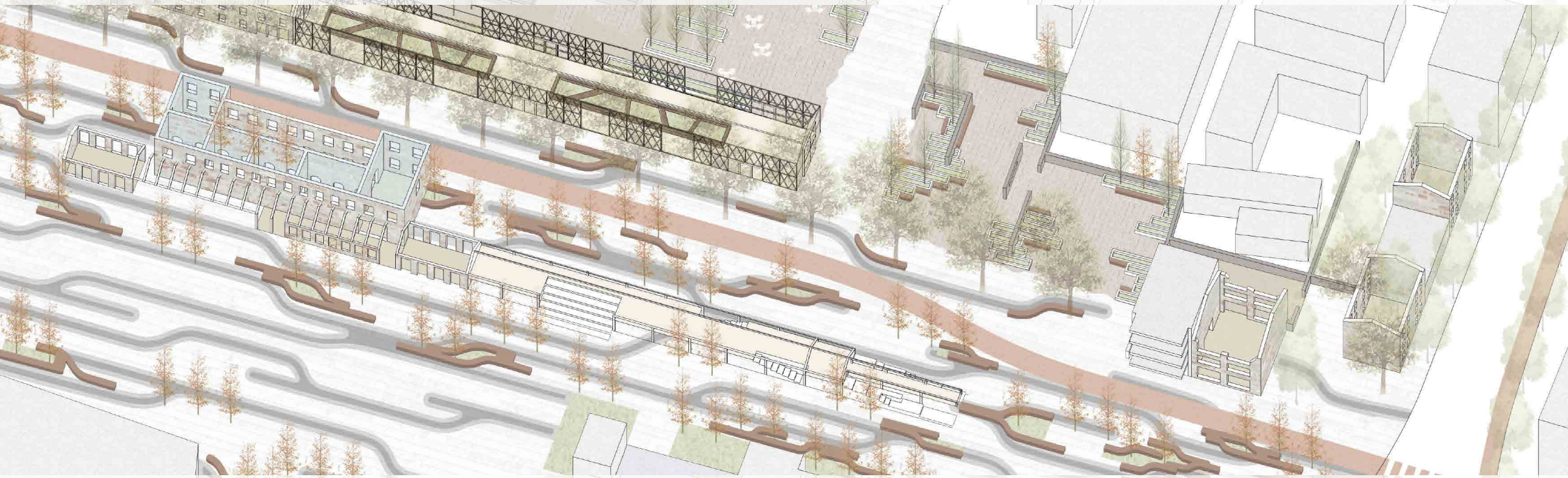

Public space as a cohesive force:

the landscape intervention in post-conflict city, Mostar

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Master thesis
Public space as a cohesive force
The landscape intervention in post-conflict city, Mostar

March 2018

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LANDSCAPE ARCHITECTURE

Public space as a cohesive force

The landscape intervention in post-conflict city, Mostar

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Shiqi Peng

Contents

Abstract 1

PART1 INTRODUCTION

01 Introduction
problem statement 5
objective&research question 9
reading itinerary 10

02 Scope&Relevance
scope 12
social&science relevance 12

03 Methodology framework
methodology 14
research method 15

04 Theoratical framework
theoretical background 19
case study 23
conclusion 26

PART2 RESEARCH ON SITE

05 Site analysis
historical analysis 29
division situation analysis 39
current condition analysis 43
potential 49

06 Working area
working area 51
the boulevard 55
river bank 64

PART3 DESIGN

07 Design
strategy&principle 70
vision 74
detail design 81

PART4 REFLECTION

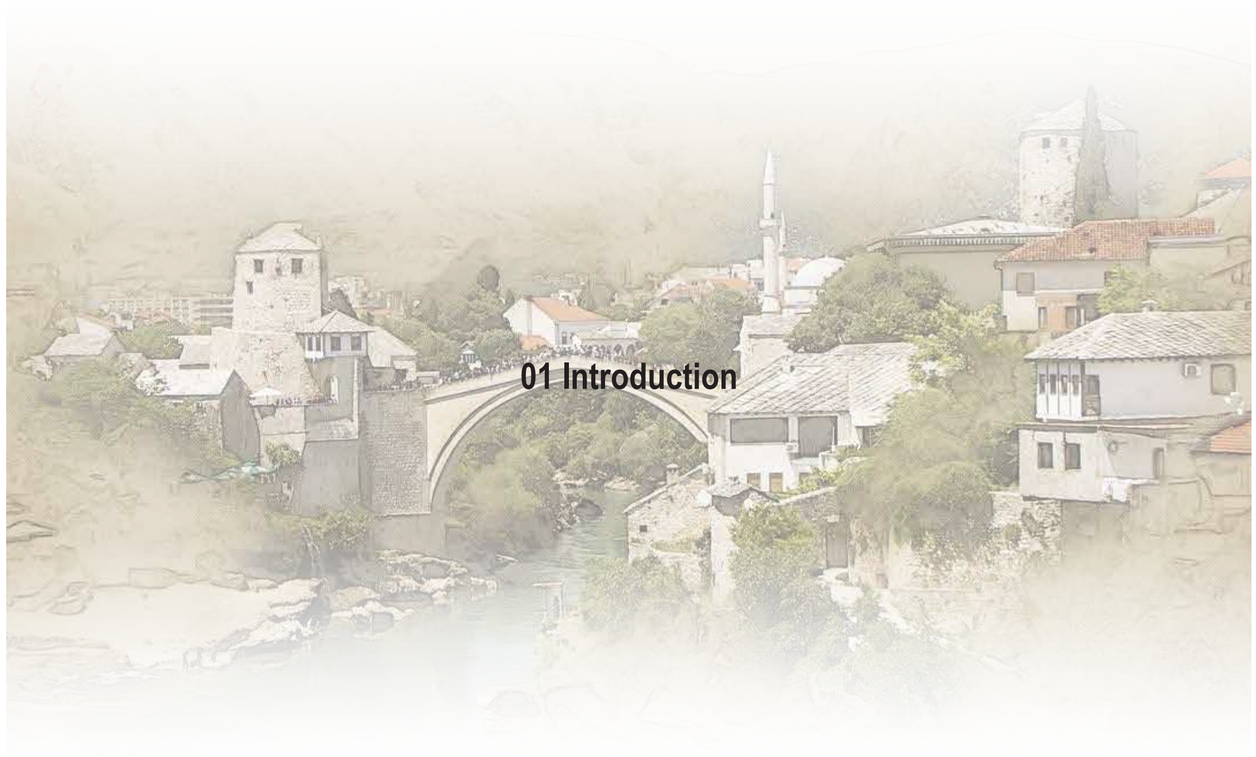
08 Reflection
reflection 111
conclusion 112

Reference 113

Abstract

Bosnia and Herzegovina suffered a lot from the civil war, and among all the cities, Mostar is the longest and most tragic place. It is also a divided city today in both physical and mental aspects. Along with the reduction of public space and the decline in quality, people lost their places of public life, consequently, causing the mental division between people and the loss of city collective memory.This project would focus on the city of Mostar as a post-conflict area and aims to mitigate the mental division of the city and bring back people and collective memory by redesigning and improving public spaces. The historical and current condition in the city would be analysised to provide a comprehensive understanding of the working site. Memoryscape and placemaking for peace making would then work as the method to lead the intervension of this project, mainly focus on:1)Traditiional and new activities that keep attracting people; 2)Public landscape that involves the history elements reflecting to the city history and collective memory; 3)In a long run, the continual public space network would gather and lead people to step over the mental border line.

Keywords: public space, history and collective memory, divided city, mental division



01 Introduction

Problem Statement

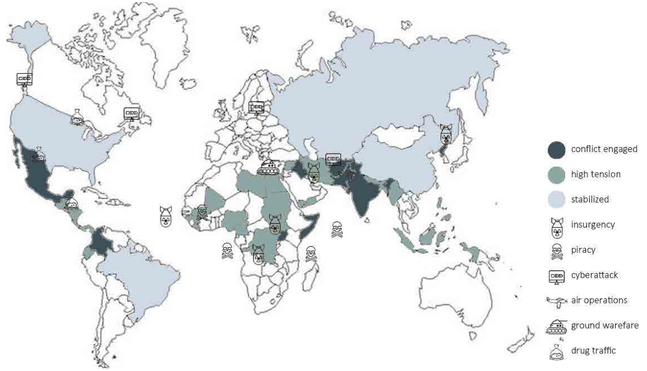


Fig.1 World conflict map2012 *map source: author, data from: Aviation Week*

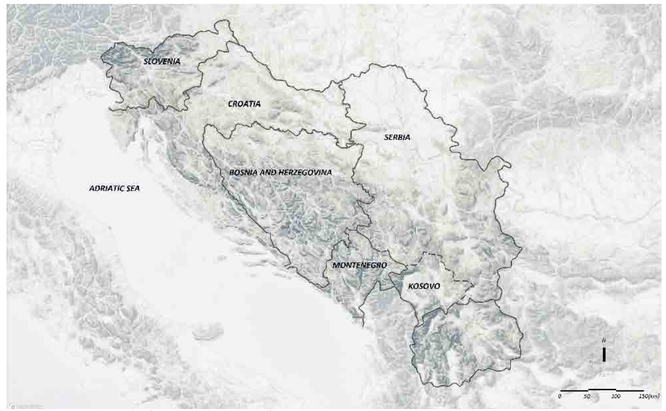


Fig.2 Formor Yugoslavia *map source: author*

Post-conflict area

Looking back at history, wars and conflicts seem to characterize the majority of the 20th Century, which was the deadliest century ever recorded. With a death toll of 187 million in just 100 years, the aggressive violence of the 20th century killed millions and devastated tens of cities around the world (Salem, 2018).

Though we already reached the stage of general peace in contemporary society, there are still areas under conflicts (*Fig.1*) because of weapons development, drag, territorial dispute, economic, religious, gender and ethnic differences during the past decades. Rather than beginning and ending cleanly, conflicts are inherited and either perpetuated or transformed by successive generations (Youth, Continuity and Change, 2012). Today, many areas still suffer from the effects left by post-conflict situation or even being in the war.

Yugoslavia has mixed of ethnic groups and religions, with Orthodox Christianity, Catholicism and Islam being the main religions. As International Criminal Tribunal for the former Yugoslavia (2017) anounced:
Coinciding with th ecollapse of communitysm and resurgent nationalism during the late 1980s and early 1990s, Yugoslavia experienced a period of intnese political and economic crisis. There was a proliferation of political parties who, on one side, advocated the outright independence of republics and, on the other, urged greater powers for certain repubulic within the federation. Political leaders used nationalist rhetoric and fuel fear and mistrust among ethnic groups.

As the largest local war in Europe after the Second World War, the Yugoslav wars lasted from 1991 to 1999 inside the former Yugoslavia (*Fig.2*), finally leading to the breakup of the country.

Fig.3 Bosnia and Herzegovina and Mostar location *map source: author*

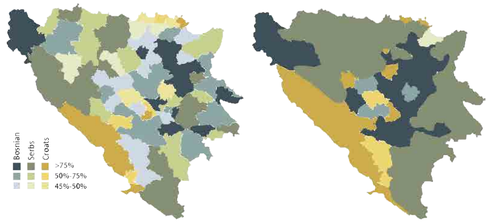


Fig.4 Bosnia and Herzegovina ethnic change before and after the war *map source: author data from: Office of High Representative 2004*

Fig.5 Mostar Old Bridge *figure source: Sinisa Sesum from whc.unesco.org/en/documents/113691*

Bosnia and Herzegovina (BiH) (*Fig.3*) suffered a lot from the civil war and as a result, the ethnic make-up (*Fig.4*) in the country changed a lot, people from different ethnics were forced to leave their homes to find a new place or became homeless.

Among all the cities, Mostar was the longest and most tragic place in the civil war. During the war, 90% of the centre was shelled and 1/3 of the buildings were destroyed (LOCAL DEMOCRACY AGENCIES Mostar, 2018), till now, 25years after the war, the work of reconstruction is still going on. But it is nowadays famous for the Old Bridge in the old city center.

In 2003 a reunification started with both national and international actors. The idea was to restore the bridges to stimulate the multiculturalism and reconciliation. A few other locally supported projects have been couched in similarly reconciliatory and multicultural language, including a proposed new Jewish Synagogue and Cultural Centre and a monument of Chinese film star Bruce Lee (LOCAL DEMOCRACY AGENCIES Mostar, 2018). However, the public life in reality is not as good as the told story. The reconstruction of The Old Bridge (*Fig.5*) and other bridges did not really lead to connect people, as people still stay in their ethnic side boundary.

Many reconstruction works had been done during the past 20 years, while there is an obvious tendency that the international voice and the local government over-emphasized the manifestation of different religious power, such as the height comparison between belfries and minarets. They ignore the significance of reconstruction of ruined or abandoned public spaces, which continually leads to further division of the city. Even worse, the old bridge is no longer serving the citizens as in the past, but being occupied by crowded tourists during the day, being empty at night; The city diving platform was removed from the city swimming pool, which means the most traditional activity of city diving exercise and competition came to its end; and some ruined buildings with considerable historical value still remain untouched yet in the ruined area. All these make people gradually lose the collective memory of places and activities. Obviously, the once most religiously mixed city turns into a divided city today in both physical and mental aspects.

Physical division:

After the war, BiH was declared a multinational state formed of three constituent people: Bosnian Muslim/Bosniac, Bosnian Croat and Bosnian Serb. As a first step, the municipality of Mostar was re-organised into six sub-districts (three Bosniacs and three Croats) and a central – neutral - zone around the area of the former frontline. But this attempt ended with failure. Now, Mostar was nonphysically divided into 3 zones: west Mostar (mostly for Croatian), east Mostar (for Bosnian) and neutural zone in between. The boundary is approximately the boulevard (former front line)(*Fig.6*) and the Neretva river (*Fig.7*).

Glorious boulevard, what it was before, was transformed into front line during the war. After the war, it got back its role as the main traffic road, but some areas along it are still in ruins now.The Neretva River, which the city was built on, is another physical division.

Mental division:

More importantly, the pain brought to a place by the war is not only about the loss of property, the damage to facilities, the death of people, but also the ruin of the immaterial value owned by the city and its people. Rather than demolishing any arbitrary building, specific culture architectures(libraries, museums, universities, squares) and public buildings were targeted, by destroying which, not only history, culture and public life of the city, but also awareness begins to emerge that the city is mortal (Beijaert&Mačkić, 2014), for people identify with their surroundings.

Along with the reduction of public space and the decline in quality, people lose their place of public life, where they used to meet with friends, entertain, hold activities, thus people lose the places and activities to tie them together. With the process of reconstruction work, there is still not enough public spaces (*Fig.8*) around the divided boundary that can attract everyone. People are increasingly trend to stay in their own ethnic territory. In addition, the loss of public space and activities can also lead to the loss of the medium by which memory and connection between individuals and the city could be founded. Those destroyed places and buildings of important historical values are likely to be slowly erased, until people can no longer remember the corresponding history, and people lose the contact with the city in the past.

Problem

Hence, the general problem this project dealing with is
1)the poor quality of existing public spaces in Mostar;
2)the division between people and the loss of memory between inhabitants and city, which largely caused by the first problem.

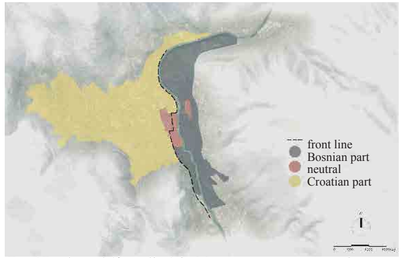


Fig.6 Boulevard (front line) in Mostar *map source: author*

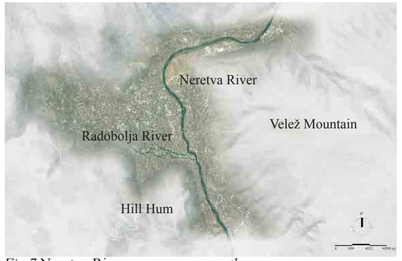


Fig.7 Neretva River *map source: author*

Fig.8 Public space in ruins *figure source: http://www.cidom.org/*

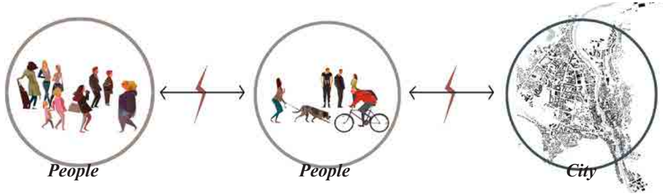


Fig.9 Public space in poor quality: former HIT Square *figure source: http://www.cidom.org/*

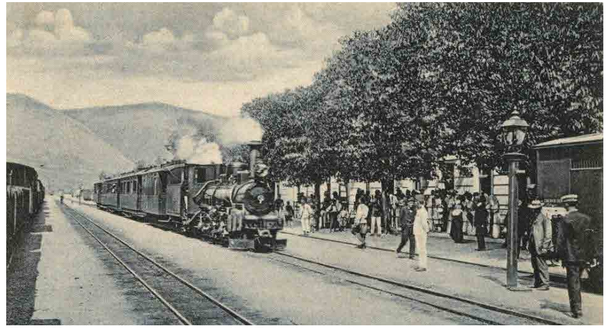


Fig.10 Heritage in abandoned area: Old Train Station *figure source: http://www.cidom.org/*

Objective&Research Question

Objective

This project seeks to mitigate the mental division of the city and promote the construction of a cohesive society by redesigning and improving public spaces as landscape intervention. Through the designed process, the public spaces in Mostar would 1)gradually invite everyone in the city to share a open and friendly context, including squares, parks, streets, riverbanks and markets, etc; 2) creat a memoryscape about city history and collective memory to re-stimulate the connection between people and city.

Research Question

How can the historical and social value of public spaces in Mostar be enhanced by landscape interventions to mitigate the mental division between people?

Sub-research Question

(Understanding question) How to conceptualize public spaces in Mostar for this project?

(Understanding question) How to understand the mental division through public space analysis?

(Design question) How to make use of the remaining historic heritage elements to bring history and memory to the public space?

(Reflection question) How could the designed public space contribute to a more cohesive society? How can it contribute to tackle the existing mental divisions in the city?

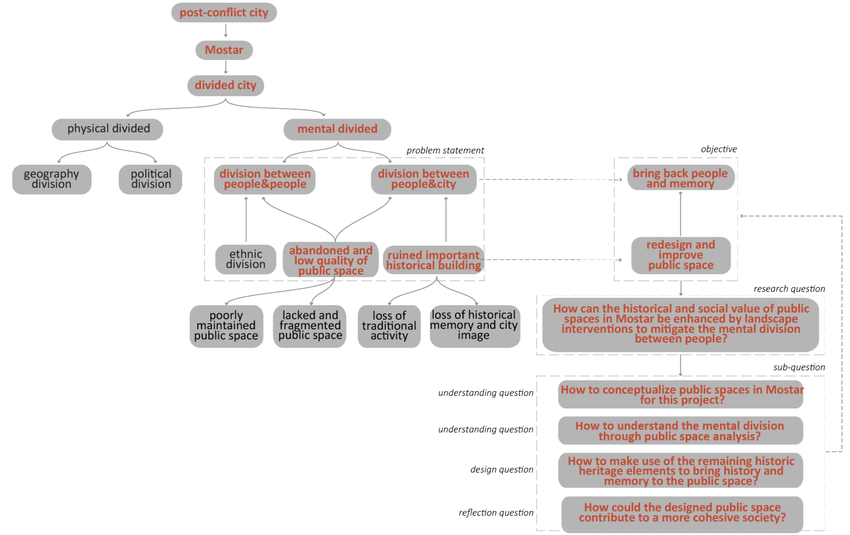


Fig.11 Objective & Research Question framework *figure source: author*

Reading Itinerary

PART1 INTRODUCTION

In this part, it described the problem field and specially analysis the aspect that the author would like to respond the challenges. As a post-conflict area, the challenges Mostar facing nowadays and possible causes are explained, following with main objective and the research questions. Then the report would describe the possible values of the project result that would contribute to the social and scientific aspects of discipline of Landscape Architecture. Finally, the methodology this project based on and theories it applied would be explained and related to the strategy, which build the overall framework of the project. The theory bckground in this part would also answer the sub-question1 (Understanding question): How to define public space in Mostar in this project?

PART2 RESEARCH

In this part, the research question2 (Understanding question)—How to understand the mental divided current situation through public space analysis? —would be answered through analysis of the city Mostar from historical and current aspects to have a deeper understanding of memory and heritage, division condition and where are potentials. Further researchs on working site would analysis the specific chanllenges and potential different working points have. This part provides diverse and reliable evidences to the further design, making the challenges and working direction more clear.

PART3 DESIGN

Design proposal lead by strategies and principles would act on different spatial and time scales. Visions and detailed designs would show how the landscape interventions work as whole system but also specific sites targeted. This part would answer question3 (Design question): How to make use of remaining history heritage element to involve history and memory in the public space?

PART4 REFLECTION

In the final part, the report again briefly answers all sub-questions as a conclusion and make a reflection on 1).The relationship betwenn research and design; Whether the design answer the research question? 2). Whether the design share the big goal of the graduation lab? 3). Whether the design is practical and reliable? Problems encountered during the design process?

02 Scope&Relevance

Scope

Though the public space design in a post-conflict background would be a specific situation compared to general public space design, it could also be regarded as a generalized approach among those post-conflict divided areas. Mostar is one of the typical divided areas in the world, as an obvious division border left by the war separate the city into different part based on different forces in the war, the ethinics in this case. The division problem Mostar facing today is also the one the other divided areas have and the reconstruction work inevitably should re-think and lead the new public life people have in the regenerated city. Sharing the post-conflict background with some other areas, this project might provide some practical aspects on understanding the division problem and on the public space reconstruction work.

Social&Science Relevance

Social relevance

Still, in 21 century, there are many countries suffer from the conflict left by the war, which already arose the international attention. More or less the destruction of material and immaterial public and cultural life would bring trauma to the public and cuase the loss of the media connecting individuals and the public and city. Thus during the reconstruction work, special attention should also be paid on the aspect of public life and city identity, which are easily lack emphasised but being closely related to the psychological reconstruction.

However the division problem on mental level would be more obscure and complicated when compared with physical division. Baesd on this post-conflict background, this mental division is often relevant to sensitive domains such as ethincs, religions, war memory and so on. Taking this aspect into consideration, the public space would be taken as the relatively moderate entry point and act as a catalyst to bridge people and city. The cohesive society future that this project hope to achieve in the end would also provide help to the reconstruction work in other divided areas towards a desirable future.

Science relevance

The study of the working area as divided city would respond to the challenge of widely understanding the division situation of the post conflict city. The way of research and intervention of this project might add the knowledge of how to cope with public space reconstruction in a divided background. Since every divided area has its own character, this project approach would be impossible to fit every other. But two point could be shared from a general aspect to do the landscape intervention:

How to study the history narrative and current situation of an area and extract the relationship between them;

How to transfer between the value (publical, cultural and historical) the design want to bring and the public demands from the local.

03 Methodology Framework

Methodology

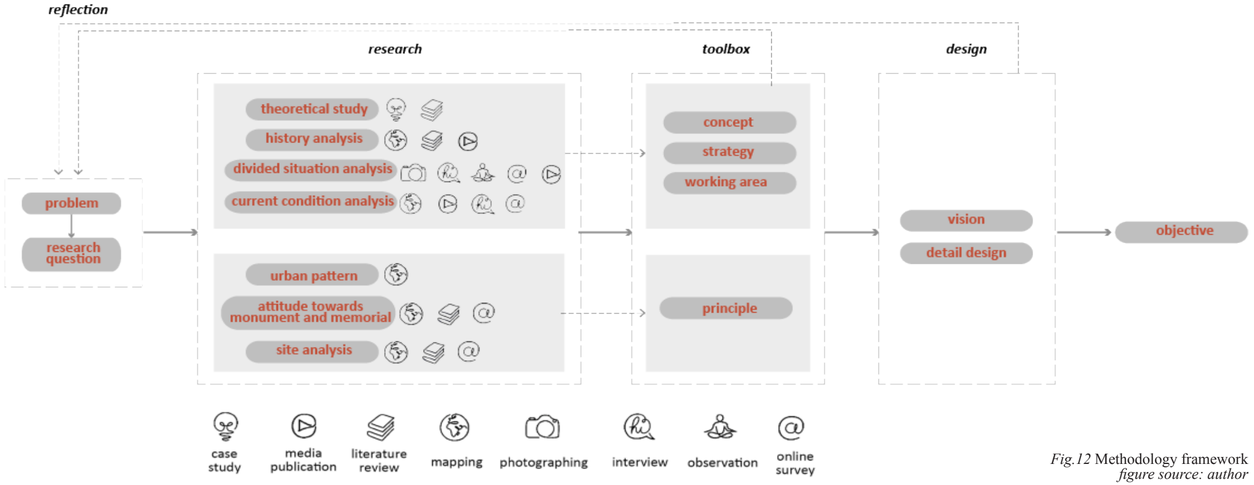


Fig.12 Methodology framework
figure source: author

Research by design

Landscape Architecture as an academic discipline focus on providing approaches to spatial concerns in urban environment, which also intersect with multiple academic disciplines like ecology, social science, economy, etc. Therefore, landscape architecture embraces approaches such as 'evidence based' design (Nijhuis & Bobbink, 2012). These approaches are based on research results from other disciplines and offer thorough legitimation of design decisions (Brown & Corry,2011; Deming & Swaffield, 2011) in site-specific designs. It is just because of those based on research results that make the design evaluable, predictable, practical and reliable.

