INLAND

healing places. alternatives to planning

research mentor: Dr. Ir. Tom Avermaetedesign tutor: Dr. Armina Pilavbuilding technology tutor: Dr. Ir. Jan Van de Voort



the spatial intelligence developed in times of war and the mutual-care relationship between Sarajevo and its inhabitants.

## SITE ANALYSIS

the fragmented identity of Marsalka, an autopoietic system. Its issues, resources and potentials.

## DESIGN

the combinations of shapes, in-situ materials and physical labour through transversal approaches, as a strategy of inclusion.

## CONCLUSIONS







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Bosniak Canton
Croat Canton
Bosniak-Croat Canton
Republika Srpska

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0	Major

Major Cities

Sarajevo

### FEDERATION OF BIH

- 1. Una Sana (Bosniak)
- 2. Posavina (Croat)
- 3. Tuzla Pdrinje (Bosniak)
- 4. Zenica Doboj (Bosniak)
- 5. Bosna Pdrinje (Bosniak)
- 6. Central Bosnia (Mixed)
- 7. Herzegovina Neretva (Mixed)
- 8. West Herzegovina (Croat)
- 9. Sarajevo (Bosniak)
- 10. Herceg Bosna (Croat)



- Croats more than 66%
- Croats 50-65%

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Croats - up to 50%

Bosniaks - more than 66% Bosniaks - 50-65% Bosniaks - up to 50%

- Serbs more than 66%
- Serbs 50-65%
- Serbs up to 50%







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Space as a *product* 



The Valley Section with basic occu















## INHABIT

"it is not that we inhabit because we have built, but we build and have built because we inhabit. [...]

What has happened to inhabiting in our worrying times? Could it not be that man's uprootedness consist on the fact that man does not yet reflect at all on the authentic crisis of the dwelling, reconginising it as the *crisis*?

> M. Heidegger Building, Dwelling, Thinking

Adaptation





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Section AA'
Section BB'
Section CC'
Section DD'



former Cadets' Accommodations

former Music School

war traces







former Sports Hall

former Cadets' Accommodations and halls

bordering residential area



When the war ended, the imposing former Austro-Hungarian complex began its *scission*.

While the western walls were so densely pierced by bullets and shards to become unusable, the eastern wing followed the reconstruction of the city and became one of the seats of the University of Sarajevo. On the one hand, such reuse of half of the complex, successfully freed the barracks from their *bigb political and symbolical charge* related to warfare, on the other, the strained division process unfolded into an even greater clash between west and east wing.

A 47 meters empty corridor stands in the middle of the courtyard, and a 70 by 30 meters stripe of more or less wild vegetation isolates the complex from the noisy Zmaja od Bosne Street. Such invisible walls contribute to an already unique and **fragmented urban reality**, which is essential to grasp, in order to envision a future for Maršalka west wing. The other wall is given by the debris themselves, those on the outer sides, which appearance is so hostile and the area around is so polluted, to prevent any exchange between their *interiors* and the open courtyards. In the case of the western outer barracks, now completely levelled, the *invisible barrier* gets even stronger, by blocking any physical connection between the site and the residential area.

When it comes to describe the complexity of such site, a hybridization of the discourse is necessary to fathom its incompleteness. The mapping process needs to take into account, besides the barracks' history, a four-dimensional system made of a specific morphology, visual relationships, different functions, materials and multiple actors. For a deeper morphological understanding, Maršalka needs to be approached beyond its plan, a view from above says, at some point, very little about its conditions. The architectural tool to better sort its intricacy is the section. Cross sections show four different spaces, from East to West: the operating university buildings, the aforementioned empty corridor, the ruins, and finally, the ghost buildings. The transversal sections give us an idea of how the nature of the space is fading to the void, from east to west. Today, Maršalka hosts, besides the University Campus, the most disparate presences: the US Embassy on the far east side, a private hotel with tennis court and swimming pool, and on the south/west side, ruined buildings, on and in which vegetation grows spontaneously. Right outside of the complex we nd on the south, residential high-rises and the access to the main artery of the street, the so-called Sniper Alley during the Siege. On the north, the train station. Obviously, such diverse spaces attract various actors: students, in the university, diplomats, at the embassy, families and workers, in the residential buildings. The debris are used by other categories of users: drug-addicts, homeless people and stray dogs are in fact finding shelters in the mutilated buildings, ending up accentuating the clash between these structures and the surroundings.

These layers inevitably declare different points of view, thus, various possibilities to read the realities of Maršalka. Furthermore, the future of the west wing, not only has to deal with the complex challenge given by its built form and its actors, the outsider of Sarajevan society that inhabited the leftover of the urban development, but also with all the actors that live around these buildings, inhabiting the district of Pofalici. By considering this as an urban design challenge, an equation where to sort, with a top-down approach, a variable x that will eventually solve Maršalka's issues, we inevitably face a cut de sae, mainly because of lack of financial resources, in addition to issues and controversies related to memory, functions, accessibility and matters of inclusion.

