (New York), Docomomo and the Serbian government ignore the lives lived in this place and push forward a glossed over story: that of the architects' conception of Cerak Vinogradi.

The idea of Cerak Vinogradi is being valued over its sometimes painful reality and instead of carefully documenting a complex story about power struggles for future generations to draw lessons from, these parties present us with a superficial reading of a place that never existed outside of the architects' minds.

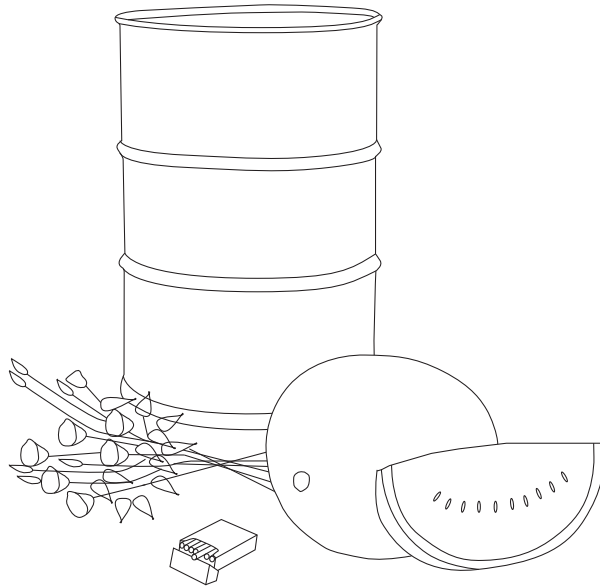


CONCLUSION

Our research through the tapestry of Belgrade started with the small gesture of pulling four threads. Albeit minute, such a gesture had two immediate consequences.

First, the threads we picked dragged us into the fabric, zooming in on specific elements of the city and temporarily drifting apart from general questions about the tapestry as a whole. Following the intuition for a particular theme, we looked for its manifestation in the scale of architecture and identified four presences: the splavovi, the Kalenic Market, the street kiosks and the New Cemetery.

In an initial disciplinary analysis, we used tools and semantics of architecture to dissect such presences. Then, through contextual and conceptual analysis we framed them in their immediate and broader context, connecting the particular phenomena we observed to their historical, theoretical, social contexts. In shifting from presence to absence and then back to presence we speculated on the universal knowledge that lays in particular manifestations. A second consequence of pulling threads was that the choice of a specific theme guided us through the complex iridescent patterns of the city, offering a long thin line to follow through the investigation. Oscillating from presence to absence, we explored the material and intangible fabric of the city; there, we found ourselves engaged with unforeseen questions, still connected to the initial hypothesis but different in scale and specificity. Despite the apparent differences between the four objects of study, we discovered similarities and tangents among the different groups which contributed to a layered understanding of Belgrade. In a sense, this allowed us to tackle and dismantle cultural complexities at a micro level, further empowering the next phases of research and design.



Through these studies, challenging topics, such as memory, are effectively demystified to the levels of specific interactions, objects, or details. At the scale of these components, we additionally learned about the necessity for a communicative and open architecture, one which requires a certain degree of reliance and cooperation between neighbors to ensure the livelihood of the group.

The splavovi proliferating along the river showed us ways of adapting to unforeseen change and fostering cooperation between users. The constellation of kiosks expressed the value of establishing a common language and proposed new ways of deciphering and formulating architecture. The market invited us to reassess the value of trust in spaces of transaction. The cemetery showed us how the memory of a city is cultivated through the repetition of intimate and collective gestures.

These forms of architecture offer isolated moments of exchange within the city and are participatory characters dealing with the questions of the collective, and interpersonal memory, with and within the city. Furthermore, the analyses are executed with the awareness of the need for architecture to offer manifestations of meaning, appropriation, and the integration of its users, emphasizing the necessity for higher degrees of latency within the built environment of Belgrade. Accordingly, these collective conclusions and their reciprocal comparisons formed the premise for a more individual approach. The focus now veered from creating a collective knowledge to translating this knowledge into an individual intervention strategy and design proposal. This different direction was complemented by analyzing six precedents in Belgrade by dissecting them in terms of use, technique, form, and communication. Questioning what choices and events led to their present state, we looked at these particular architectures to reflect on universal questions concerning construction, domesticity, power, resilience, appropriation, and memory. In doing so, different types of knowledge could be extracted for the same examined precedent.

The consolidation of both the collective research and precedent investigation, this way of analyzing Belgrade through absence and presence, proved to be a fruitful method for the individual investigation to come. The apparent restriction of not being able to visit the city thus made these 'virtual' analyses possible that were versatile to be applied in different ways.

While we are looking forward to set foot in physical Belgrade one day, our equally real "virtual Belgrade" urged us to find new ways of investigating and experimenting in the city. We had to acknowledge the limitations of our own discipline in order to challenge customary means of analysis. From Delft, but also from Belgrade, we tried to gain a focused and valuable understanding of the built environment and position ourselves in it as future architects.

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