With the development in discipline of Landscape Architecture, there are increased effort to reflect the role of research and design (Lenzholzer, Nijhuis, & Cortesão, 2018):
research for design- research informs design to improve the quality of the designed artifact and to increase its reliability.

research on design-research is carried out on finished design products (substantial) or on the design process (procedural).

research by design (RTD)-combine research and design in common research processes.

In RTD processes "designs are not made intuitively, but based on study (experimental design study), recording, examination and evaluation; an incremental process, where the former informs the latter in an iterative process" (Nijhuis & Bobbink, 2012). Through the RTD processes, not only the design objective oriented design would be achieve but also new knowledge could be developed during the research and design process and contribute to the further design and discipline toolbox.

Research Methods

Research methods given in this project is based on some of the research methods introduced in 'How to study public life' (Gehl, 2013) and some public survey methods.

Literature review
Literature review constitutes an important part of the research and is used to answer all the sub-research questions. Here, the theory about place making&peacemaking, about post-conflcit area transformation and about the topic of public space would be studied.

Media production
Important information resource, including digital vedios and photos from archive, officially announced news and plannings and handbooks. For example, history vedios and photos are useful for the study of the past and comparison with current situation. In this project, this methods would be largely used as there are not enough already organized informations about post Mostar and lack of means to record during the war time.

Case study
Plan analysis of existing precedents is a useful way to identify design directives, as results of design (realized plans) are an important source of knowledge and evidence of which planning and design principles function well or not. This type of knowledge can serve as the basis for future designs (Nijhuis & Bobbink, 2012). For example, in this project, other previous studies in post-conflict areas are good results to provide guide. Cases in Berlin, Beirut and former Yugoslavian countries can offer relative logic in research, attitudes towards design.

Mapping
Mapping is a wideused tool in anlysis as it consists the process of searching, screen and representation of information, it is the effective and concise way of information visualisation. It includes description, modelling, classification, interpretation, evaluation and diagnosis, engaged action and so on. Here, mapping is mainly used to represent the phsical characteristics of the urban area in the past and currently, futhering lead to the conclusive representation.

Photographing
Photographing is an important and effective way to study public life. It is a way to derectly reflect people's behavior in the evironment. Through photographing, the real daily life of people in Mostar is recorded.

Interview
Interviews are commonly used in researches in order to have a better understanging of the opinions from the public and find their demands. Espetially in this case, in a divided city, the published materials mostly represent the official standpoint, while the inner feeling and opinions from the residents are actually more important for the grounded public space design and the goal of a inclusive society.

Observation
Individual experiences and feeling are slao important for the research part. Personal observations shows how individual perceive a certain space and can be used to evaluate the space then can help understanding public behaviors.

Online survey
Online survey is an option for interview, it benefits from the universality, convenience and high efficiency of internet, can quickly get respnds from large amount of experiment subjects.

Research by design process application

As shown in *Fig.12*, the research and design part in this report follow the RTD process. In different stages of the project, the actions of reserch and design are repeated: research supports design and in turn design evaluation and reflection lead to the next round of research (*Fig.13*).

Generally, there are two parts of research in this project. The first part of research, consisting of methodology framework and theoritical framework, works as the theoritical foundation of the design part. The methodology framework clarify the supportative relationship between research and design during the whole process. The theory background indicates relative directions to focus based on existing theories under the same post-conflict background. The second part of research includes site relative division problem analysis, history analysis and current condition analysis. This part helps to have a better and deeper unstanding of the challenge and working objects, exploring a promising working area and also strategies. All the potentials coming from conclusions and the strategies work as the toolbox to guide and support the follow design part.

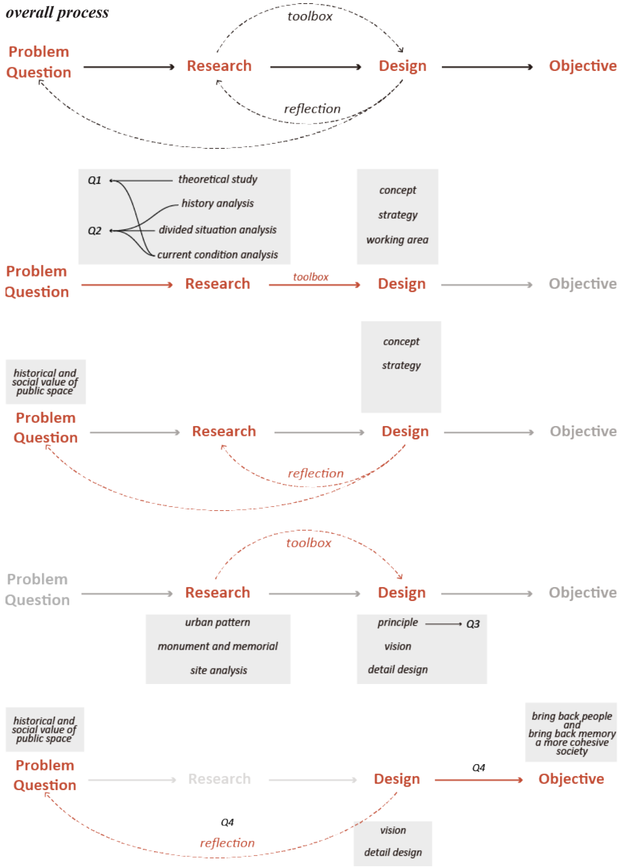


Fig.13 Research by design process *figure source: author*

Theoretical Background

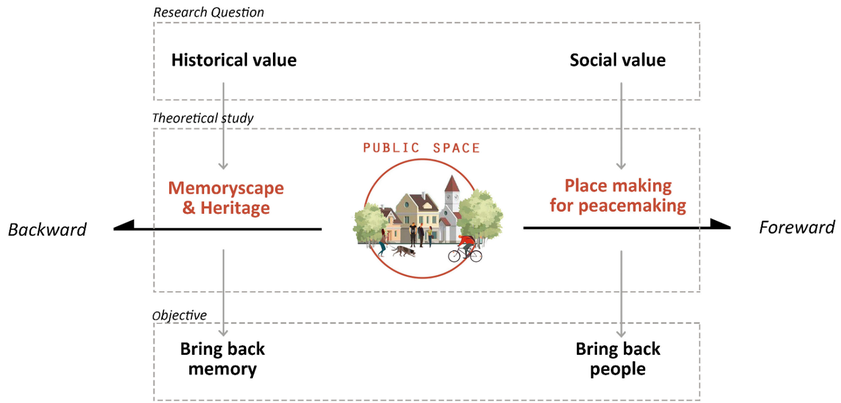


Fig.14 Relation between theories, reasearch question and objective
figure source: author

According to the objetive and reaserch question, this project aims to regard public space as design object. It looks backward to explore public space historical value that can bring back memory and also looks foreward to explore the social value that can gather people again. Based on this aspect, related theories about the public space are choosen to explore the ability public space hold that can connect present city with the past and look into the better fture.

Memoryscape

Memoryscape

Archaeologist Bill White, III (n.d.) wrote in his digital historical website:
Landscapes exist not only in the present. They are also part of our memories. Memoryscapes are the way human beings remember the landscapes in which they live. It is the places you can "see" when you close your eyes. For social scientists, memoryscapes are important because they help us understand the ways people know the places where they live, work, and play. We social scientists want to know what other people are thinking and why they have those thoughts.

Heritage

Heritage, specifically built heritage, is the symbolic representation of national identity. We are told that the 'built environment provides a footnote to our histories, helping to identify our places' and 'historic buildings give us a glimpse of our past and lend character to our communities' (Department of the Environment and Heritage, 2004). From a general aspect, heritage is the tangible or intangible thing that left from the past, usually attached with the genius loci and sense of belonging.

As wrote in 'CULTURAL HERITAGE IN SMART CITY ENVIRONMENTS' (Angelidoua, Karachalioua, Angelidoua, & Stylianidisa, 2017):
Tangible cultural heritage:
a.movable cultural heritage (paintings, sculptures, coins, manuscripts)
b.immovable cultural heritage (monuments, archaeological sites, and so on)
c.underwater cultural heritage (shipwrecks, underwater ruins and cities)
Intangible cultural heritage:
a. oral traditions, performing arts, social practices, rituals, festive events
b. knowledge and practices concerning nature and the universe
c. knowledge and skills to produce traditional crafts

Both tangible and intangible cultural heritages are of great importance, in this project it is more about buildings and traditional avtivities.

Memory and Heritage in divided city

In the piecing together of post-war cities, there are two kinds of reconstructing. Urban design specialist Mitchell Sipus argues that reconstruction of cities in the aftermath of war happens on the physical level, but also on the ontological level (Salem, 2018). Repair of urban physical surface and overlay of new urban fabric layer might verify the end of the war, while the memory still exist in the deeper part. Those seemly prosperous new layers of urban infrastrures are built on the ground, but is the invisible trauma memory also fade?

The bittersweet yet unnerving truth is that when wars end, their devastation – physical and emotional – remain (Salem, 2018). No city is ever a blank slate. No amount of bombing or bulldozing can fully eradicate the traces of what came before, either in the landscape itself or in the memories and habits of its residents (Jorda, 2006). Even when the traces are no more physically visible, they still continue their influence on the way people think and behave.

If see the city in debris as a whole heritage, it is the physical trace memory that remained implications and associations with the past. By learning and understanding more about their heritage, people are able to rebuild the illusion of the past city and life in their mind amd value and appreciate it more, which contribute to enhancing social inclusion, developing intercultural dialogue, shaping the identity of a territory, improving the quality of the environment, providing social cohesion, and economic profit (Angelidoua, Karachalioua, Angelidoua, & Stylianidisa, 2017).

In the context of post-conflict countries which struggle to continue the devastation of the war and build bridges toward futures of national cohesion, memory can be a unifying force- a vehicle for reconciliation and a push toward transitional justice (Garcia & Kotzen, 2014). Because people identify with their surroundings. For citizens, the loss or transformation of land, houses, or buildings can mean the loss of social links; radical changes of space and environment can lead to radical disruptions of community (Piquard & Swenarton, 2011). On the contrary, the place survived from the war or debris providing similar past scenario can evoke the memory together with stability sense of stability and belonging.

Thus post-conflict development should pay great attention to this invisible but inherent force and foster collective memory attached to the outer environment. This point is of special significance to the places where people desire to re-own and re-cultivate their sense of belonging. Creating spaces showing what left or echoing the original structure with evoking the collective memory of residents and their active participation, could be one way forward.

Place making

Place making

Project For Public Spaces(PPS) (2007) defined placemaking (*Fig.15*) as both an overarching idea and a hands-on approach for improving a neighborhood, city, or region. It inspires people to participate in the design and shaping of their own community pblic space, by which enhance the social and cultural value of the public space as a shared space and also strengthen the connection between community members.

The concepts behind placemaking originated in the 1960s, when writers like Jane Jacobs and William H. Whyte offered groundbreaking ideas about designing cities that catered to people, not just to cars and shopping centers. Their work focused on the importance of lively neighborhoods and inviting public spaces. Jacobs (1961) pur forward the idea of "eyes on the street" and advocated the benifit of lively street life. Whyte (1980) emphasized essential elements for creating great public spaces.

Peacemaking

Placemaking as a global topic has kept attracting considerable interests in the domains of politics, trade, education and so on. On the way pursuing for peace, people realised that the violence conflict would not only leave long-term sequela to the area, but also itself is an un-effective way of development. Peacebuilding also became part of the official discourse when the United Nations Secretary-General Boutros Boutros-Ghali (1992) introduced the concept of post-conflict peacebuilding in the Agenda for Peace.

Like placemaking, peacemaking is more than an idea—it's a process that aims to change people's attitudes and behavior, and to transform dynamics between individuals and groups in order to achieve a peaceful coexistence in a specific place (Project For Public Spaces, 2007).

Place making for Peacemaking

Jalkh (2017) from PPS pointed the cooperation potential and connection between these two ideas. The placemaking process affords peacemaking efforts a physical space in which to enhance dialogue between different people. It welcomes and encourages "Others" to find a place where they feel welcome and respected, and it inevitably leads to peacemaking through community participation and mutual trust.

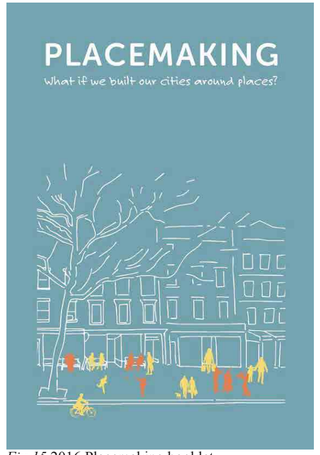


Fig.15 2016 Placemaking booklet
figure source: https://www.pps.org

Based on the lens of peacebuilding theory, here in a post-conflict area, place making work could focus on following aspects:

1. Place making re-cultivate community spatial and cultural peace.

Spatial intervention in a community scale would directly influence the atmosphere and reflect on local behavior and thoughts. Troy Glover (2003) argues that community gardens can change the cultural environment and result in social participation and sence of belonging.

> By converting decaying urban spaces into ornamental or vegetable gardens or both, residents transform neighborhood liabilities, namely abandoned, dilapidated lots, into tangible (e.g., fresh produce, beautification, sitting gardens for recreation) and intangible neighborhood assets. (Glover, 2003, p.190-212)

2. Place-making to support transitional justice and reconciliation: spaces for remembering, healing and envisioning peace.

Accroding to the historical and educatinal value of the conflit-related space, how to tackle with them can reflect the attitude dealing wiht the past, respecting, learning and healing from the past. Built specifically to recognize, remember and understand the roots of political violence, trauma and human rights violations, many memorials and museums about the history of conflicts and its victims and survivors exist (McEvoy-Levy, 2012). Relative professionals emphasize 'the therapeutic effect of the return journey' and the educational functions provided for future generations.

Public Space Study

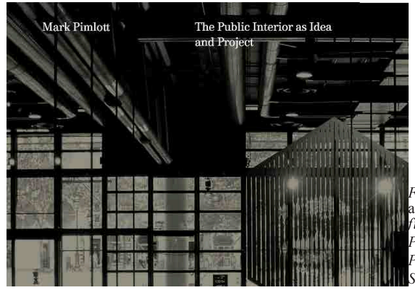
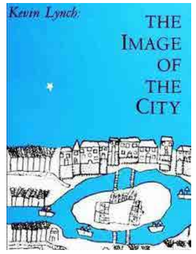


Fig.16 The Public Interior as Idea and Project
figure source: Cover copy.The Public Interior as Idea and Project, by Mark Pimlott, JAP SAM Books, 2015.



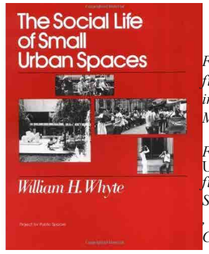


Fig.17 The image of the city
figure souce: Cover copy. The image of the city, by Kevin Lynch, MIT Press, 1960.

Fig.18 The Social Life of Small Urban Spaces
figure source: Cover copy. The Social Life of Small Urban Spaces , by William H. Whyte, Conservation Foundation, 1980.

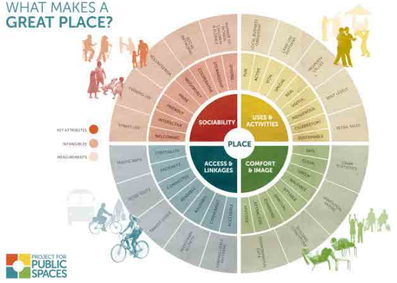


Fig.19 What makes a great place
figure source: https://www.pps.org/

Definition of Public Space

In the broadest terms a public space is a socially-constructed territory or terrain that represents, shapes, controls, manages or guides social interactions and is distinguishable from both private space and from wilderness. In a historical perspective, the use of public space has gradually evolved from activities primarily motivated by necessity to those more optional in nature (Gehl, & Gemzoe, 2006).

The historical view of public space was defined as the sphere of action and speech, which is closely related to communication. In contemporary city, public space is no longer made only by canonical typologies-square, garden-but evolves several hybrid spaces and joint uses, including the sphere of communication and virtual space (Brandão & Brandão, 2017)

Semi Public Space: The extend area from the edge of the building to the public sidewalk, including all civic spaces surrounding a public building, the building facade, entrance and ground floor, and is managed by the building manager or their service provider (PPS, 2008).

Public Interior Space: The term public interiors refers to spatially contained environments which are experienced as belong to the public sphere. In this definition public interiors include the space inside civic buildings (government buildings) and institutions (e.g. for education, healthcare, culture etc.) The more extensive definition of public interiors as the totality of spaces in which civil society can be seen to operate means that the research extends to those environments, both inside and outside buildings, for the encounter and collective use of private people. These are places of sociability, entertainment, transport, leisure and commerce, as well as culture in the broadest sense (Pimlott, 2015).

The definition of public space might be different based on the development and change of space use (public/private) and territory (open space/with roof/inner space). For this project I would focuses on spaces from general sociability and culture aspect of public space, where people can spontaneously come and experience their daily life, with direct or indirect interaction with others, including squares, parks, public opened greenland, sports ground streets, bridges, riverbank (and river area), outside coffee seats, surrounding area of public buildings for culture and recreation.

Quality Criteria for Public Space

There are countless materials about the public space criteria based on different site and scale. They are focus on easily detectable physical criterias or more abstract emotional feelings.

PPS gives some criterias (*Fig.19*) from a general level:

Access & Linkages

Whether a place is easy to access related to its surroundings, like the physical route for

pedestrian and public transport and visible link for people to recognise the place. Easily accessing is the basic precondition for great public space.

Comfort & Image
A great public space should also pay attention to the comfortable physical and mental environment. A clear image would help people to better remember it and form memory in mind.

Uses & Activities
Different activities can attract different group of peoople, and activity is also the core people consider to go and return to a place. Whether activities are attrctive and whether they can meet the public need would deside the success of the place.

Sociability
Besides the necessary activities people spontaneously experience in the place, the sociability of a place can influence the public activities that promote the communication and connection between people.

Focus on this project in Mostar, public spaces should be first evaluated from a bigger scale, including *continuity of spaces Access & Linkages* and *diversity and atrction of Uses & Activities*. Futher, if the design goes deep into the detial, other criterias above could help.

Importance of public space

History importance
The City is characterized by the breakdown and reinvention of public spaces. For the city is historically typical natural growing and self-organization development (Siláči & Vitková, 2017). But the formation of the city and its public spaces is associated: Urban development determines the distribution and form of public spaces, such as the influence of historic events and celebrities would directly or indirectly result in the formation of gathering spaces; On the other hand, the use of the public spaces would in turn influence the update of surrounding urban form.

Social importance
UN-Habitat has studied the contribution of streets as public spaces on the prosperity of cities, which finds a correlation between expansive street grids and prosperity as well as developing a public space toolkit. Presence in public space correlates strongly with participation in urban life, and with a city's sustainability and prosperity (Whyte, 1980).

Henry Shaftoe (2008) wrote in the book that places where people can be 'sociable and festive'are the essence of urbanity. Without public sapces, city has less places to cultivate its identity and culture among the citizens, thus the city lose a social force for cohesion. Continuously polarized city might bring concomitant problems, like hampering economic activities, polluting the environment, and reducing social stability and security.

Public spaces in Mostar
"You can't design your way out of conflict," Goodyear (2012) says. "But the way we build neighborhoods can either help or hinder polarized communities." If we are ambitious enough to talk about long-term solutions that foster belonging, ownership, cohesion, and integration, public space is one point to start. Public space in the post-conflict background should be a neutral and safe territory, where people have equal right to share the place and can take a breath from the outter ethnicity and economic tensions.

Case Study
Berlin Wall

The Berlin Wall, built to separate East and West Berlin, fell at the end of the Cold War in 1989. It not only divided the city for 28 years, but the way of life for millions both inside and outside the wall. Cases about Berlin Wall are generally focus on the representation of former fabric and collective memory during the war time, discussing the way to mark the past on a left over boundary.

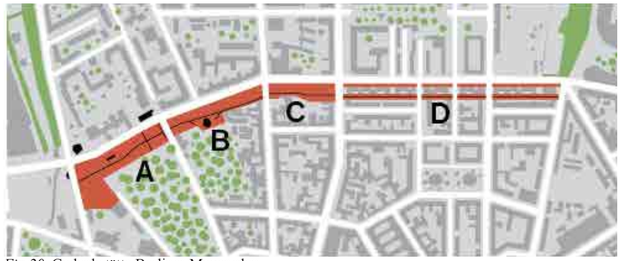


Fig.20 Gedenkstätte Berliner Mauer plan
map source: https://www.berliner-mauer-gedenkstaette.de

Fig.21 Gedenkstätte Berliner Mauer
figure source: https://www.berliner-mauer-gedenkstaette.de

Memorial Park
Area A—The Wall and The Death Strip
Shows the wall functioned as the central element used to secure power, use photos, vedios and documents to show the life in two side.
Area B—The Destruction of the City
The story of escape, different materials to mark the trace and outline.
Area C—Building the Wall
Area D—Everyday Life at the Wall
Focus on the patrol line in the reconstruction area

Landscaping the Death Strip as Giant Garden(Schaer, 2009)

Twenty years ago, those innocent-looking strips of sand and gravel on the former border of East and West Germany had a far more sinister purpose. They would be smoothed out regularly so that it was easy for border guards to see the footprints of any citizens trying to flee from east to west. Now a Dutch landscape architect hopes to see those sands shifting again -- but for different reasons altogether. Her goal is to respect the history of the areas and preserve any remnants of the former border area while generally beautifying the land, replanting and landscaping, as well as facilitating additional opportunities for such pastimes as cycling, walking and other sports.

Her plan would see the barren strips of sand moved at regular intervals in order to encourage new plant life to take root as well as the ongoing formation of the "mega-dunes" that are already evolving naturally in the German woods. At one stage there were 302 watch towers on the border; today only five still exist. Van den Berg would like to see the five remaining towers, and any others that can be resurrected, turned into small, secret gardens.

Sarajevo Boulevard

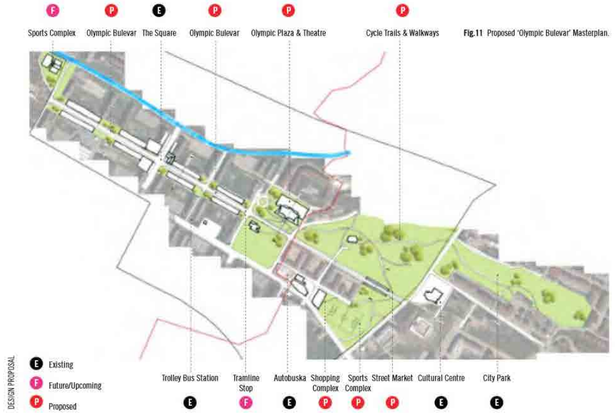


Fig.11 Proposed 'Olympic Bulevar' Masterplan.

Reactivating Sarajevo

Similar with what happened in Mostar, the case "THE OLYMPIC BULEVAR" (Lien, Rafiq, & Walker, 2014) from Sarajevo focused on analysing the historic cultural and green infrastructural axes as the main new organizational forces that are to drive a transformation of the built environment of contemporary Sarajevo. The successful period of Sarajevo's past offers potential room to open up new shared spaces where residents can co-exist in an environment that shifts the focus away from representation of nationality, religion or ethnicity.

Activities as an engine for movement through space: "The Olympic Boulevard" aims at giving people a reason to physically engage with the entity on the other side of the border. A proposed sports complex will make up the western starting point, giving great potential to encourage more interaction through an expended selection of activities. The Bus Station currently lacks supporting amenities like cafes, restaurants or small shops that can enhance the activation space around the station.The design also increased urban connectivity: "The Olympic Boulevard" is concerned with increasing the physical mobility between two stations.