	Miljacka river
	parking lots
	green areas
	surrounding buildings
	University buildings
	war ruins
	bus and tram stations
••	cars routes
00	pedestrian passages and routes
	intervention, areas of influence
	tram lines
	train rails
	physical barriers, fences
	ruptures, border between non-communicating areas
V	entrances to Maršalka
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former Cadets Accommodations



former Sports Hall and 1st year Classrooms

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AUSTRO HUNGARIAN CITY

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#### OTTOMAN CITY



Barbed wire, rusted, left from the war, wrapped with sand bags to accentuate the division between the entrance to the complex and the former Music School.

Bricks take different shapes in the aging process of the Ottoman complex, while on the east wing the renovation cleared the leftovers from crumbled walls and explosions, on the west part of Marśalka many fragments are present. On the western border, piles of bricks could be reused, once separated from soil and grass. Inside the former Cadets' accommodation facilities other bricks are possible to be used, since almost all the interior walls decayed.

The concrete is the hardest material to recycle, most of it crumbled and melted with the ground, what is kept in relative good conditions I assume are the foundations of the buildings, still allowing for the envelopes to stand.

The fences are put mainly areound the former Cadets' Accommodation building, to separate

The glass was among the first materials to break during the war, almost no window survived the siege, and the same goes for Marśalka's windows.

What is covered in grass during the spring, summer, and fall months, lays under centimeters

Pebbles falling from the roofs, getting scattered on the ground, many roofs are to be replaced.

Plaster is often scattered on the ruins' walls, partly covering the bricks layers, serves now mostly as a protection layer on the exterior walls.

Sand bags are another leftover from the war, accentuating the clash between the paths and the

Vegetation plays a major role in Marśalka, by getting scattered all around the empty spaces, overtaking the foundations of the ruins, by growing inside the abandoned buildings, popping out of the envelopes' war lacerations, by wildly covering the strip separating the complex from the main street. It is a process that can hardly be fought with modest tools.

Wood is constituting many of the substructure of the buildings, frames of windows, minor beams, doors and ramps. Most of it, especially what was kept inside the barracks, could be reused.

Such materials are present in the following elements that independently respond to the aging process:

BULLETS, pierce the walls and create fracture points

**COURTYARD**, suffers the change of scale and use in the complex' transformation

ENTRANCE, faces the issue of being overwhelmed by vegetation

FACADE, crumbles, gets scars, gets soaked and eventually decays

FOUNDATIONS, get covered by soil and vegetation

MINES, need to be dismantled and contribute to the unsafe conditions of the complex

PATH, gets covered by vegetation, eventually needs to be reconfigured

PORCH, gets covered in graffiti and instead of a connector become symbol of segregation

ROOF, crumbles, falls, gets soaked and pierced, and eventually decays

TREE, slowly grows uncontested, outside and inside the buildings

WALL, sags and sinks in the earth, crumbles in fragments (bricks) or decays

WINDOW, gets shattered and eventually covered from the inside or bricked-up from the outside



# PHOTOS 4 MODELS

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# CONCLUSIONS





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The design is a process of combination. Combination of materials, shapes and archetypes, aiming to break the barriers of accessibility of the site. Namely, the LINE, the POINT and the SUREACE, shall generate situations of encounter, access, directionality, intimacy, exhibition or interaction. Very simple forms, once assembled with in-situ materials and adapted to existing situation, translate in site specific elements, such as plazas, porches, paths, gardens and podia.

## $(\uparrow)$









# PUNCTUAL + LINEAR INTERVENTIONS 山 ACT: areas to connect the Residential Area with Maršalka EVENT: aim for encounter and exhibition SURFACE INTERVENTION ACT: areas to connect the interiors of the barrack with the exterior EVENT: fim for interaction ACT: meeting area between the interiors of the barrack and the exterior EVENT: aim for encounter and interaction LINEAR INTERVENTION

ACT: connecting area between the interiors of the barrack and the exterior EVENT: aim for *connection* and *access* 

#### SURFACE + LINEAR + PUNCTUAL INTERVENTIONS

ACT: new core of the complex, connecting with the University EVENT: aim for connection, exhibition, encounter and interaction

#### LINEAR INTERVENTION

ACT: redefinition of the main access, connecting with the street EVENT: aim for directionality and access

#### SURFACE + LINEAR + PUNCTUAL INTERVENTIONS

ACT: recognition of the enormous potential of the building, definition of -a new way to access it through elements that break into the ruins EVENT: aim for access, connection, encounter, intimacy, exhibition and interaction

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7] ruin garden: surface

Maršalka, Sarajevo, Bosnia Herzegovina Interventions along the former Cadets' Accommodations Facilities *perspective view* 



## BASSO RILIEVI

Models Pictures








# PHASE I

Reading 1 to 2 months



## PHASE II

Fragments Location 1 to 2 months



# PHASE III

Selective Cleaning 2 to 3 months







PHASE V

Customization *ongoing process* 





















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### SCENARIOS OF APPROPRIATION

Models Pictures





**INLAND** 43°51'24.4"N 18°23'40.5"E

Cross Section Former Sports Halls Barrack







Centre for Agriculture, Gardens connecting with the Residential Area



Centre for Performative Arts



Plaza in front of the exhibition space



## RESEARCH

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what is to be taken from the spatial intelligence of the war, alternatives to planning and reflections on Ecology.









KJ Marshall "Our Town", 1995

Yona Friedman manifesto

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