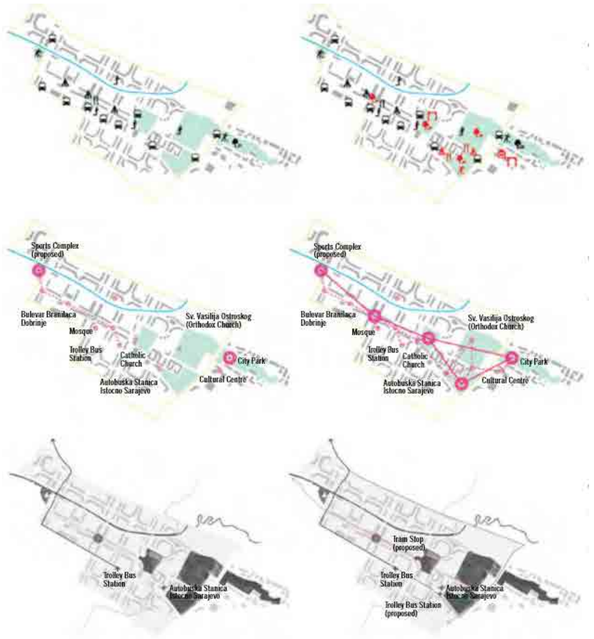


Fig.22 Proposed Olympic boulevard masterplan (left)
map source: The Olympic Bulevar: Inbetweenness and peripheries in Sarajevo Lien, Rafiq & Walker, 2014)

Fig.23 Activity analysis and development along the boulevard (right)
map source: The Olympic Bulevar: Inbetweenness and peripheries in Sarajevo Lien, Rafiq & Walker, 2014)

Beirut Green Line

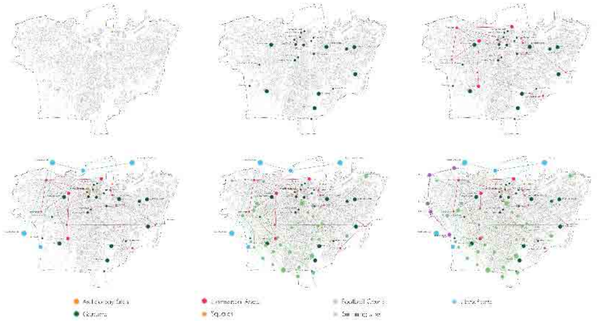
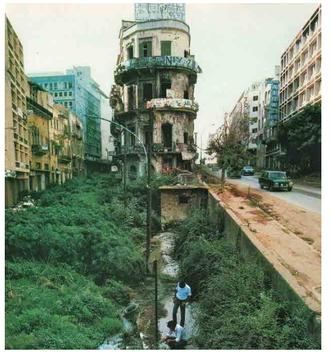


Fig.24 Open space analysis
map source: In-between realities: Towards a socially sustainable urban strategy for Beirut city (Sukkarieh, 2015)



The Green line (former front line) separated the mainly Muslim factions in West Beirut from the Christian East Beirut during the war, and nowadays remains a fragile geographical spot where lush green belt emerged from the abandoned area with large amount of demolished constructions and mussy groves.

Fig.26 Beirut Green Line
figure source: https://people-dont-have-to-be-anything-else.fandom.com

Fig.25 Dwellers' movement analysis
map source: In-between realities: Towards a socially sustainable urban strategy for Beirut city (Sukkarieh, 2015)

Towards a socially sustainable urban srategy for Beirut City

The project "IN-BETWEEN REALITIES" (Sukkarieh, 2015) describes, conceptualizes and explains the division in post-war Beirut, Lebanon based on religious distribution. In this project, the author first try to understand the logic behind the division situation, then by analysising three different kind of spaces in the city (perceived, conceived and lived spaces), new potentials are explored to contribute to the future development of the city. For the three kinds of spaces, related researchs are made on 1) how would different religious backgrounds influence the forming of city images and acquired social memories? 2) how would urban interventions enhance the relation between places and images and stimulate the forming of collective memory.

Conclusion

Three cases above are all choosen from the tipical divided city, one of them already finished the transformation after the war, while other two are still on their way finding the proper strategy to cope with multi-challenges. Following are the points I learned from them:

1. Collective memory
People have different social memory based on their different ethnic, religious, political parties and living background. In order to achieve the inclusive society, the memory that can shared by general public group should be more focus on, especially the one of the prosperous period in the past.

2. Visual memory
As many traces of the memories have gradually been erased by the expansion of urban fabric due to reconstruction work and urban development, history related memory should be visualized through symbolic using of history element. This is not to reduce memory to what is geographically visible, but to use the visibility as one way of accessing public imaginations. It is an attempt to read conflict, agency and power as spatial, discursive practices (Kappler, 2017).

3. Place making
The place should always respond to the districts needs and adaptable to surrounding futher development.

4. Importance of border line
Border line is where the conflict happened, but also where diverse groups of people mix. If people stay away from them, much of the future potential of cities is lost (Youth, Continuity and Change, 2012). Public space could be added to the border line as the supporting facilities for the existing public infrastructures on the border line, and increase physical mobility between two sides.

Based on previous studies, the public space has such a potential in connecting people, evoking past memory and creating new memory. I envision a place where allows people to interact with their environment, the left heritage, and of course each other, creating new memories to coexist with past memory and experiences. The public spaces with great potential would be taken as entry points to stimulate public gathering, activities and memories for re-bridging the connection.

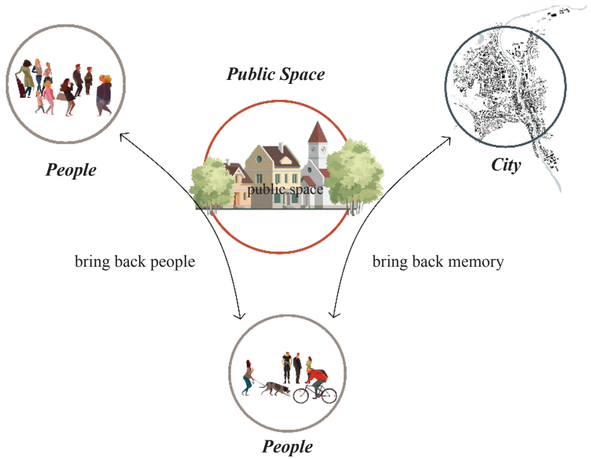


Fig.27 The role of public space to mitigate mental division
figure source: author

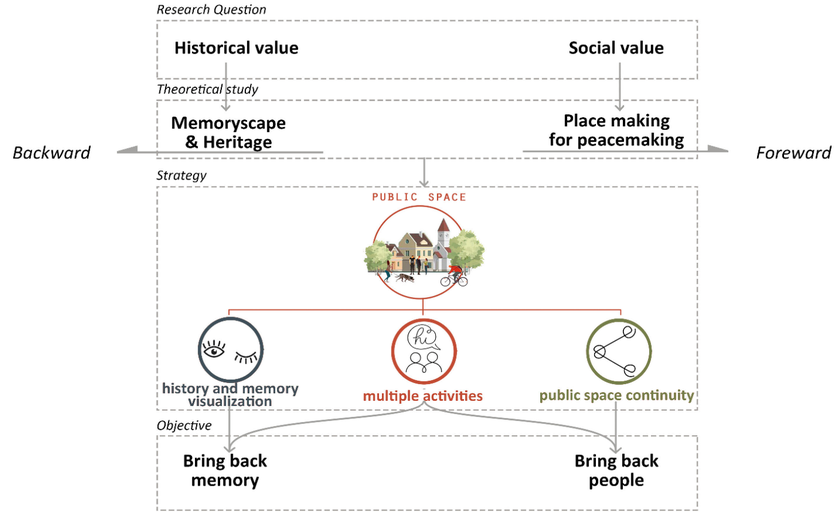


Fig.28 Strategy on public space to mitigate mental division
figure source: author

05 Site Analysis

Historical Analysis

History of Mostar

As wrote in the documents from World Heritage Committee (2005), the histoy of Mostar can be briefly introduced as following:

Before 1468

A settlement established as an urban structure in the 15th century on the crossing of a river and a land road was originally located in a valley of the Neretva River. The name of Mostar was first mentioned in a document dating from 1474, refers to the wooden bridge (former old bridge).

1468-1878 Ottoman period

During 15th and 16th centuries, the town of Mostar developed following the Ottoman character as crafts and commercial centre combines with mahala housing complex. Since then Mostar has been long known for its old Turkish houses and the Old Bridge which the original wooden bridge was rebuilt in stonein 1557 and quickly became a wonder in its own time and the city's symbol.

1878-***1918 Austria-Hungary period***

Austria-Hungary took control over BiH in 1878 and governed the country till 1918 when the World War I broke out and ended up as the country of Yugoslavia. During the late nineteenth century, the process of economic and social transformation has introduced in BiH, which dethroned agricultural society, as it had existed for thousands of years, and replaced it with the urban, industrialized, technocratic society.

1918-1992 Yugoslavia

After World War II, the city turned into a major industrial and tourist center and prospered economically during the time of the Socialist Federal Republic of Yugoslavia. The socialist era boosted development of the city's industrial base which offered employment to a wide sector of the city's women of all ethnic backgrounds, and encouraged the immigration of rural residents into the city.

1992-1996 Civil War

Throughout late 1992, tensions between Croats and Bosniaks increased in Mostar. In early 1993 the Croat–Bosniak War escalated and by mid-April 1993 Mostar had become a divided city with the western part dominated by HVO forces and the eastern part where the Army of the Republic of Bosnia and Herzegovina (ARBiH) was largely concentrated. Fighting broke out in May when both sides of the city came under intense artillery fire. Ended with the Dayton Agreement in 1995, around 2,000 people died in Mostar during the war.

1996-2004 Reconstruction

Beginning in 1996, cooperation of the local government in Mostar, with the local Institute for the Protection of Monuments, the "Stari Mostar" Foundation, the World Bank, UNESCO, the Research Centre for Islamic History, Art and Culture (IRCICA) Istanbul, the Aga Khan Trust for Culture, the World Monuments Fund, universities worldwide, and many other professional partners have generated a reliable professional network and a sound agenda for revitalization of the historic core.

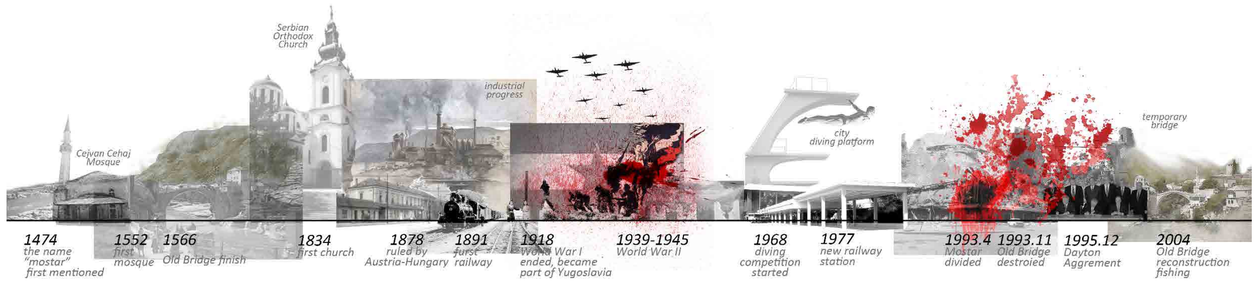


Fig.29 Mostar development timeline *figure source:author*

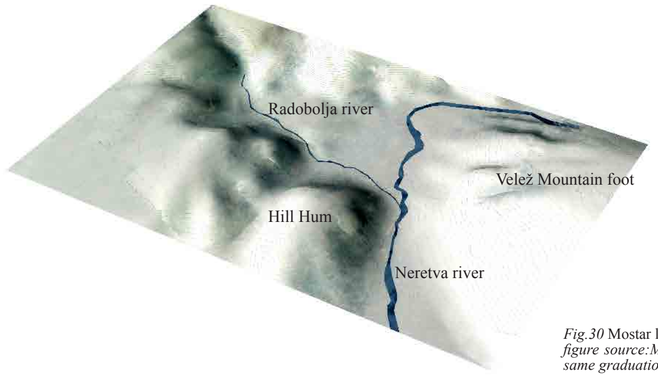


Fig.30 Mostar location and topography
figure source:Minna Liu (colleague from same graduation lab)

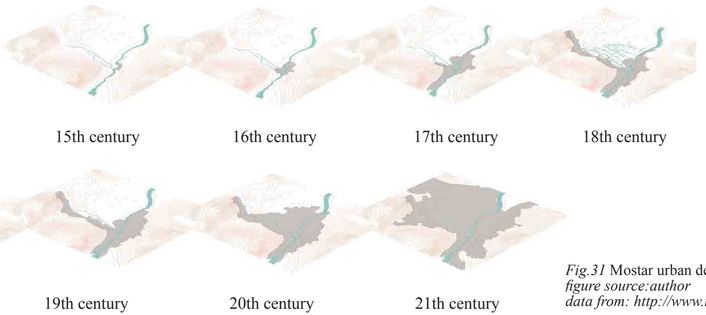


Fig.31 Mostar urban development
figure source:author
data from: http://www.mostar.ba/

The essence of centuries-long cultural continuity is represented by the universal synthesis of life phenomena: the bridge and its fortresses, religious edifices, residential zones (mahalas), arable lands, houses, bazaar, its public life in the streets and river (World Heritage Committee, 2005). It is just because of this luxuriant history process, physical fabeic together with memory keep becoming palimpsest in this city.

15th-19th century

The urban development from 15th century to 19th century are mainly along the Neretva river and Radobolja river (*Fig.31*). During this period, the development speed is relatively slow due to poor productivity and technology, thus the urban range still largely be limited to the topography and nature resource distribution. At the beginning of its foundation, the location of Mostar is at the valley area along Neretva River between Hill Hum and Velež Mountain foot (*Fig.30*). It is the result of comprehensive consideration of flood risk, rainfall risk, military protection, agriculture, water source, weather and trade route. During this period, buils environment in Mostar is in the pattern of "mahala", the traditional housing complex.

20th-21th century

During this period, the development mainly focus on the large area on west bank (*Fig.31*). With the rapid development in technology, city can no more rely on agricultural production, more space in the west plain turn into urban area. Since the first railway which later turned into boulevard was built in the west, during this period, the later road system and city pattern were also influenced by the introduction of railway. It as an opportunity started the development of that area.

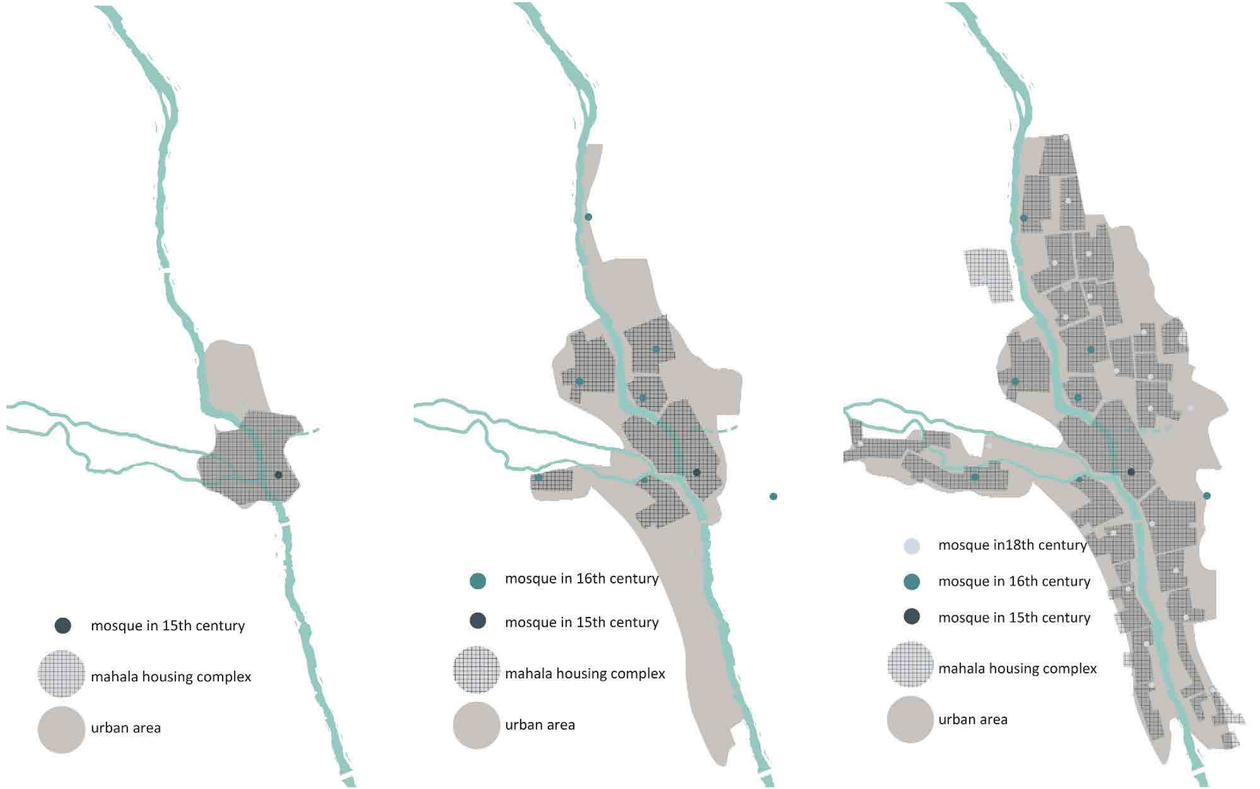


Fig.32 Mostar traditional pattern of mahala development
figure source: author
data from: Mahalles in the City of Mostar (Borislav Puljiæ, 2011)

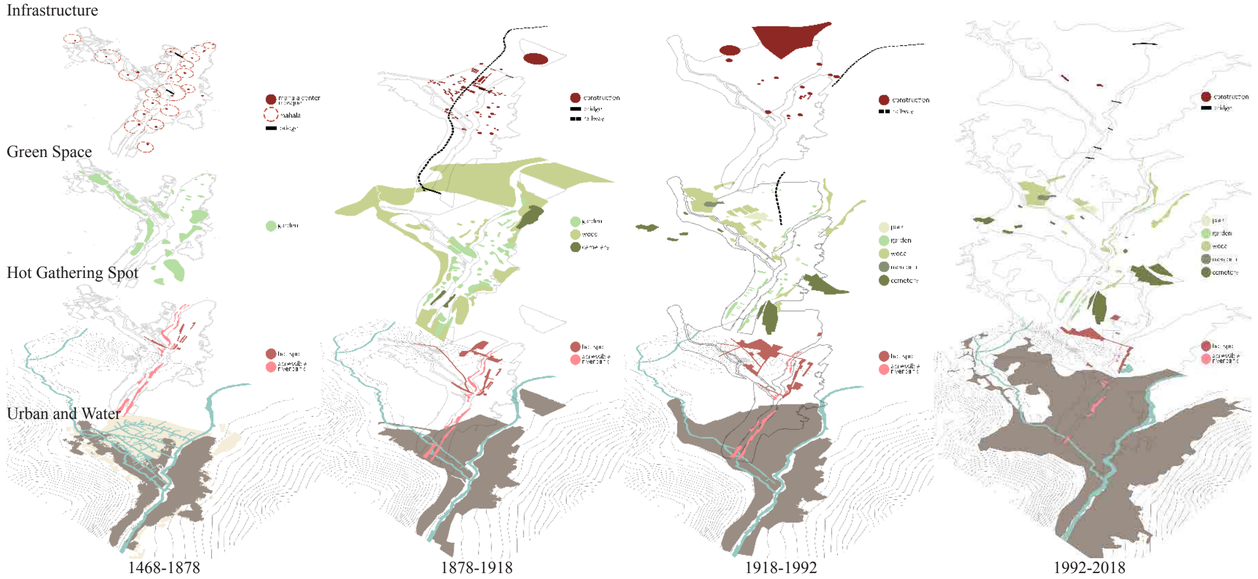


Fig.33 Mostar development change *figure source:author data from: http://www.cidom.org/*

Social life is relatively prosperous in the former Yugoslavia, with modern and perfect facilities, diverse recreational and public spaces, high accessibility to the river bank, rich riverbank activities, and wide central activity areas on both sides of the river. After the war, some public spaces and public buildings are occupied or destroyed, such as the functional change from recreational green space to cemetery, resulting in limited social center on two sides. Besides, river bank has also been occupied by construction development, private use or wildly plants and bushes lacking maintenance. The vitality centers in both side decrease their active range, and there are less connetion between them, gradually become seperate system.

Ruined Ground

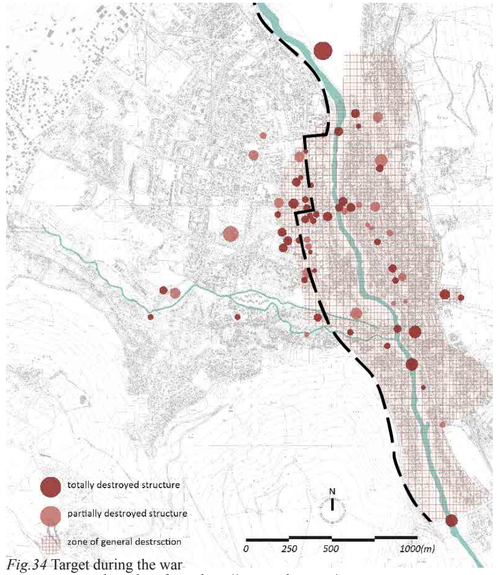


Fig.34 Target during the war map *source:author data from: http://www.cidom.org/*

As everything that was viewed as "meaningless and less important" was left untouched during the reconstruction after the war, general open spaces and non-religious, non-public functioned buildings are still stayed in ruins or of poor quality,which gives the potential to new improved public spaces.

Buildings and spaces with important historical significance should be valued because they are the places where historical events occured and where people gathered in the past. From spatial aspect, they are important nodes/landmarks in the system of public space. From social psychological aspect, they are carriers on which public memory fromed.

If one is seriously damaged and there is no special public significance, it can be transformed into a new functional space servicing the surroundings.

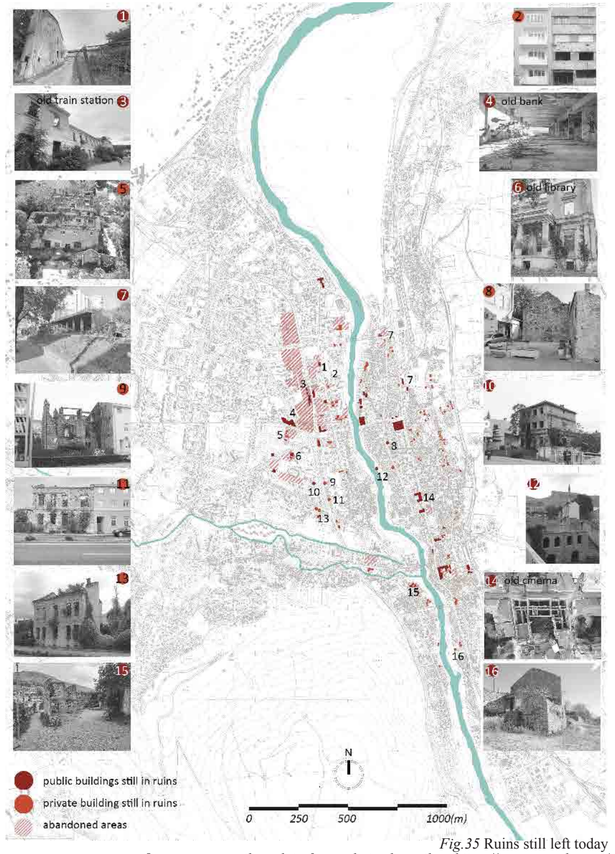


Fig.35 Ruins still left today *figure source:author data from: photos by author, https://maps.google.com/*

Attitude of Government in Reconstruction Work

Rebuilt religious and traditional building

Nowhere is the importance of appropriate development more evident than in the historic neighbourhoods (*Fig.36*) that form the very heart of the old town, these old neighbourhoods reflect the character of the city formed during the Ottoman period, and remain an inextricable part of Mostar's historic image (Pašić, & Siravo, 2004).

Reconstructuin of Old Bridge

1)To quarry stone from the same mountain as centuries ago (local stone tenelija in Mukosa quarry).
2)Rebuilt using the same technique as then. Some old pieces of the original bridge now lie at the pebble beach and serve as places to sit (Beijaert&Mačkić, 2014).
3)Bridge ruins/stones lay out on the bank of the river, they appear to blend in with the landscape rather than call attention to themselves.

The presence of these stones (*Fig.37*) is not to force them on to the memory-industry, but to be used as a space (/platform) for contemplation on the issues of memory and forgetting through built form, and in this specific case an unintentional memorial. Through their presence and representation, these stones have an inherent value for understanding the temporality of memory (Krishnamurthy, 2012).

Goverment's attitude towards heritage in reconstruction work

In the reconstrcution work of Mostar, besides necessary public infrustructure and buildings, obviouslly, the goverment paied special attention to the places and constructions with both functional and historical value. The Old Bridge would be the most remarkable and representative one. Over the centuries the Old Bridge has taken on the role of a familiar landmark and a physical biography both for the city and the people (Krishnamurthy, 2012). More or less, there are extra profit brought by the reconstruction of the Old Bridge, including but not limited to:
1)connection of pedestrian network
2)tourism economic profit
3)historical value as world heritage
4)symbolic meaning of peace, as a way of conveying spirit

Despite of some disputes on whether the Old Bridge really meet these value, the government still has a great interest on pursuing multi-profits mentioned here. Thus the design work on the heritages and public spaces would be more supportive by government if also show concerns on these values and profits.

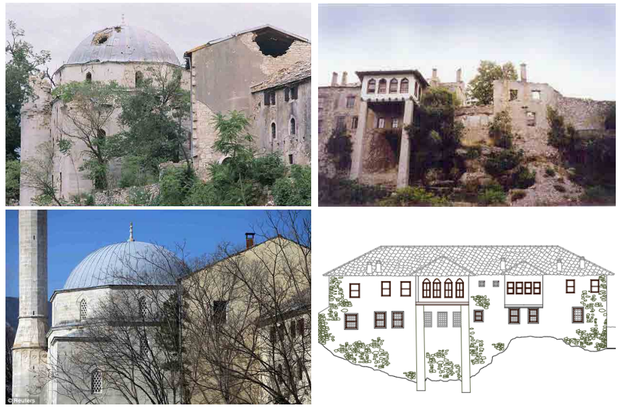


Fig.36 Reconstructionu of religious and traditional building
figure from: Rehabitating The Historic Neighbourhood (Pašić, & Siravo, 2004).

Fig.37 Reuse of original stones for reconstruction of Old Bridge
figure from: http://www.cidom.org/,

Memory Carriers Analysis

The memory exists in the carriers like place, activity and symbolic elements. By analysising key words of the memory in these three carriers, the memory chart (*Fig.38*) is made to show the distribution and transformation of memory along different history periods. Large amount of print, electronic and media materials are referenced first to select memory key words and then to mark them on the map (*Fig.39, Fig.40, Fig.41*).

From the memory chart, the appearance, disappearance and transformation of a kind of memory and the time help better understanding the importance of that kind of memory and the specification of a certain period or time nodes. By comparing the marked maps, there is a obvious look that those memories mainly distribute along the riverbank, boulevard and promenade where hold stronger potential when talking about memory in the design part.

While actually the restoration of the collective memory is not simply attached to the places and objects (buildings, squares, landmrks, etc), but also attached to the relationships between them, it is about how people understand the objects and the environment by, for example, spatial connection, routes and movement (DeWolf, Girani, Sinatra, & Sirkis, 2014). Kevin Lynch (1960) mentioned the theory of urban legibility that a vivid and integrated physical setting, capable of producing a sharp image, plays a social role as well, it can furnish the raw material for the symbols and collective memories of group communication. Thus the restoration of memory here also ask for the attention on original relationships between these memory carriers, like spatial pattern, eye-level image and people movement.

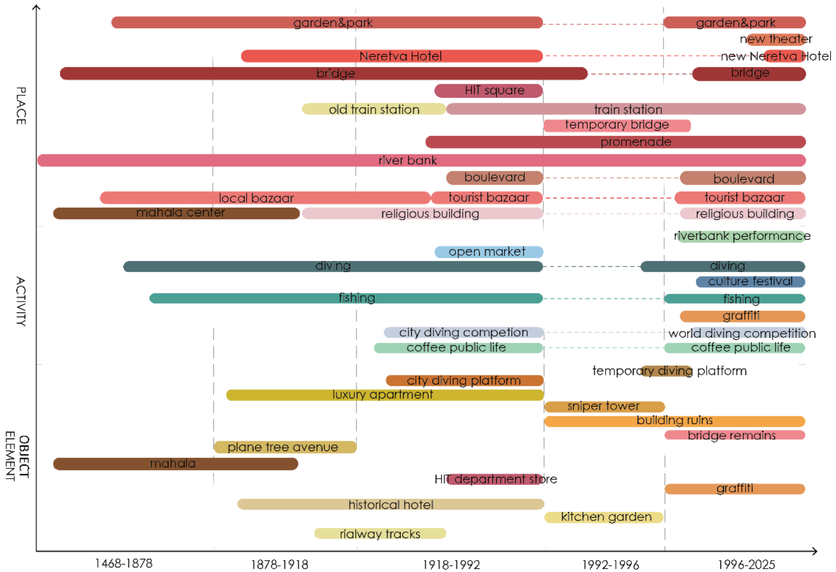


Fig.38 Memory chart *figure source:author*

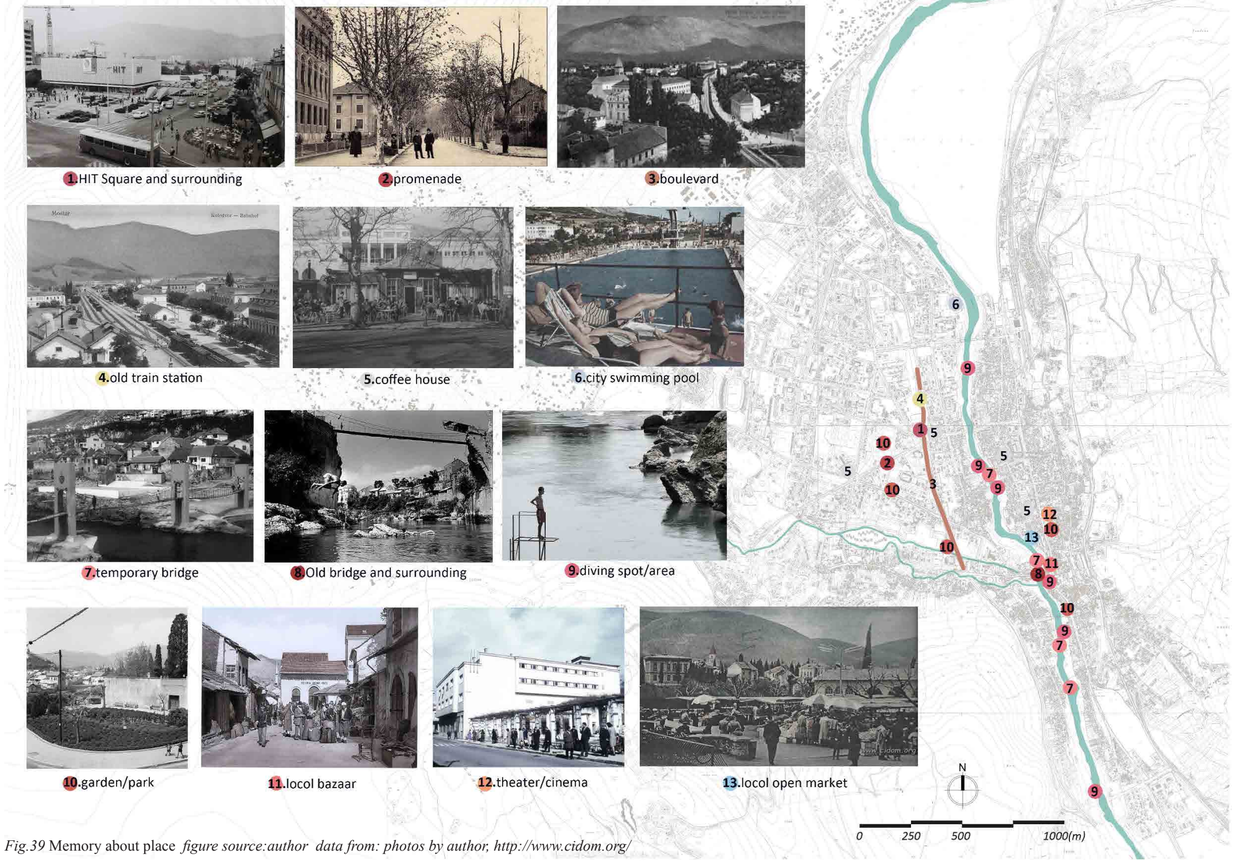


Fig.39 Memory about place *figure source:author data from: photos by author, http://www.cidom.org/*

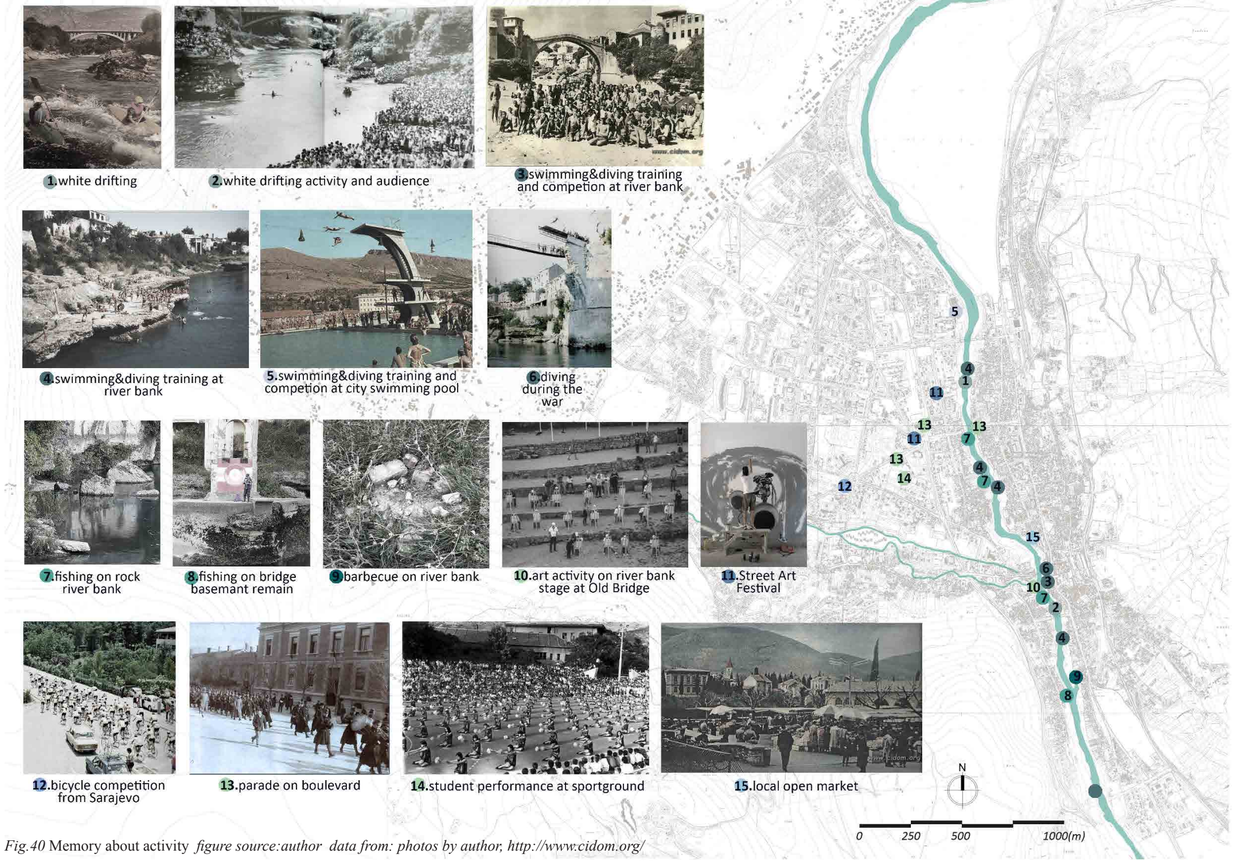


Fig.40 Memory about activity *figure source:author data from: photos by author, http://www.cidom.org/*

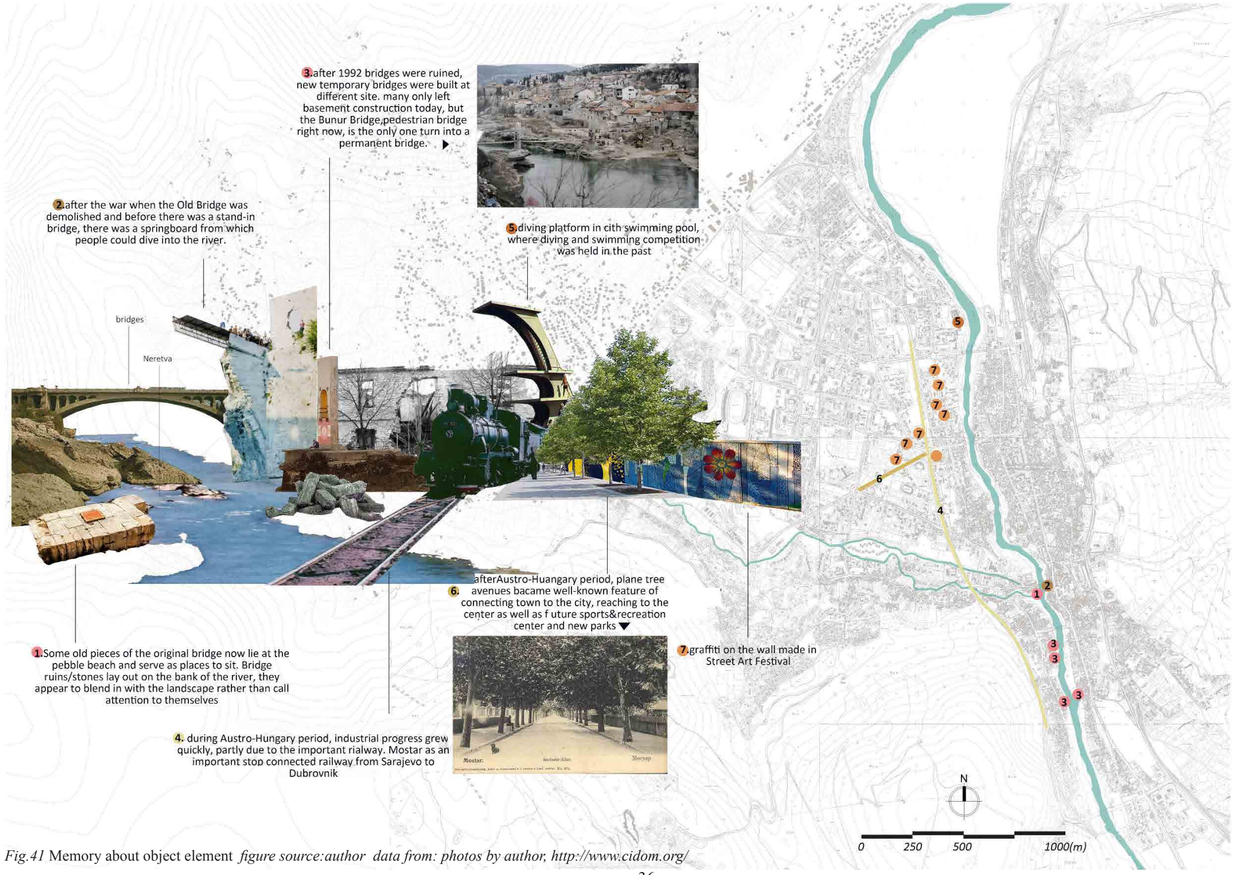


Fig.41 Memory about object element *figure source:author data from: photos by author, http://www.cidom.org/*

Division Situation Analysis

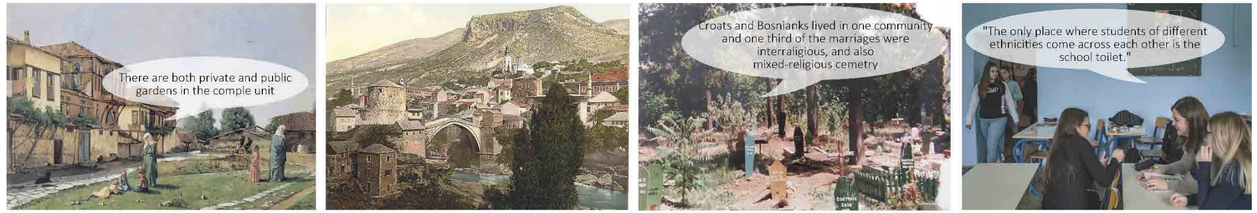
Even in the early time, Mostar people from different religions and ethnics mixed together in mahalas, then with the newly development of west Mostar, residents in the city had futher mixture. Mostar used to be the paragon of tolerance an dwaas known as the city with the most mixed marriage. During the war, people of minority ethnic on both bank were forced to move to the other side to stay with their ethnic. After the war, the segregation in ethnics are obvious.

Mahala as the earliest cohesive complex: The poor and the rivch existed in every mahala, poor families would get help from the rich and there were no religious division in the complex.

After the rule of Austro-Hungary, new churches was built, th eoriginal single-religious mahala turned into the mixed-religous one.

After World WarII, the industrial economy had a rapid growth, urban development brought more place to live. 18,000 inhabitants grew to 100,000, people moved to west part for new appartments and left the old home in the east mahala side. People from different religions further mixed in this period.

Today, Mostar's elite high school sits on the former front line. Students from both sides of the town attend classes on the first two floors, sharing some classrooms, but never be together. The third floor of the school in Mostar is occupied by the United World College, an international school .



1468-1878 Ottoman period | 1878-1918 Austro Hungirian period | 1918-1992 Yugoslavia period | 1992-now BiH period

Fig.42 Ethnic mixed and divided form *figure source:author data from: http://www.cidom.org/, https://www.nytimes.com/*

The Guardian

Bridge opens but Mostar remains a divided city

BBC NEWS

Is Mostar still a divided city?

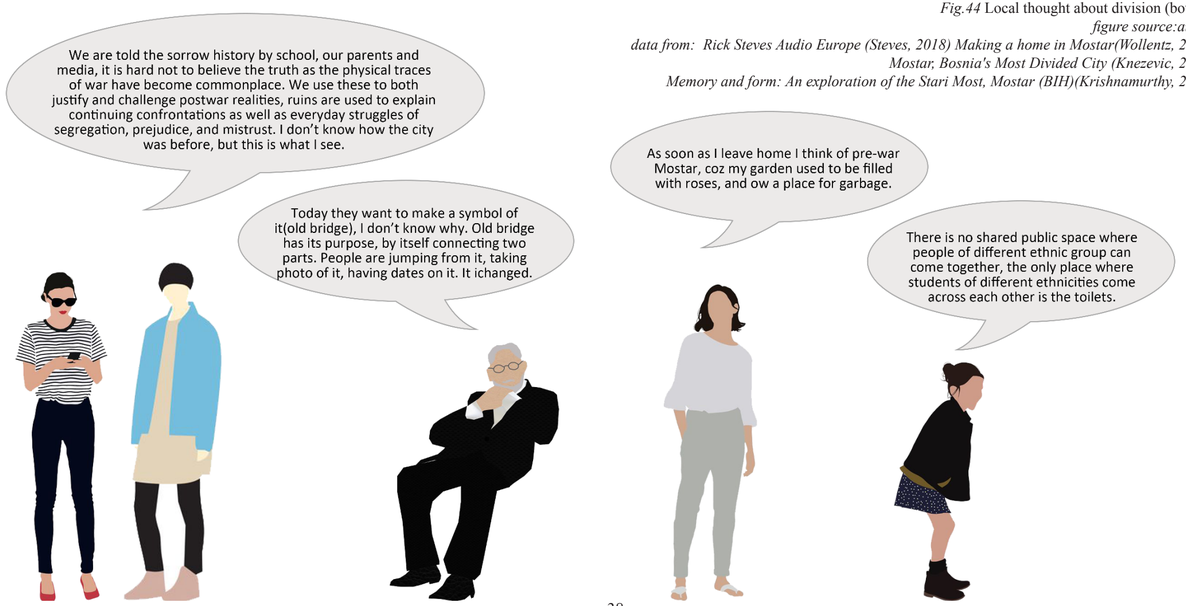
26 Jul 2018

The New York Times

In a Divided Bosnia, Segregated Schools Persist

Fig43 News about Mostar segregation (top)
figure source:https://www.theguardian.com/world 4/jul/23/iantraynor
https://www.bbc.com/news/av/world-europe-44970561
https://www.nytimes.com/2018/12/01/world/europe

Fig.44 Local thought about division (bottom)
figure source:author
data from: Rick Steves Audio Europe (Steves, 2018) Making a home in Mostar(Wollentz, 2017). Mostar, Bosnia's Most Divided City (Knezevic, 2017). Memory and form: An exploration of the Stari Most, Mostar (BIH)(Krishnamurthy, 2012).



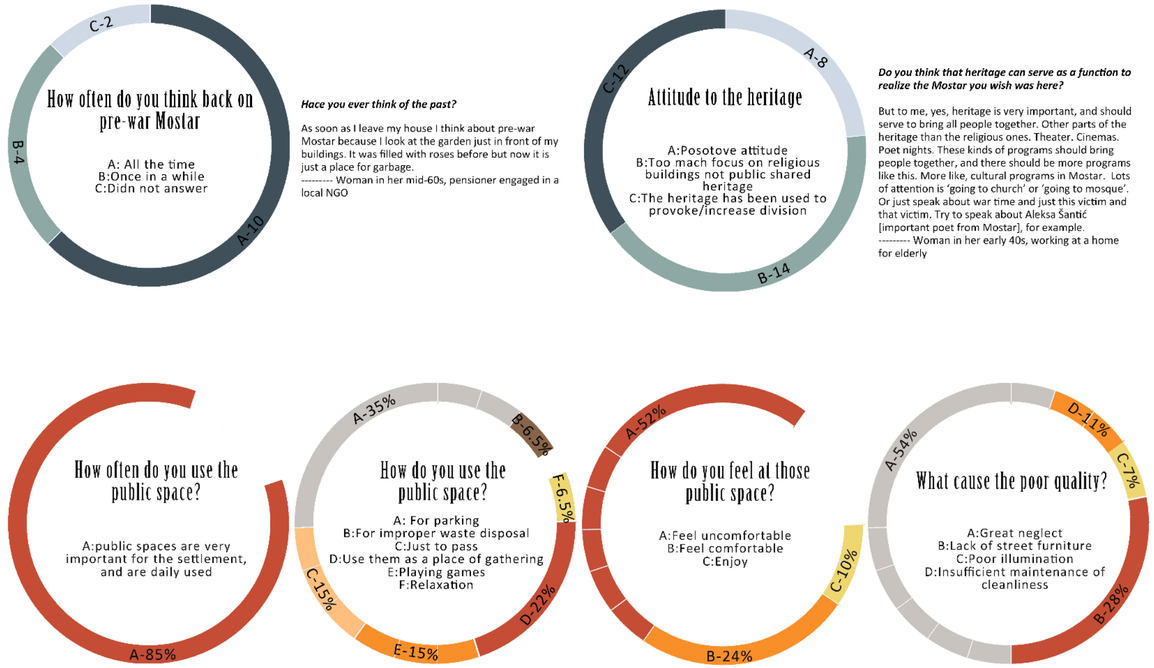


Fig.45 Local attitude towards memory, heritage and public space
figure source:author
data from: Can Public Spaces Initiate The Recovery Of A Town? (Gašparović, Mrđa, & Oberman, 2011). Making a home in Mostar(Wollentz, 2017).

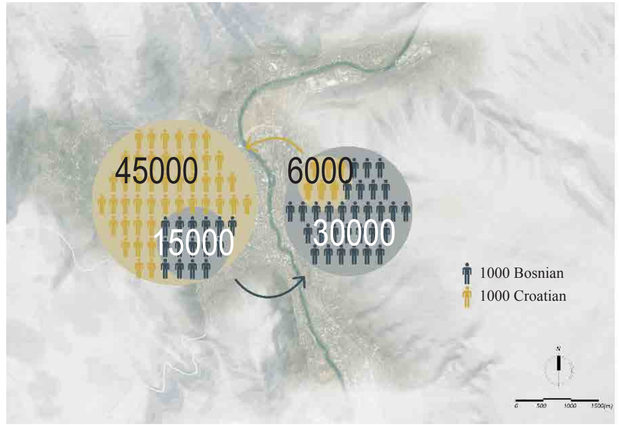


Fig.46 Ethnic change during the war
figure source:author
data from: 'The Divided City and the Grassroots'

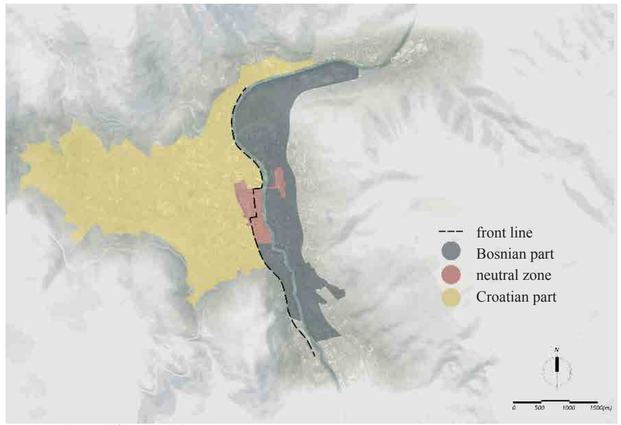


Fig.6 Boulevard (front line) in Mostar
map source: author

The central neutral zone

The idea first came out in 1996 that dividing a Central Zone as a jointly administered municipality, the only politically shared space in the city, hoping the Central Zone could foster possitive communication between the two sides and provide a physical starting point for a reunited city. After long intense discussion about the area of this neutral zone and buildings included in, finally the Rome Agreement is signed that the Central Zone should be seen as a jointly controlled territory and a shared space by two sides. Thus this between zone is of great importance as the potential space to pursue for an equal, shared and cohesive area encouraging reunion.

Current Condition Analysis

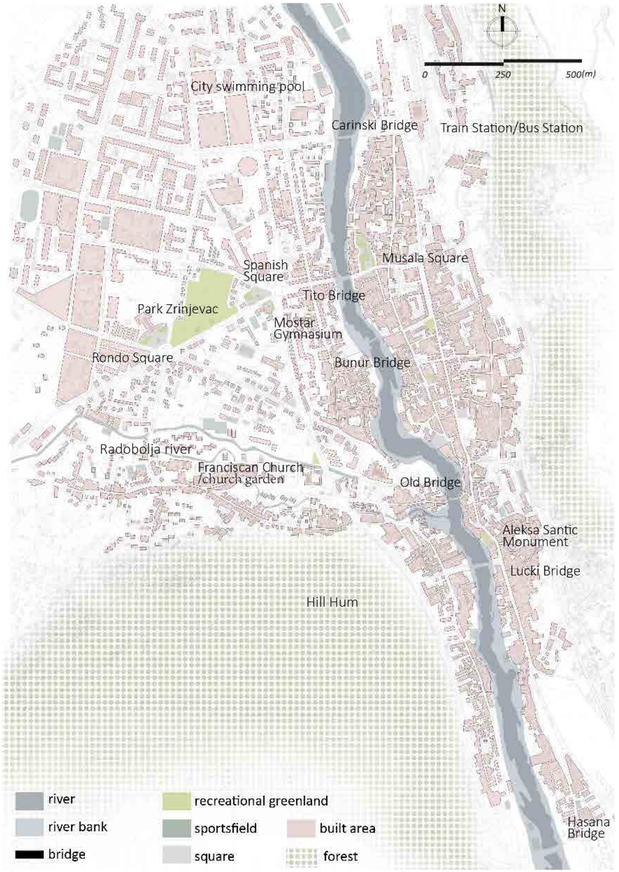


Fig.47 General city mophology
map source:author

Fig.48 Traffic network map *map source:author*

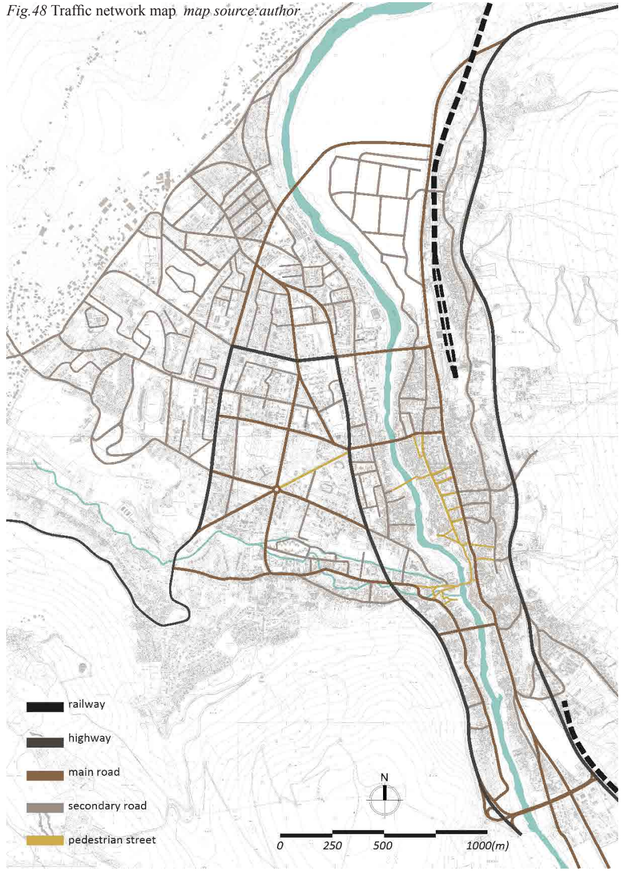


Fig.49 Institution Division *map source:author*

The separate municipal systems on both sides also contribute to the segregation situation, not only do they have seperate schools and religious buildings but also respective water supply, electrical and medical system. This division-support municipal policy would just make people increasingly getting used to the division situation.

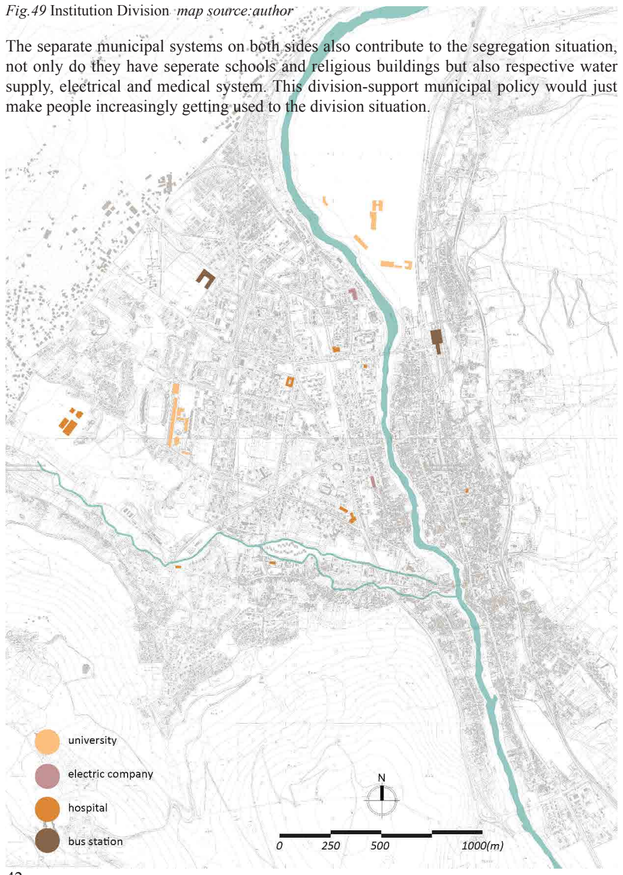


Fig.50 Educational Building *map source:author*

Fig.51 Religious Building *map source:author*

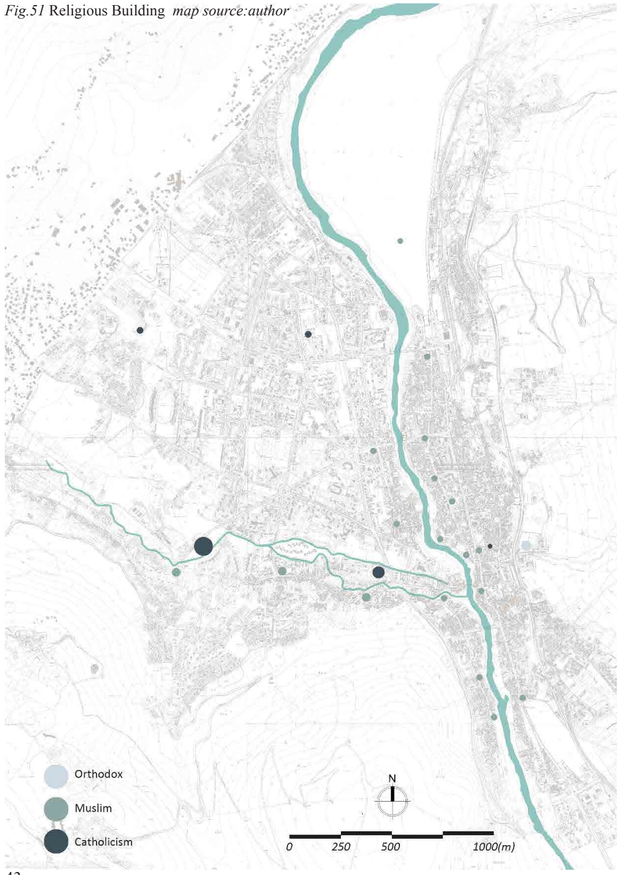


Fig.52 Public Service Building *map source:author*

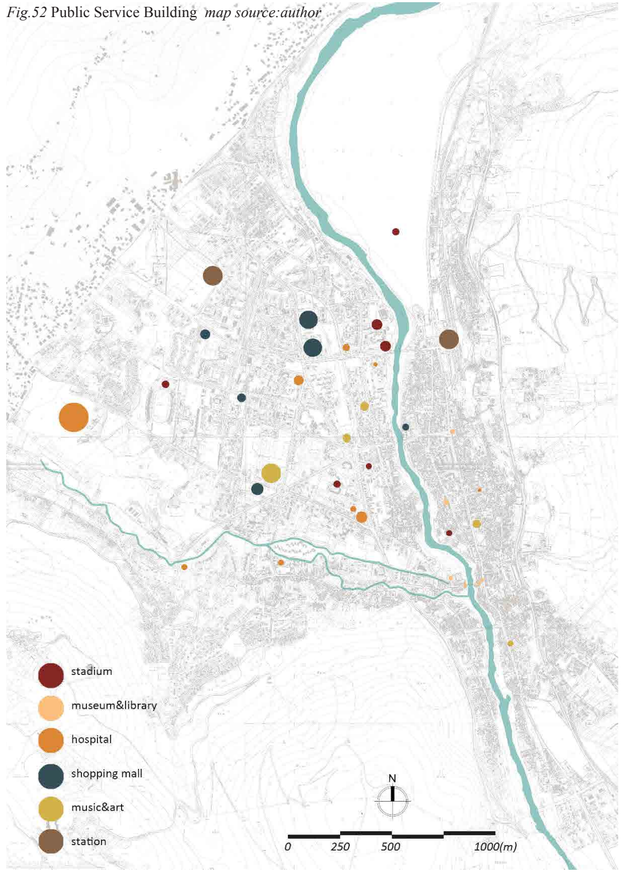
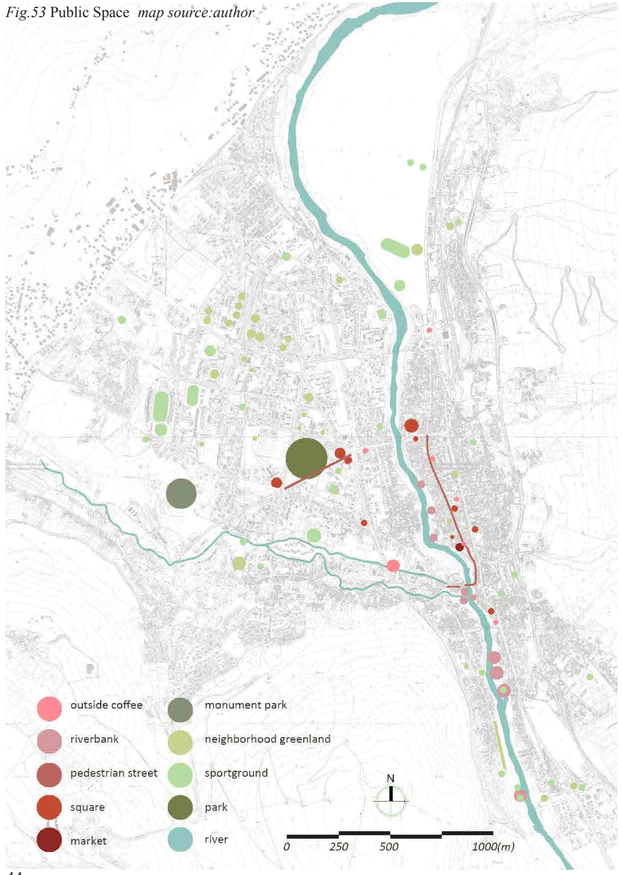
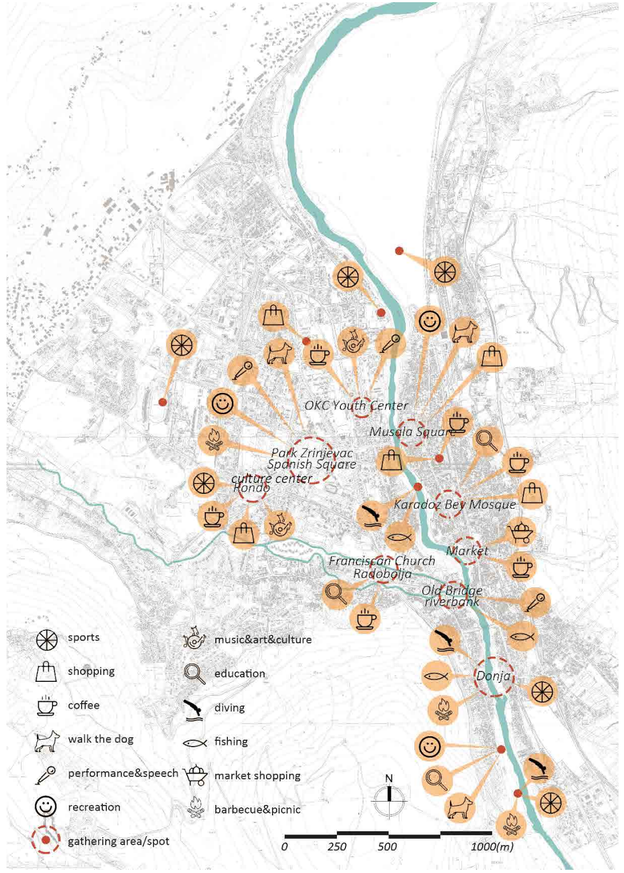


Fig.53 Public Space *map source:author*





By a series of current condition mapppings, the distribution of hot gathering place currentlly (*Fig.55*) and in the past (*Fig.56*) could be summarised. Following are some conclusions from those mapping.

Vitality change

Public Space in the past has higher continuity between two sides and higher vitality along the whole river bank. Nowadays, the public center in east bank is still the Brace Fejica Street, while public center in the west bank has lower vitality along the boulevard.

Lower continuity

Physical configuration of the street network can derectly control the accessibility and guide people flow in the city. Continue public spaces can work as another layer of network to lead to the inclusive public areas in the city, also has the power to integrate or segregate,

Different vitality in two side

The city center in East has smaller scale, but do because of this, it takes better advantages of mixed-use spaces and functions, a street with shops, markets, cofes and small squares will be active throughout the day, including the late evening hours. While in west public center, single-use urban spaces are only active at certain hours of the day.

Use of ruins

In the south part of the river bank, some activities start on the base of the leftover from the war, showing the trend to creat new places and activities with physical environment change.

Fig.54 Activity *map source:author*

Fig.55 Hot spot currently *map source:author*

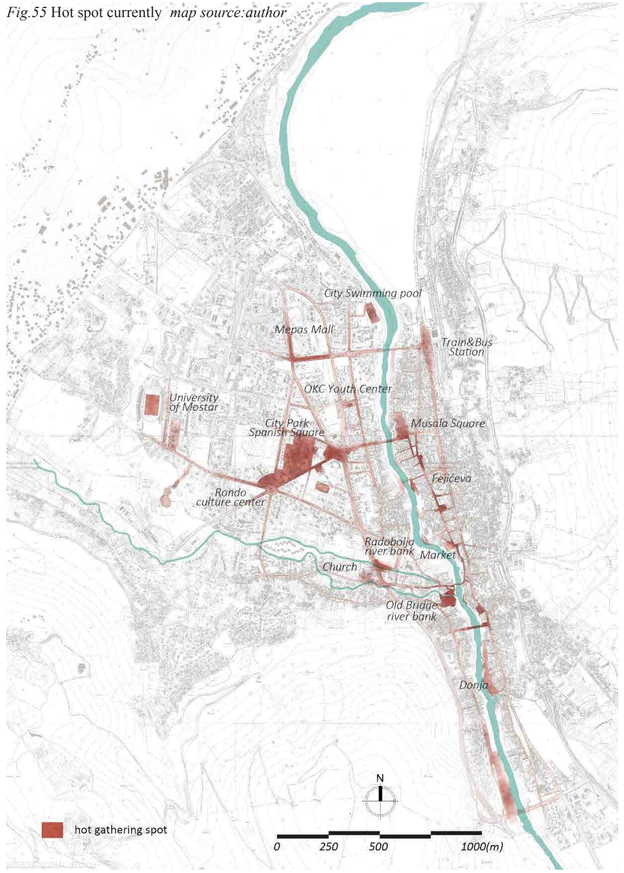
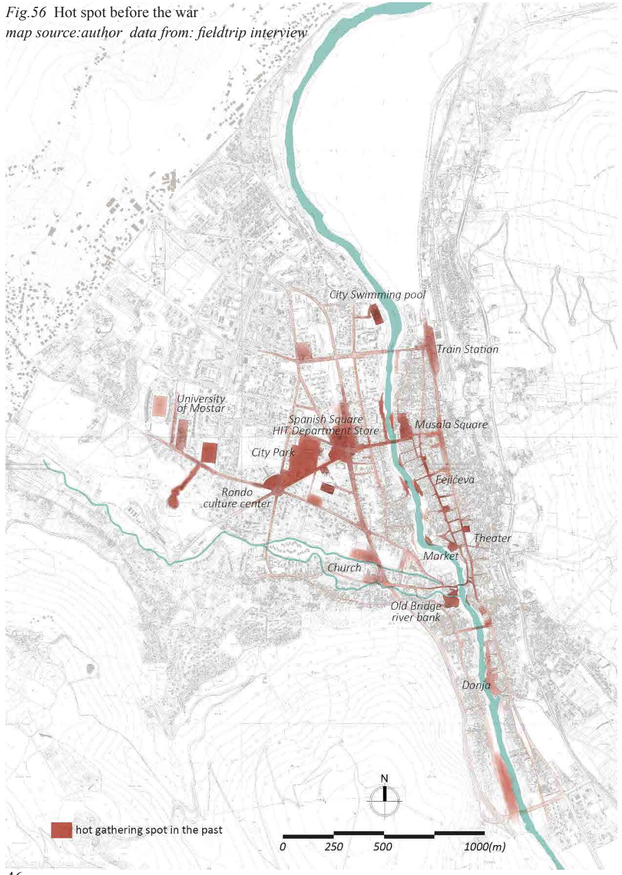


Fig.56 Hot spot before the war
map source:author data from: fieldtrip interview



Potential

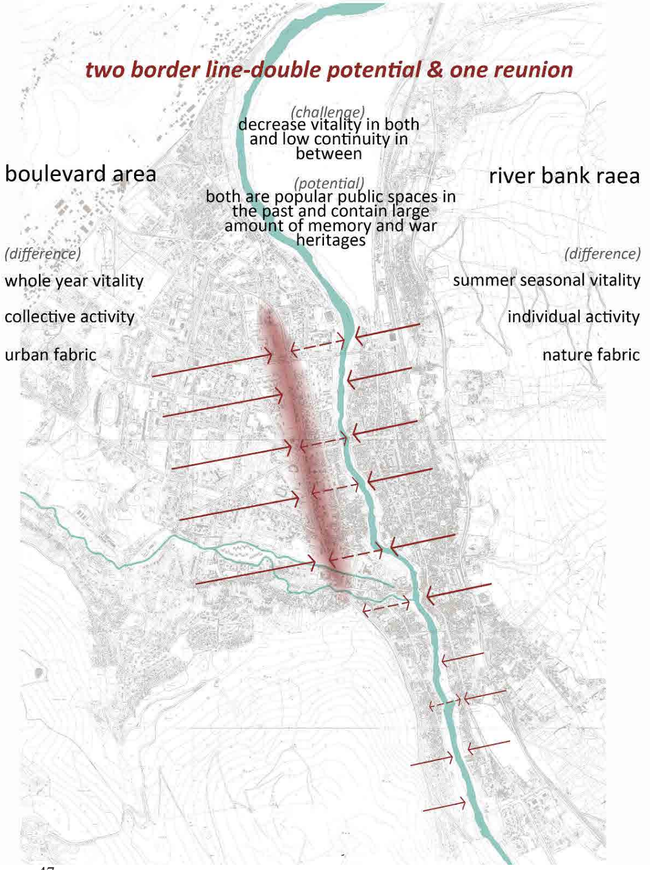
The boulevard and the river bank are two obviously recognized physical border lins. Even though there is no strict involvement relationship between physical divisin and mental division breaking the physical border do have effective help to mitigate mental division as an early step. Although these two border lines are different in many aspects, they actually hold double potential and can work together as one reunion, which also follows the original idea of establishing the central neutral zone as the shared space and physical starting point of reunion.

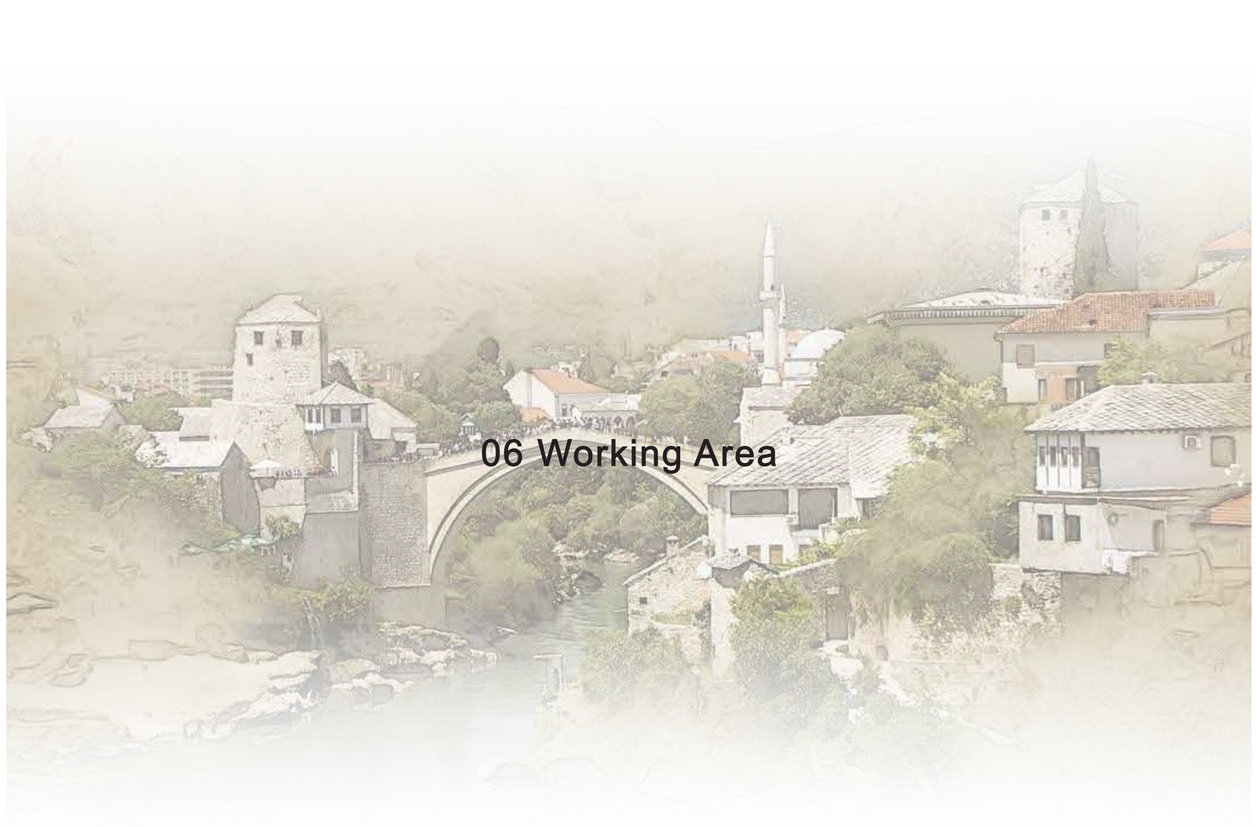
Two different border lines:
-use time: difference in seasonal use
-activity: boulevard is more for events like collective activity; river bank more for private use
-fabric and atmosphere: difference in urban/man-made and nature fabric and atmosphere

Two similar border lines:
-important role in city structure: they acted as back bones in different periods of the urban development, together form the strong structure in the middle of the city.
-as border lines: both experienced the transformation of turning from gathering lines to physical division lines and to mental division lines.
-carriers of memory: layers of events and memories deposited on them.

Two potentialed lines as one reunion:
-break the border: both of these two lines were hot gathering spot in the past but witnessed their decline after the civil war. Breaking the border is for people to get out of one's religious and ethnic territory and enter in the border of other's.
-collection of collective memory: many carriers (varrious spaces, activities, constructions and debris) of collective memory area on these two lines, making it a more pratical site to bring back memory.

Fig.57 potential working area f*igure source:author*





Working Area

Urban pattern

Because of the restriction on geographical condition and different develop area in different periods, layers of urban fabric had been erased or overlayed during the long history and finally present the pattern it has now. As mentioned before in the potential part, the two border lines this project working on are of different environment atmosphere. This point is also supported by the pattern difference. Taking the Noli (1984) map as an example, analysis of urban pattern in the working area is made made, based on the previous theory study about public, semi-public and private spaces. In this map (*Fig.61*), public space refers to natually formed or man-made spaces with some frequency of use that is accessible to everyone; semi-public space refers to space gathering people but belonged to private stakeholders, usually ask for an amount of enpenditure, like outside coffee seats; private space refers to spaces owned by or only accessible to a certern group of people, like private garden or fenced community sportsground.

Besides the pattern map, landuse map (*Fig.62*) is also made. Then by combining this two maps, three types of patterns (*Fig.64*) can be abstracted to describe the urban fabric in the working area and also the whole city:

1) mahala pattern- a evolution from traditional mahala housing complex, mixture of residentil, public serving, religious and recreational function. This pattern mainly distributes in the east bank and partly west.

2) river bank housing pattern- a typical housing pattern along the two sides of the river from early century, showing the transition from private space to public space, from indoor to outdoor.

3) morden block pattern- a newly developed pattern during the last century only distributes in the west side. This pattern consists of large single-fuction blocks dividing by traffic roads.

This analysis helps to better consider the overall atmosphere and scale of designs on two different pattern border lines, as boulevard for pattern3 and river bank for pattern2.

Attitude towards Monument & Memorial

While most survivors and observers agree that memorials should be created at the sites of mass atrocities, there is much discussion on the purpose they should serve. Should memorials be for sake of the victims? Or should they be used to educate visitors and foster reconciliation with the surrounding communities?(Irwin & Šarić, 2010)

This is the question the post-conflict areas need to reflect. Here, the attitude of government and locals towards monument and memorials is analysised based on the fact in Mostar and some previous studies made by Center for Nonviolent Action (2016) in the region of BiH.

Omarska survivor Pervanic said that in recent years there have been an increasing number of smaller memorials created by Bosniaks in Prijedor, but that many of them are religious in nature and use divisive language (Irwin & Šarić, 2010).The truth itself that different religions and ethnics build the monuments but tell the story in their own different way is also an act forcing division. It is stressed that the messages we create by building these memorials are so important, while memorials are almost always politicised in Bosnia, which doesn't have to be (Irwin & Šarić, 2010). Like The Cross (*Fig.58*) built in 2000 in Mostar on Hum Hill and the high bell tower church in the west side, both of them actually show an implicit but inevitable control of the whole city, since they can be seen in every corner of the city.

Pervanic said that memorials should be "living monuments" which educate people about what happened there. The purpose of monument and memorial establishment is to cherish the memory, but it should be more the future-towards warning and vista.

Fig.58 The Cross on Hum Hill *figure source:David W. Montgomery, 2006.*

Fig.59 Liska cemetery *figure source:http://www.cidom.org/*

Fig.60 The monument to the Bosnian army
figure source: Tülay Zivali, 2012

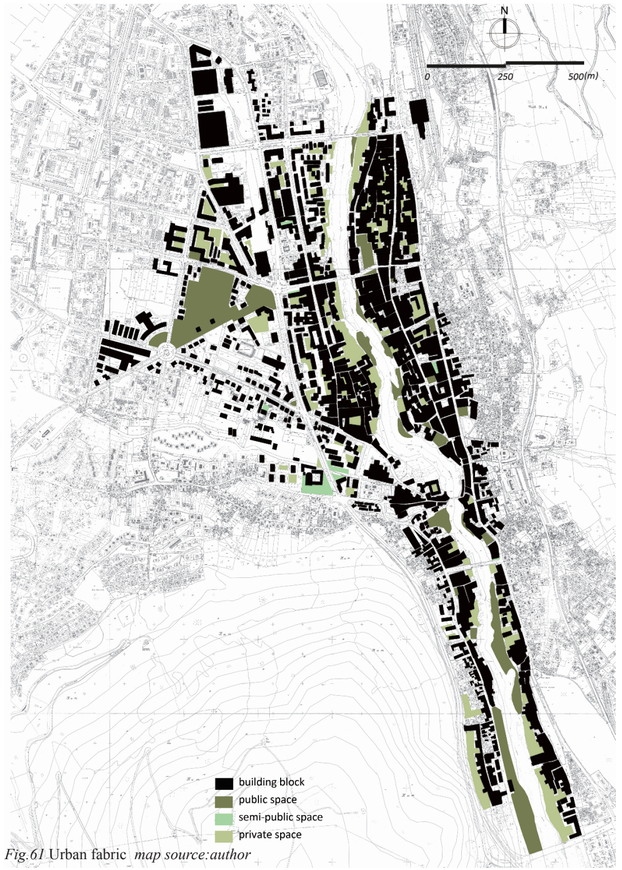


Fig.61 Urban fabric *map source:author*

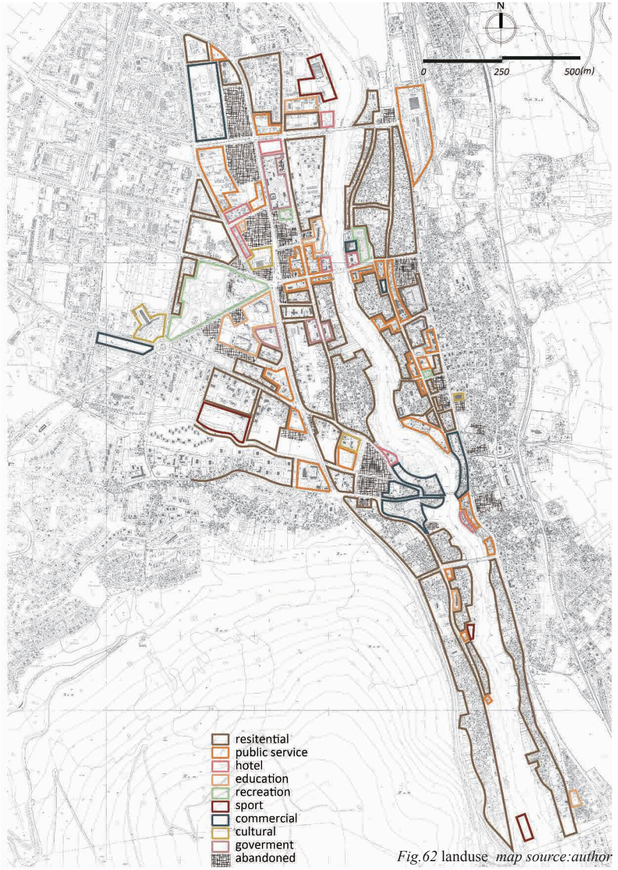


Fig.62 landuse *map source:author*

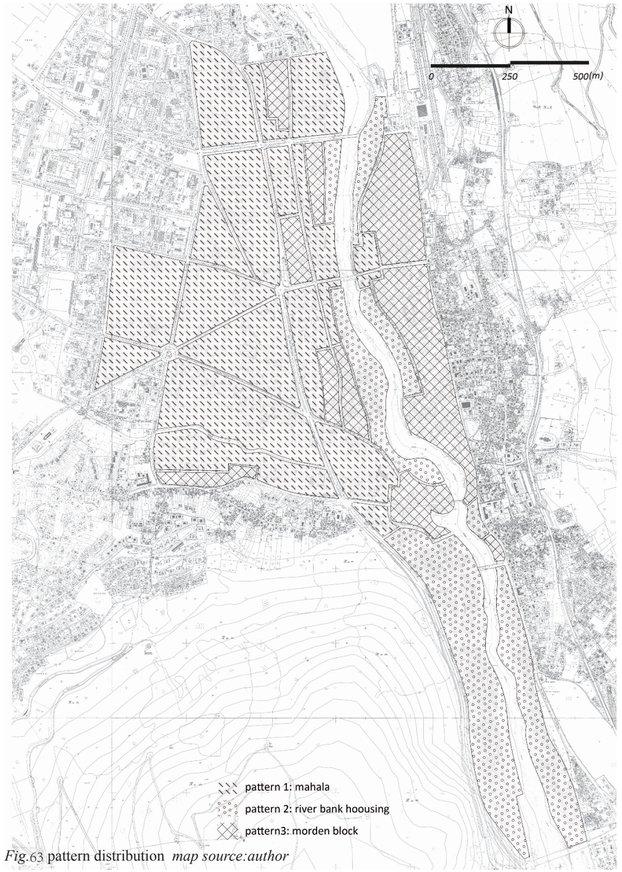


Fig.63 pattern distribution *map source:author*

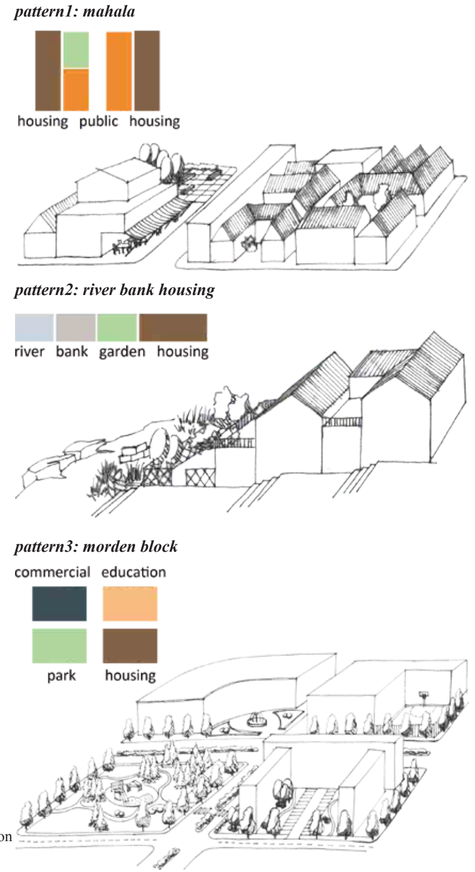


Fig.64 pattern conclusion
figure source:author

Nevertheless, other factors confirms that the meet of two different backgrounds should be treated very carefully either as monument or as memorial. Liska cemetery (*Fig.59*) is the only mixed-religious cemetery in the city till today located near boulevard in the west, all belong to Mostarians who were killed in 1992 during the confrontation with the JNA and Serbs. But then when Bosnian and Croatian fight, things changed. In Feb 1997, a group of about 100 Bosnian crossed the boulevard and entered Liska cemetery to visit Muslim graves on the occasion of a festive day. In the end 2 polices from Croatioan side did a violence that in the group one person was killed and at least twenty people were wounded. In 2013, a bomb blast destroyed a monument (*Fig.60*) to fallen soldiers of Bosnia's Muslim-dominated wartime army on the boulevard. It was just one year after it established, and next to it is a memorial in honor of Croat veterans of the conflict which was built in the same year.

Living monument

All these information provides the public demand on monument and memorial, but it should be treated in a not aggressive way nor conflicting language, maybe the "living monument" could be a gentle and neutral way acting as a backward and forward leading force, a monument for memory of the past life of the public.

The living monument does not simply show the fact of war result nor any specific event/deceased targeted, it should be open enough for everyone to have dialogue with it. In this project, the monument is better related to the collective and personal memory and by recalling and rethinking of the past, lving monument is proposed to motivate dialogue in the present and arouse ideal future.

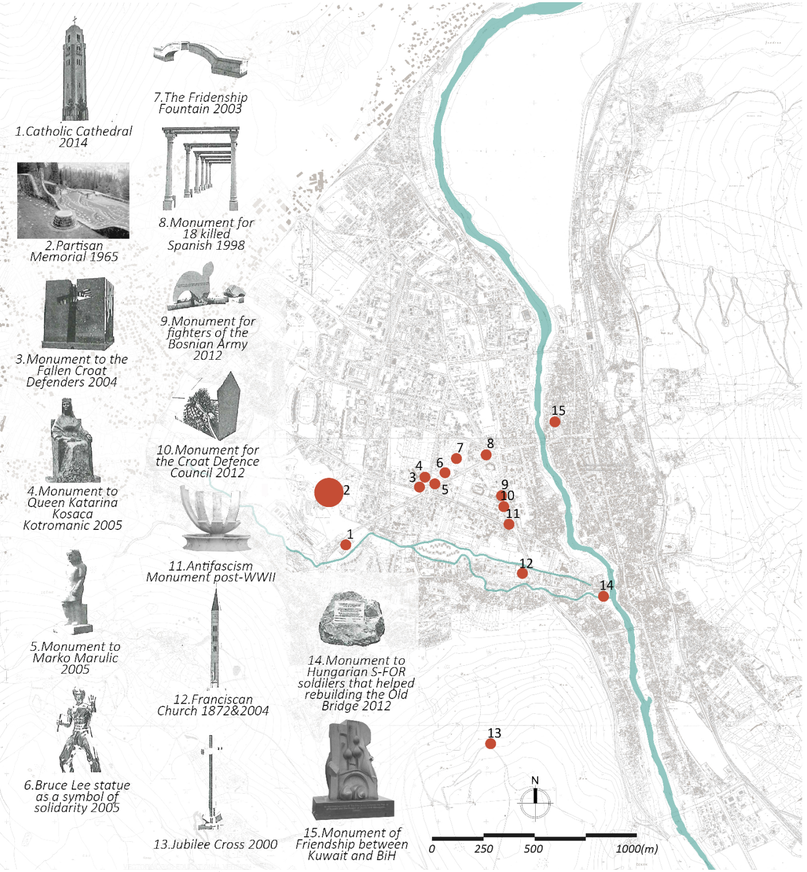


Fig.65 Monument in city
map source:author
data from: Mortal Cities: Forgotten Monuments (Mackic, 2016)

The Boulevard

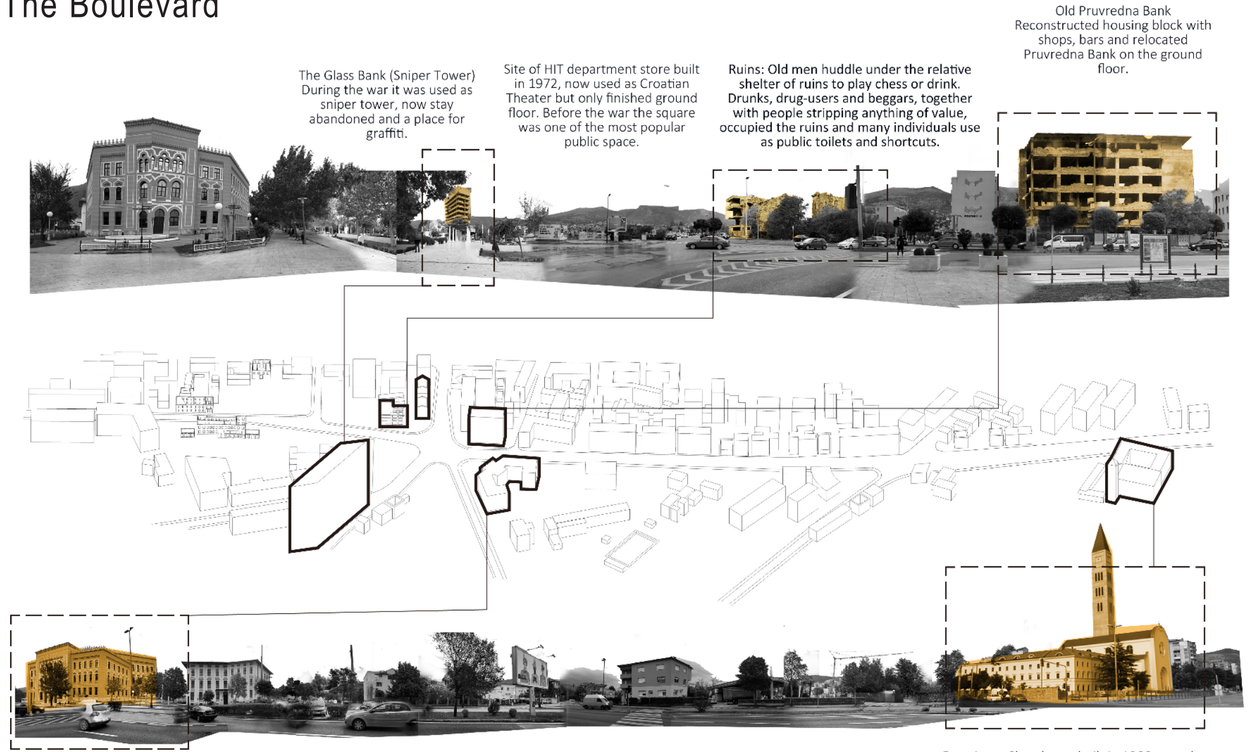


Fig.66 Boulevard panorama *figure source:author*

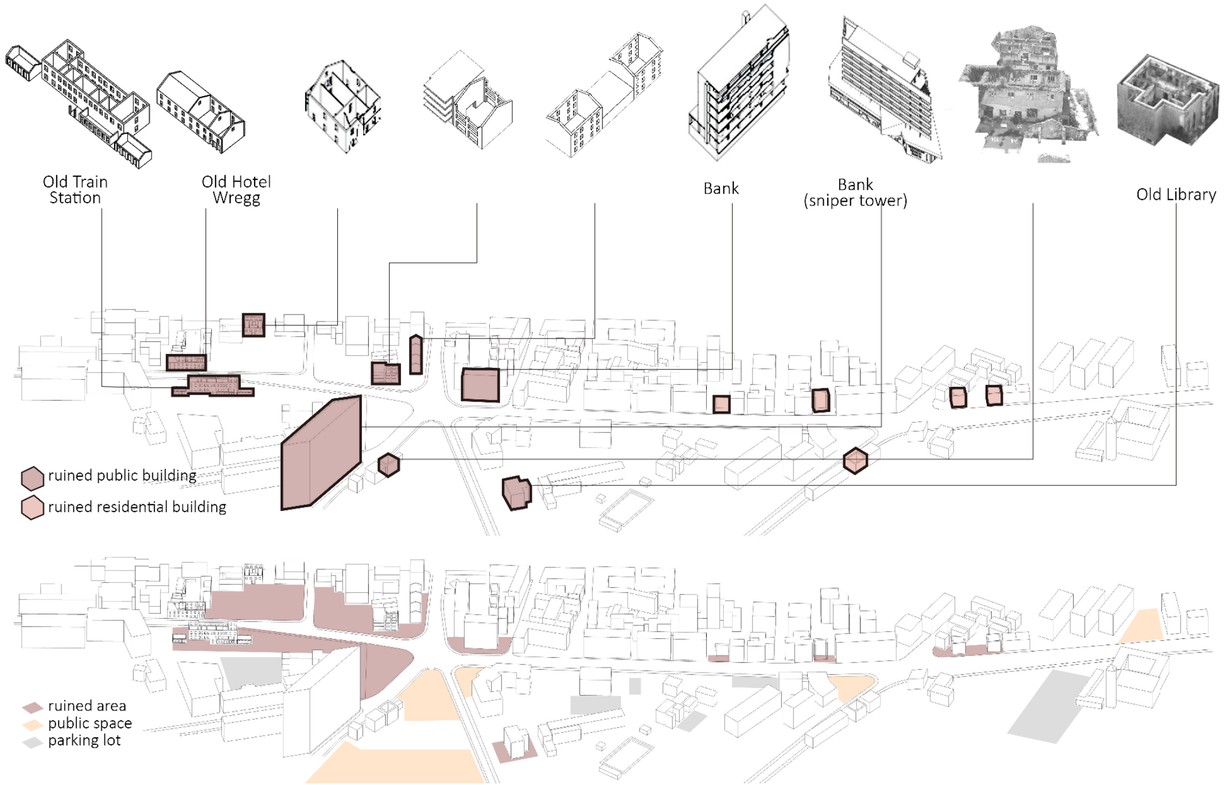


Fig.67 Ruins aand current landuse on Boulevard
figure source:author
data from: Reactivation of Mostar's Diluted Urban Fabric (Mitchell, 2012)

As concluded in the previous text, the importance of boulevard lies in: 1)importance in urban pattern: It is the skeleton of modern development in the western part of the city; 2)importance as former gathering line and now border line: It experienced the transformation of pre-war gathering line to front line during the war and mental border line after the war, thus it is crucial to achieve the backward transformation to gathering line again; 3)importance in carring collective memory: With the development and break out of the war, the city experienced prosperity and decline, carrying the multiple feelings of joy, fear and sadness.

This part starts with the analysis of current condition (*Fig.66,Fig.67*), trying to explore the spatial potential.

The Need of mixed functions and audiences

Most of what we take in visually is at eye-level, and in relation to buildings,it is primarily the ground-floor level that catches our eye (Gehl, 2013). Therefore, which space people want to enter in and what activity would happen is also related to this eye-level facade. Inspired by the introduced research on active or passive facade in 'How to study public life', here the transition of land use and building function on the ground level is analysised along the west boulevard and the whole-day active pedestrian street on the east bank (from the Old Bridge northward to Titov Bridge)(*Fig.68*).

Compared to the boulevard in west, pedestrian street in east is obviously a whole-day hot gathering place for people from that side. One reason for the prevalence on the pedestrian is the mixture of building function and space use. Most of the residential building has their facade as public function, and the street also inlove the space like small squares and outside coffee seats. While maybe because of the blocks on boulevard are uaually single funcyioned. Jacobs (1992) points out to the advantages of mixed-use spaces and functions in a city, by comparing purely residential areas to those where the ground floors of residential buildings are used as shops.While single-use urban spaces are only active at certain hours of the day (in residential areas: mornings, after-work hours, and early evenings), a street with shops will be active throughout the day, including the late evening hours.

Another reason is that fence are placed properly around private space to provide the sense of transparency, while some of the places in boulevard are enclosed by wall. Besides, the one in east is car-free pedestrian, where only belong to people themselves. Fred Kent had the saying that if you plan cities for cars and traffic, you get cars and traffic; if you plan for people and places, you get people and places (Kent, 2005). Lack of active public spaces and attractive environment make the boulevard only a quick passing road.

As a conclution, the building function and space use on boulevard should be more diverse and mixed. The spaces should be designed for a better experience for people. Conflict in Cities and the Contested State (2012) wrote in their website that people's motivations for sharing space can be spontaneous and sharing can take place at many levels including shopping, the accessing of services such as education and health care, and cultural events and entertainment. Thus mixture of functions can provide more opportunities to meet people's different demands. Combined with current landuse of Boulevard (*Fig.67*), abandoned areas, parking lots, existing public spaces and ruined constructions are the potential areas.

Fig.68 Comparison between Boulevard and east pedestrian street: ground floor function *map source:author*

Fig.69 History change of Boulevard
figure source:author

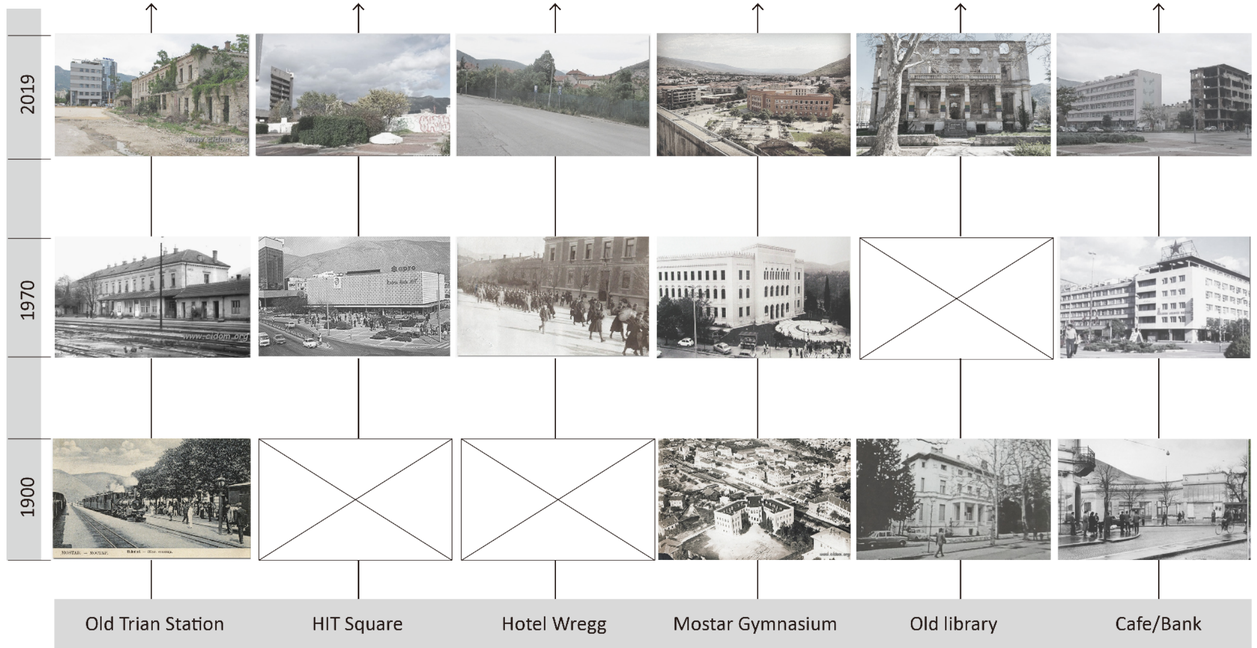


Fig.70 History change of Boulevard typical buildings
figure source:author data from: http://www.cidom.org/

History change

History change of the boulevard (*Fig.69*) showed the change of boulevard pattern and the review of past images.

1990: Narrow gauge railway CIRO was built in the early 20th century to connect Sarajevo and Konavle, and Mostar is an important station on this line. The constructuion of this great railway is undoubtedly the beginning of the boulevard story. The newly built buildings along the boulevard in this period are railway related public buildings, big hotels and new style appartments and houses.

1970: The city got a new railway on the east side, and CIRO lost it function. With the industrial development of the city, the boulevard witnessed its second prosperity, large amount of new public buildings, gardens, parks, squares and eportsgrounds maked it the most popular street in the city.

currently: most of the buildings on the boulevard were damaged to varying degrees during the war. The reconstruction work is still going on but many abandoned pblic spaces had turned into parking lots and the boulevard now is just a quick-passing traffic road.

Even though the once significant railway track left nothing on the boulevarrd right now, the street pattern (*Fig.71*) was still somehow transfered based on the original pattern. It might also be regarded as a way to leave traces.

Recently a group of institutions including Tourist organization, "Herzegovina Bike" Association, Municipalites, Tourist board, and Dubrovnik Neretva County Regional Development Agency already worked together for an idea that to revitalize this line as a bicycle route in order to preserve this railway line as a historical heritage and to develop new tourism service (*Fig.74*). By doing this, the trail will connect all attractive historically important building and landscape scenes together.

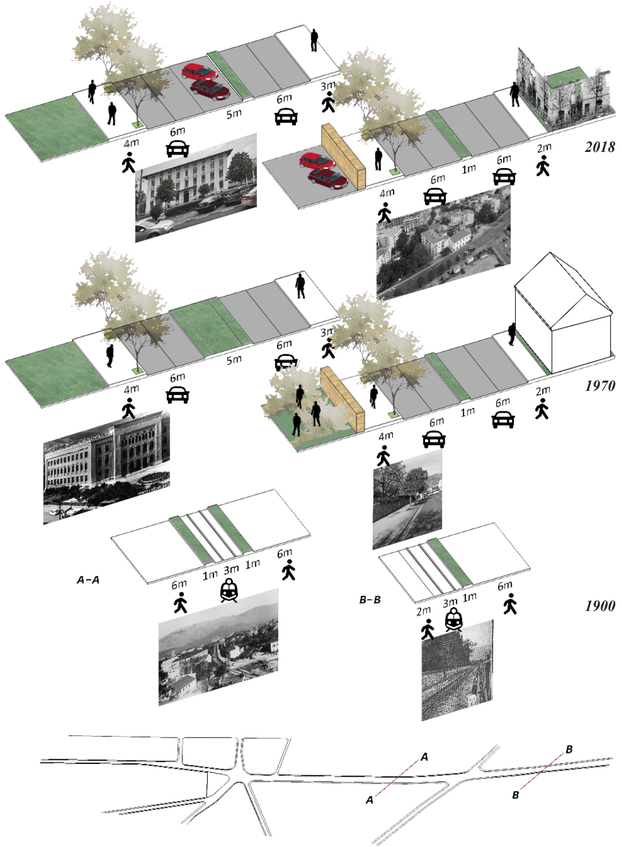


Fig.71 Change of street pattern (right)
figure source:author
data from:http://www.cidom.org/

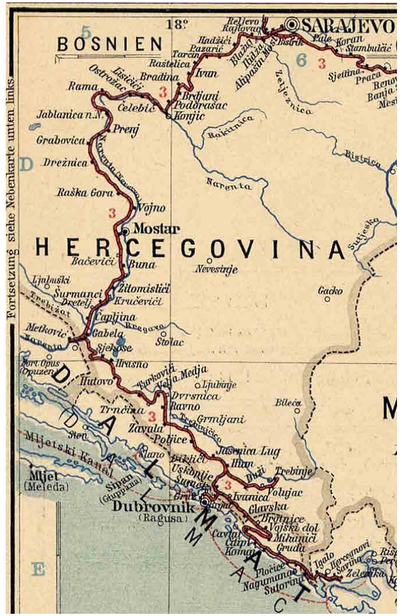


Fig.72 History map of CIRO railway (left)
map source: https://www.ciro.herzegovinabike.ba/gb/

Fig.73 Old photo of CIRO railway in Mostar (middle)
figure source: http://www.cidom.org/

Fig.74 Scenery along CIRO railway (right)
figure source: https://www.ciro.herzegovinabike.ba/gb/

Potential in changing to pedestrian boulevard

This project propose to transform the current boulevard into a pedestrian boulevard with public traffic line from the Franciscan church crossing upwards till the old train station crossing (*Fig.75*).

The possibility of this transformation:

1) Based on the landuse map, it is mainly residential areas, education areas and public spaces along this road, thus has a less demand in motor vehicle use.
2) The city scale is relative small, the city is suitable to build public traffic system. The construction of public traffic line on this boulevard is a stepstone for the improvement of the urban public transportation system in the future.
3) The single vehicle line is mainly for public traffic like bus, but it might also be used by private motor vehicles in rush hours to share traffic pressure from other roads if it is necessary.

The benefit this transformation can bring:

1) It better connect the public spaces along the boulevard. There would be pedestrian streets on both west and east bank, connected by two pedestrian bridges and a vehicle-pedestrian mixed bridge. A more pedestrian-friendly walking system would be formed in the center of the city.
2) Following the "CIRO bicycle route" project, this transformation would creat a fluent bikeway towards the old train station.
3) The boulevard would be again seen as the backbone in the west bank urban structure to re-play its historical,cultural and social role.

Based on original track pattern and current pattern, the proposed street pattern extends the middle green belt to both sides of the road to creat the area for pedestrian passing and public use (*Fig.76*). Current sidewalk on the west side would be turned into a bikeway, and extra room would be taken from the green area on side(A-A)/ the square(B-B) as a new sidewalk.

Fig.75 Potential in changing to pedestrian boulevard *map source: author*

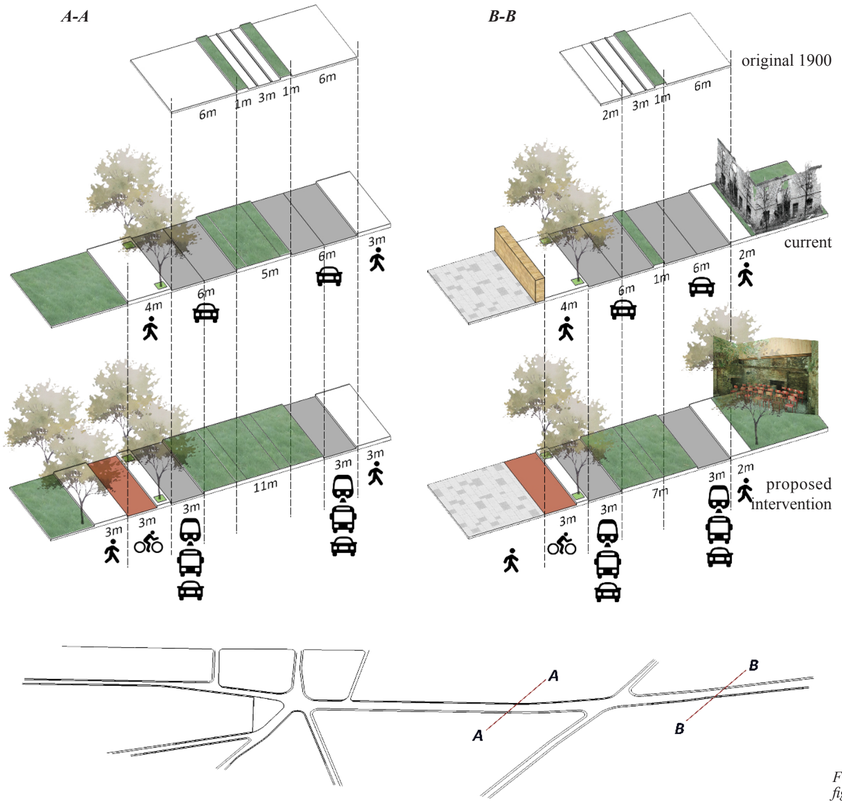


Fig.76 Proposed change of street pattern
figure source: author

River bank

As concluded in the previous text, the importance of river bank lies in: 1)importance in urban pattern: It is the root of city development, it is the soul of the city, all bridges on it form the symbol of the city; 2)importance as former gathering line and now border line: Like boulevard, it also transfered from gathering line to border line, waiting for turning back; 3)importance in carring collective memory: This is especially for the memory during the civil war cause all bridges were destoried and people used temporary bridges to cross the river and hide in the caves along bank.

Seasonal Use

Different form the boulevard, the use of river bank is largely influenced by seasonal change. Many places on the bank are not accessible during Autumn and Winter due to the rise of water level (*Fig.77*),wahter related activities also stop for the unsuitable weather.

The tradition of diving (*Fig.78*) from bridges into Neretva River dates back to 1566. The first recorded is from 1664, and the competition started in1968. Even after the war when the Old Bridge was still demolished and before there was a stand-in bridge, there was a springboard from which people could dive into the river. But this activity would only be active for 5 months in summer.

Because of the special Karst landscape, river bank is characterized by caves, sinkholes and underground streams. Those caves (*Fig.79*) are also used by people in low water level time and as short time shelter during the war time to hide from sniper shot.

Temporary bridge

During the war time, all the bridges in Mostar on Neratve were damaged in different time. There were 6 temporary bridges built in war in total, two of them were on the basement of ruined bridges (*Fig.80*), and the rest were newly built. They served for the transportation of food, wounded people, military equipment and escaping people.

Fig.77 High water level at Old Bridge
figure source: https://everything-everywhere.com/unesco-world-heritage-site-236-old-bridge-area-of-the-old-city-of-mostar/

Fig.78 Diving platform on bank
figure source: Photography Adam Jones

Fig.79 Cave under bank
figure source: Photography Denis Vuk

Fig.80 Temporary bridge Kamenica and another no-name one in Donja area 1993
figure source: Photography Jakub Hadžić

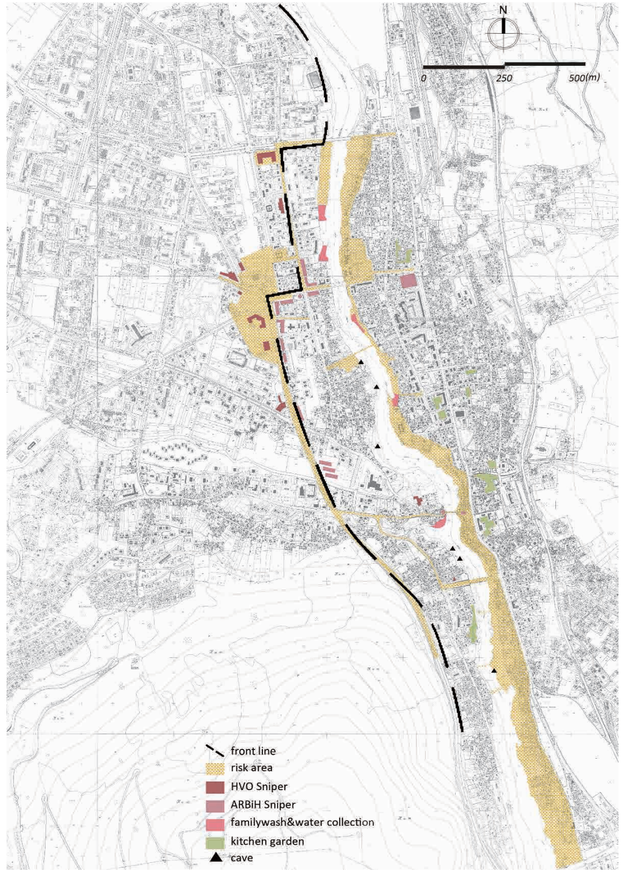
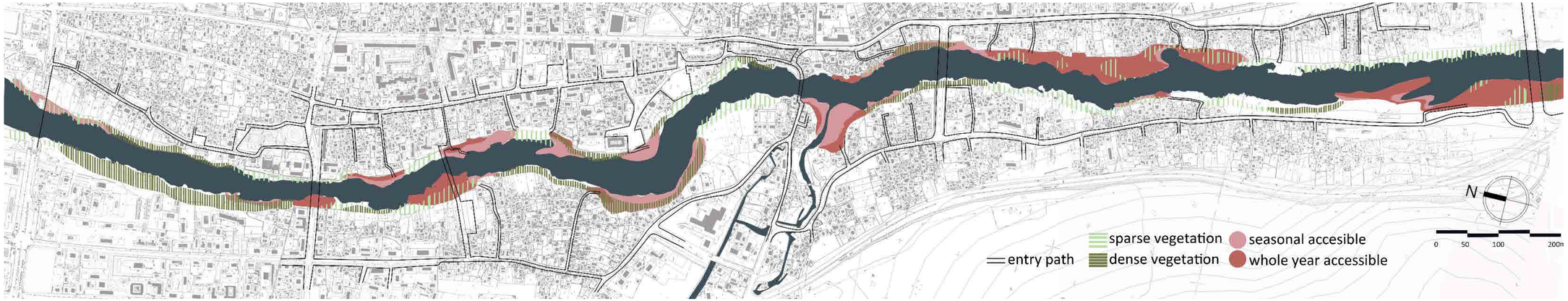


Fig.81 River bank use during the war
map source:author

River, river bank and bridge use during and after the war

During the war, the army from different sides both occupied high-rise buildings as sniper towers, thus any open spaces near the sniper towers would be risked. The river, river bank and bridges, which were lively public spaces before the war, all turned into horrible area that should escape from: people used to enjoy their life and scenery but turned to quickly pass those fragile temporary bridges. Private gardens along the river bank also turned into risk area, people sought for open spaces surrounded by building blocks to grow their food to survive, which is known as kitchen garden.

As mentioned in the previous text, the river bank area and bridges are quick passing area during the war. After the war, bank area are gradually reused by public and private. Ruins are left on the bank and vegetations occupied the bank, but by using remaining temporary bridge basements as new activity spaces, people are hoping and trying to reuse the bank area. The public should also realise the historical value of those remains and bring them back to people's view, otherwise they would be coverd by vegetations in the future and erased from the public memory.



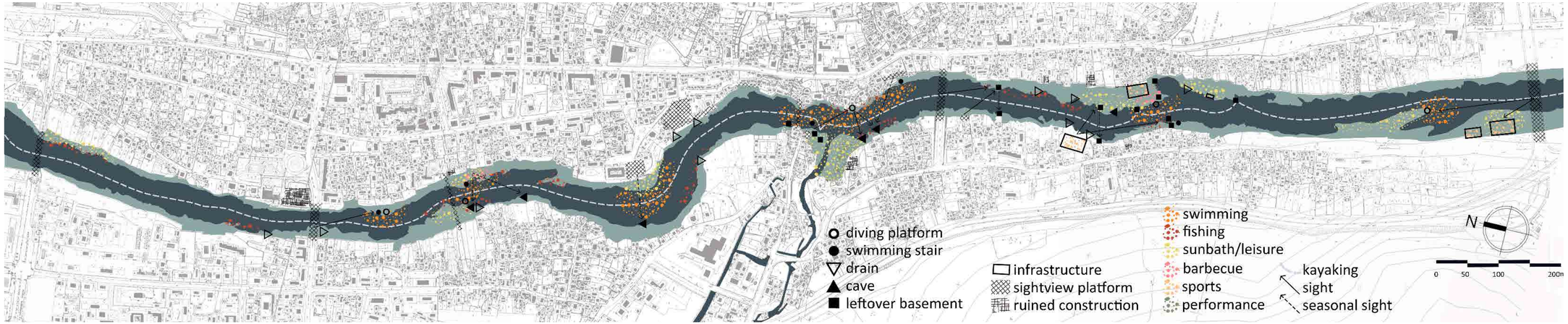


Fig.82 River bank activity and visual element
map source:author

Fig83 River bank accessibility
map source:author

Current accessibility and activities along the river bank are shown on left (*Fig.82,Fig.83*). Besides, there are also many visual elements on the bank. Those elements are activity related (like diving platform) or memory related (like temporary basement). Eventhough not everywhere on the river bank is accessible, there are platforms along the streets providing places to have a view of the river, bridges also share the same function as platforms. From those platforms, activities and visual elements would act as symbols to attract people moving from one spot to another.

River bank analysis conclusion

Combaining the accessibility, activities and elements mappings, active places along the river bank cam be classifyied into highly active group (whole-yaer active and with more kind of different activities and important elements) and active group (only seasonal accessible woth limited activities and lack elements). Based on the analysis, river bank is currently partly active, there are some active spots distribute along the river. In order to enhance the vitality, two aspects are focused on:
1)more activities and spaces that can adapt to the seasonal water level change, bring new river landscape to the Autumn and Winter Mostar;
2)emphasizing the symbolic attration of visual element as they mark the activity and collective memory.

Among all active spots, having bigger accessible space, most activities and diverse visual elements, the south part of river bank, Donja area, would be taken as detail designed site.

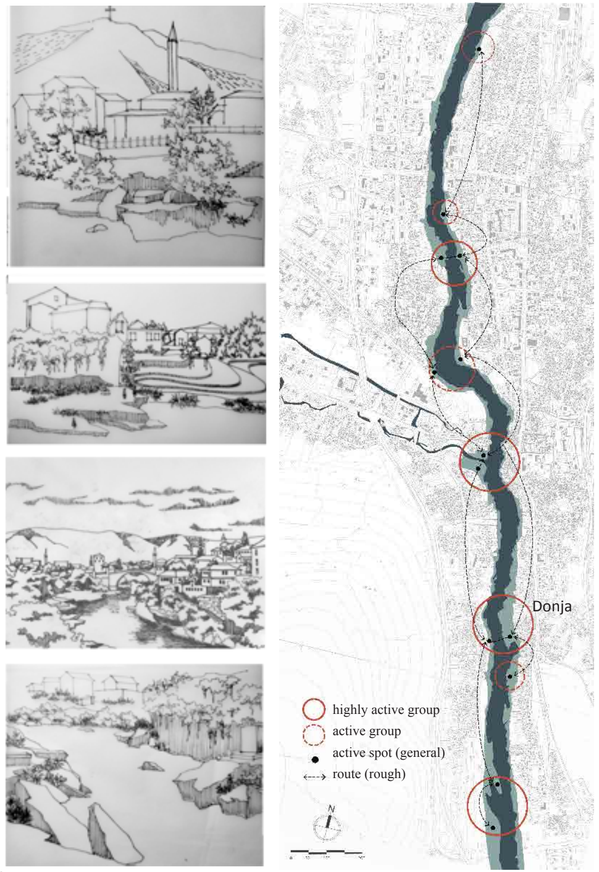
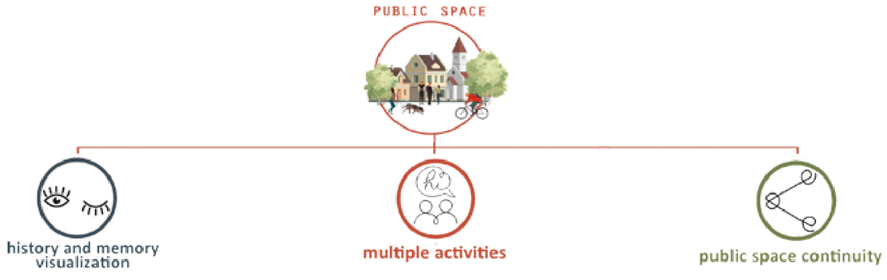


Fig.84 Active group along river bank
map source:author

Startegy & Principle



(Mental aspect) The public landscape would involve the narrative reflecting to the city history and public memory to help public rebuilt the connection and memory of the city. The way showing the narrative need be easy to understand, by which people can quickly evoke the memory and history and futher bring some thinking.

(Use aspect) Traditiional and new activities will keep attracting people and as these experiences are repeated, public spaces become vessels to carry positive communal meanings, the connections between individuals begin to be rebuilt again (Carr, Francis, Rivlin, & Stone, 1993.

(Physical aspect) Public spaces should be easy to get to each other, locals should have abundant and accessible public spaces to go to. In a long run, the continuously connected public space network would gather and lead people to step over the mental division line.

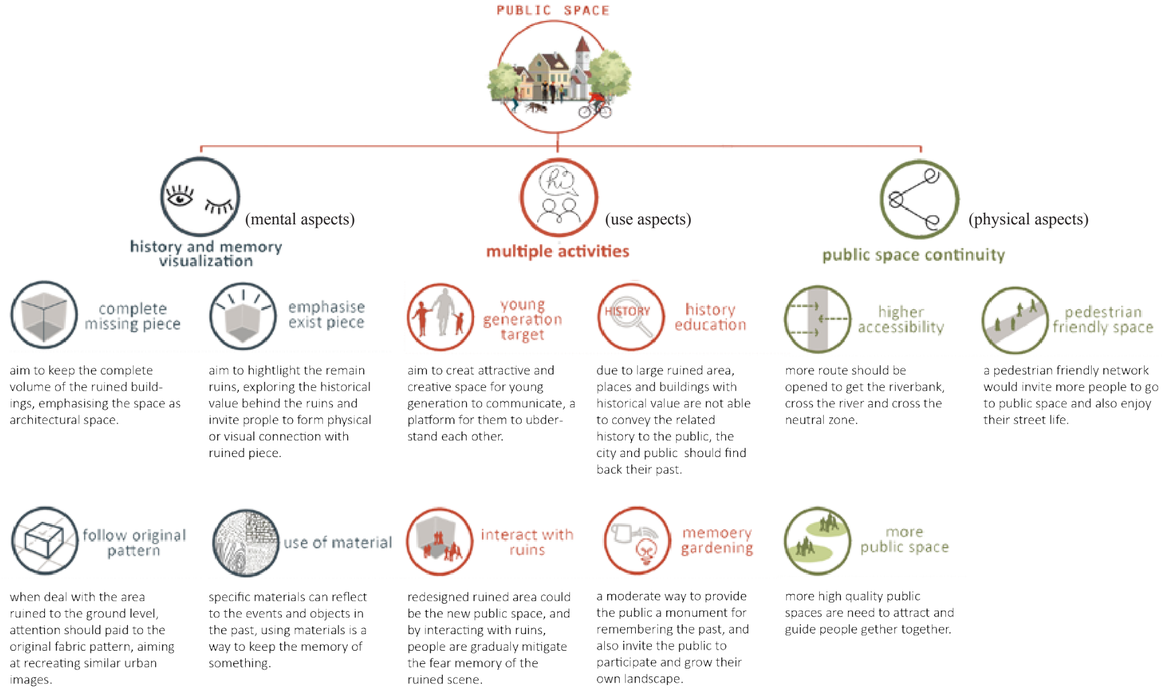
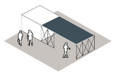


Fig.85 Strategy and principle
figure source:author

history and memory visualization

complete missing piece



complete constructure

Following the original constructure and facade of the ruined building, new constructure is added to the building to creat a rather cpmplete construc-ture.

complete boundary

Following the original boundary of the ruined building, new constructure is added to the building to complete original boundary.

emphasise ruined piece

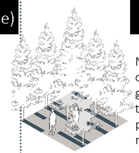
framing (untouchable)

At places where the remained ruin pieces are far away and not accessi-ble, new constructions would be added to fram the ruins and guide people to see through it creating visual connection.

centralization (touchable)

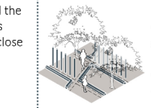
Creating a accessible area around the remianed ruin pieces to emphasis them and invite people to come close to interact more.

follow original pattern



planting pattern

New constructions or planting on ground level follow the original planting arrange-ment.



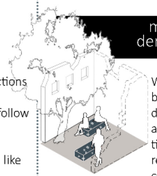
construction pattern

New constructions or plnting on ground level follow the original construction arrangement, like boundary.

use of material

historical material

Choosing the materials form what were used on this site in the history, like the materials related to the railway track would be used again on the boulevard area to respond the historical memory.



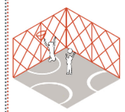
material from demolished ruins

Where the ruined buildings are demolished, abandoned construc-tion maerials can be reused to make new constructions on this site.

multiple activities

young generation target

sports space



On one hand, young generations are important for the mitigation of mental division problem, on the other hand, there are lack of open spaces for yong generation activities like vigorous sports, thus more open sports spaces are needed to gather young generations.

history education

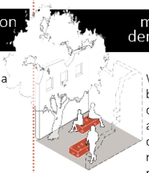
introduction board

Introduction board are used to give a brife information of the ruins with historical value.

museum in ruined space

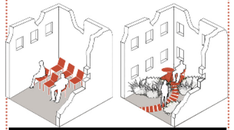
Some ruined buildings are repaired and then transformed into the museums or exihibition area to tell the related history story. Wihtin a original and ruined environment, people can better feel and understand the past.

interact with ruins



material from demolished ruins

Where the ruined buildings are demolished, abandoned construction maerials can be reused to make new constructions on this site.



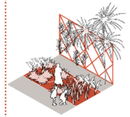
ruins as public space

Ruined buildings with rather complete constructure creat the new semi-pub-lic spaces that can be used as places for public or private activities.

constructions on ruins

Added platforms and steps on ruined highrise buildings provide the possibility to view the city from different hight level.

memoery gardening

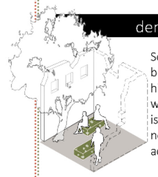


cultivate one's plant

Ruined buildings with rather complete constructure creat the new semi-pub-lic spaces that can be used as places for public or private activities.

public space continuity

higher accessibility



demolished ruins

Some ruined buildings with less historical value would be demol-ished to proviede new path for better accessibility.

boardwalk

Some parts of the river bank are occupied by vegetations or too steep to walk, thus hollowed grid boardwalk is build to provide walkable path and cause less effect to vegetations.

pedestrian friendly space

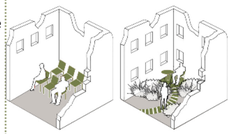
pedestrian green belt

The green belt on the boulevard is extended and transformed into a pedestrian boulevard as part of the new pedestrian system.

boardwalk

Some parts of the river bank are occupied by vegetations or too steep to walk, thus hollowed grid boardwalk is build to provide walkable path and cause less effect to vegetations.

more public space



ruins as public space

Ruined buildings with rather complete constructure creat the new semi-public spaces that can be used as places for public or private activities.

transform of parking lots

Some parking losts are transfered to more proper places refer to the urban overall development, thus the area can be transformed into new public spaces.

Here, a more detailed chart shows the spatial instruments that developed from the 3 aspects principles. Strategies, principles and spatial instruments form the toolbox of this project.

Fig.86 Strategy, principle and spatial instrument framework
figure source:author

Vision

Fig.87 presents the general application of principles on different proposed spots. It can be used as a guide to understand the interventions in the city. It also shows the priority among all interventions as most spots on two border lines should be constructed in first step. Some of the intervensions are applied with same principles,then spots constructed in 5 yeas are regarded as the test points and example for the other spots.

According to the conclusion drawn form the current condition analysis, high quality public spaces are very rare in the city (*Fig.88*). Some projects are planed by the government and already under construction (*Fig.89*), together with which, this project try to contribut to the current pulic space network from mental, use and physical aspects.

Besides, As shown in *Fig.89* and *Fig.90*, there would be two most important public spaces groups located in the city: the Spanish square and old station area group, and the Old Bridge area group. They are important in both urban structure and social aspect, they are located on two backbones of the city and own most and intensive high quality public spaces.

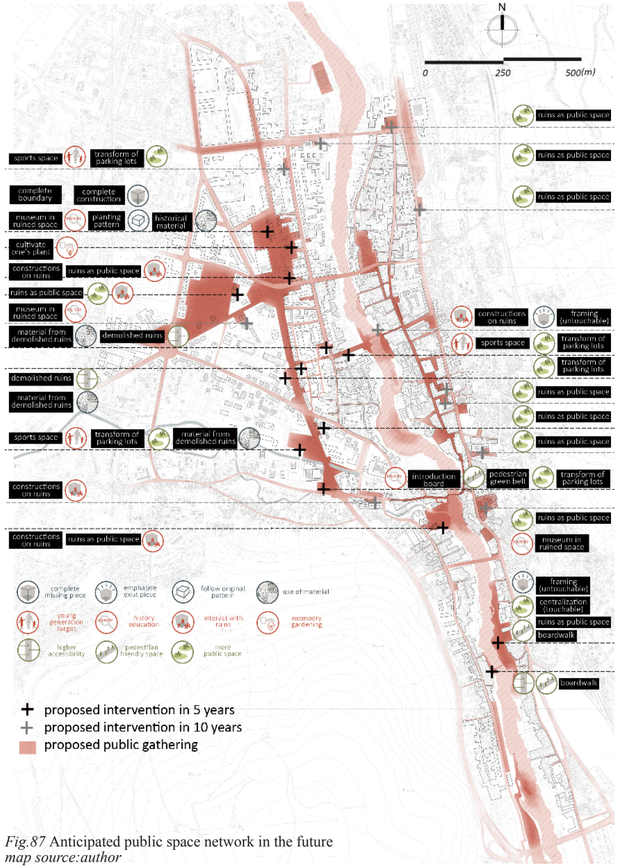


Fig.87 Anticipated public space network in the future
map source:author

Fig.88 General city mophology
map source:author

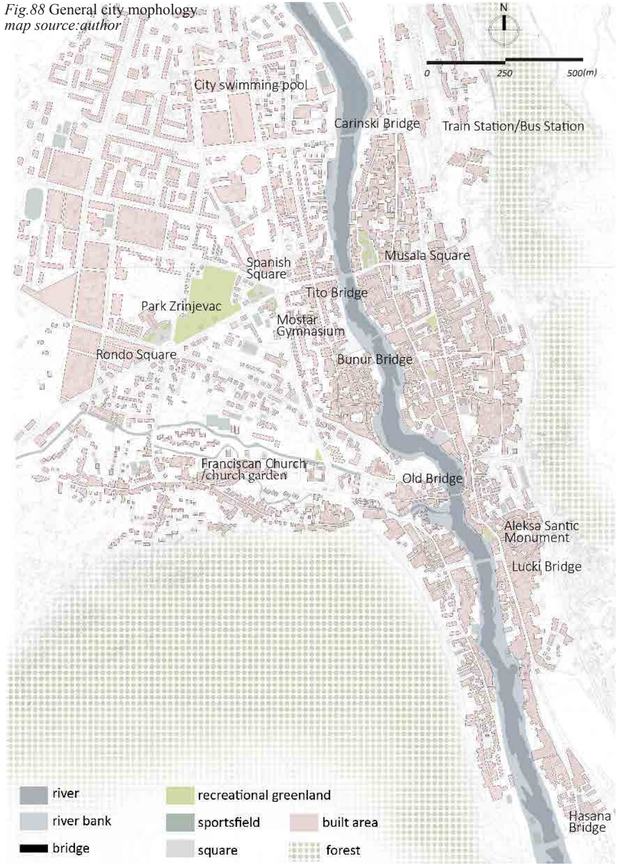
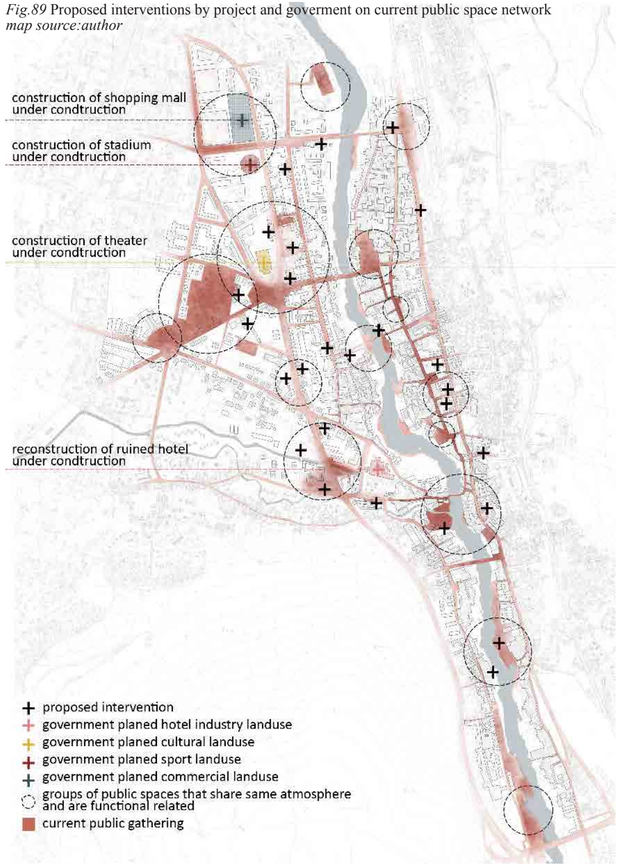
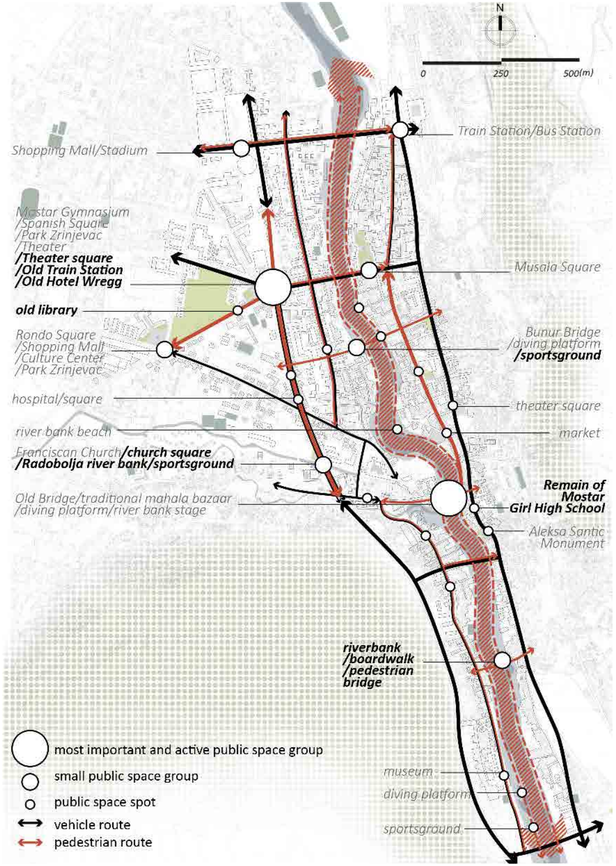


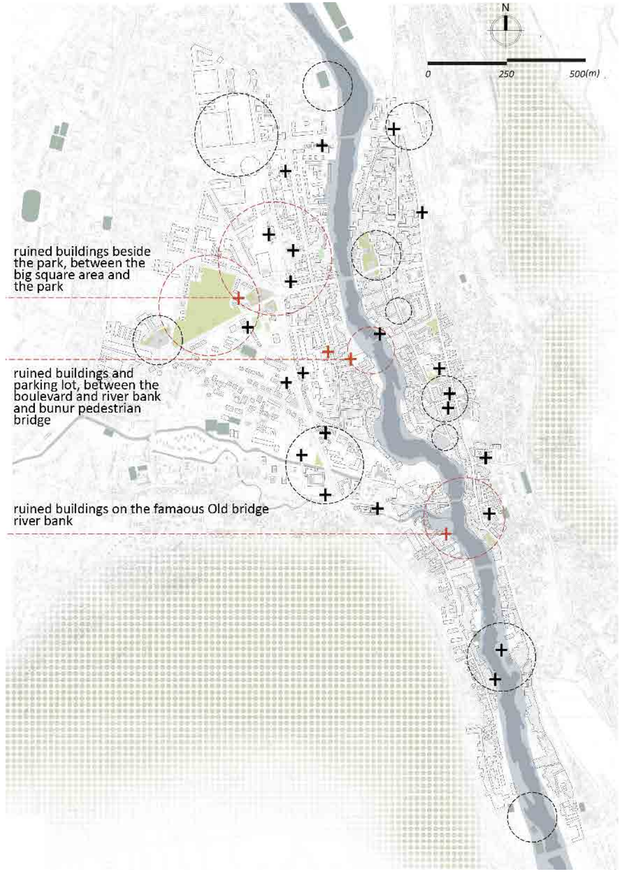
Fig.89 Proposed interventions by project and goverment on current public space network
map source:author





Based on the proposed strategies and principles, both the current transport network (*Fig.90*) and the public space network (*Fig.87*) would be improved. The transport network would be more pedestrian friendly and guide people to the central area of the city. In the pesdestrian network, there are three north-south backbones: the boulevard; river/river bank; the Old Bridge pedestrian street on east bank, connected by three pedestrian bridges and four vehicle-pedestrian mixed bridges. Public spaces are distributed along the transport network and centralized distributed along the pedestrian network.

Fig.90 Proposed pedestrian and vehicle network
map source:author



In the following part, three points are choosen from different public spaces groups as examples: one on boulevard, one on river bank and one in between. They are also choosen by different urban pattern: morden pattern, river bank pattern and mahala pattern. These drawings would present how would principles be applied to the ground. Different principles are choosen from the toolbox under three aspects based on site conditions to form different programs for each sites. Together with the spatial instruments to explain, the drawings depict the spatial transformation and its proposed influsence to surroundings. These are the middle scale proposals between the large area vision and detail designs on sites.

Fig.91 Example points of principle application
map source:author

material from demolished ruins

Materials like brick recycled from demolished buildings are reused for pavement of the path.

ruins as public space

The original construcuture of the beam is kept for vines and hanging plants.

ruins as public space

Based on the constructure of the remained stairs, a new platform on the second story is added to the ruined building. A new stage area is created in the building for performance.

use of material

interact with ruins

memoery gardening

more public space

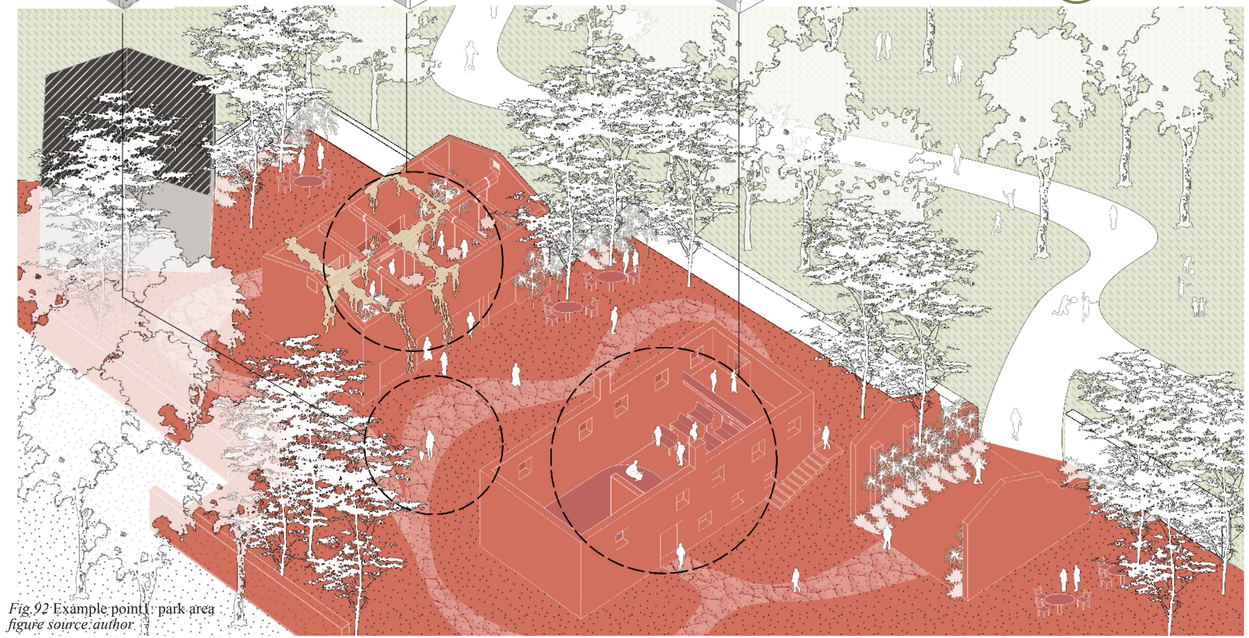


Fig.92 Example point1: park area
figure source:author

demolished ruins

Ruined buildings are demolished to creat more paths crossing this area for better connecting boulevard with the river bank.

ruins as public space

Currently, there are some pedlars on the sidewalk selling goods. The ruined constructure would provide a place for small market.

sports space

It is now a strip shaped parking lot, but it is better used as public space to attract more people to the river bank and cross the bridge.

use of material

young generation target

higher accessibility

more public space

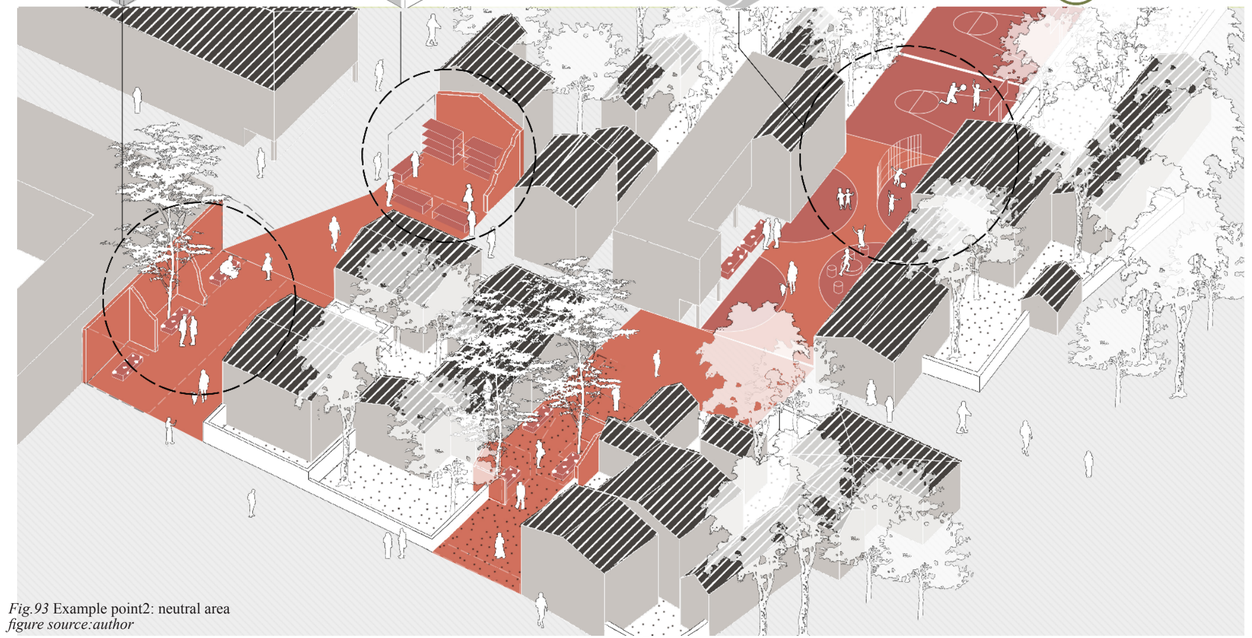


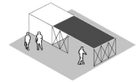
Fig.93 Example point2: neutral area
figure source:author

ruins as public space

Room with vegetations to creat public and private satying place.

constructions on ruins

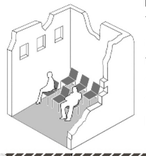
Platforms on different hight and direction provide the places to have a sight view of the old bridge area panorama.



complete constructure

ruins as public space

The ruined building is repaired and a new construction is added to the roof part. This building contains a big open space that can be used as exhibition or perform area.



complete missing piece

interact with ruins

more public space

Fig.94 Example point3: Old Bridge river bank area
figure source:author

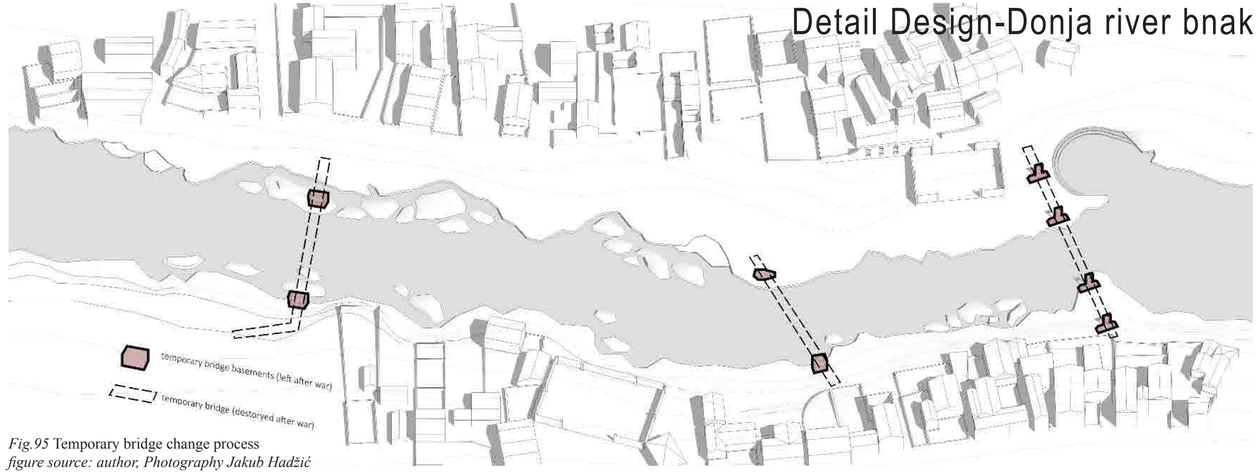
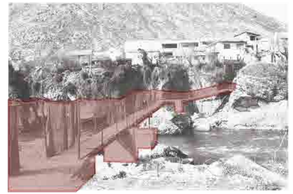
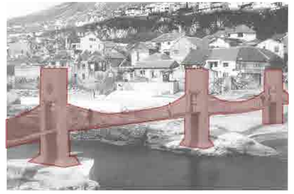


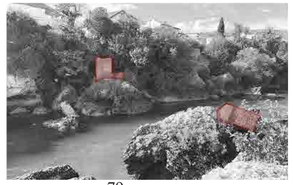
Fig.95 Temporary bridge change process
figure source: author, Photography Jakub Hadžić

1992-1994

2019







The remaining basements of the temporary bridges and large arae of flat and open river bank characterise the Donja area river bank. *Fig.95* shows the bridge story during and after the war. As war-related heritages, those remaining basements can speak as a symbolic language to tell that historical period. Here, one of the earlist and best kept bridge basement is reused to rubuild the Bridge Kamenica.

The newly built bridge can not only improve the accessibility between two banks as part of the proposed pedestrian network, but also speak as a monument to reflect the past and future. Two sides of the bridge are fenced by fluctuant wooden boards, which would bring different atmosphere:
1) entrance part is fenced by boards higher than eye-level, reflecting the war atmosphere when people had to escape through the temporary bridges decorated by cloth to hide from snipers.
2) middle part is fenced by low boards that allow people to enjoy the panorama of riversape, reflecting the subsequent peace atmosphere and ideal active river bank.

More possible paths are explored to enter river bank area, and other ruined constructions would also be used to creat public space and place for domestic water purification.

Fig.96 Donja area river bank proposed design
figure source:author

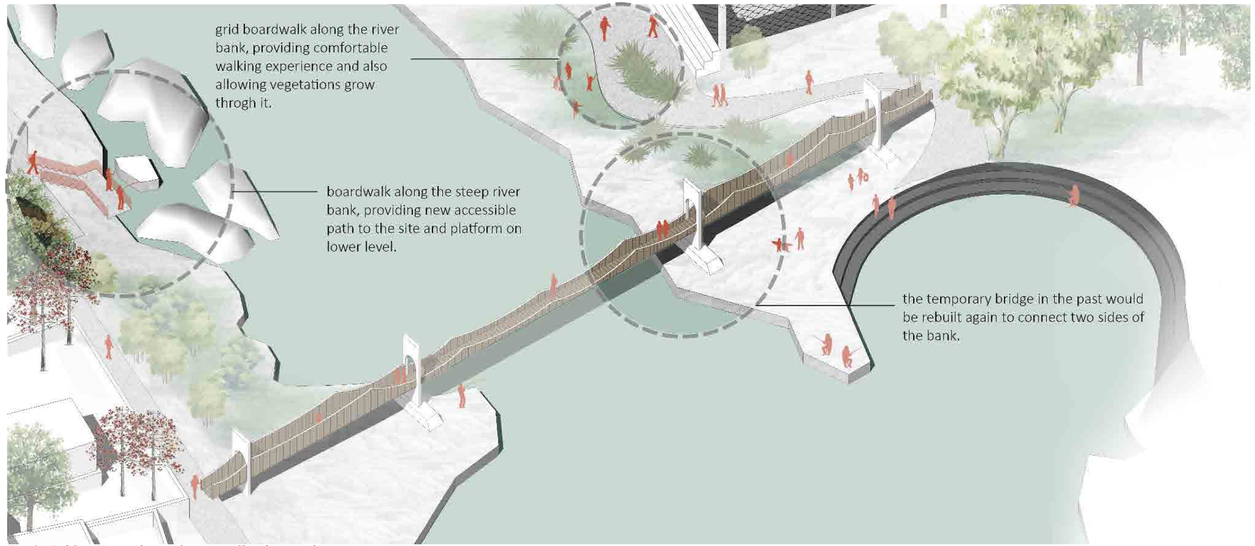


Fig.97 Bridge Kamenica and surrounding impression
figure source:author

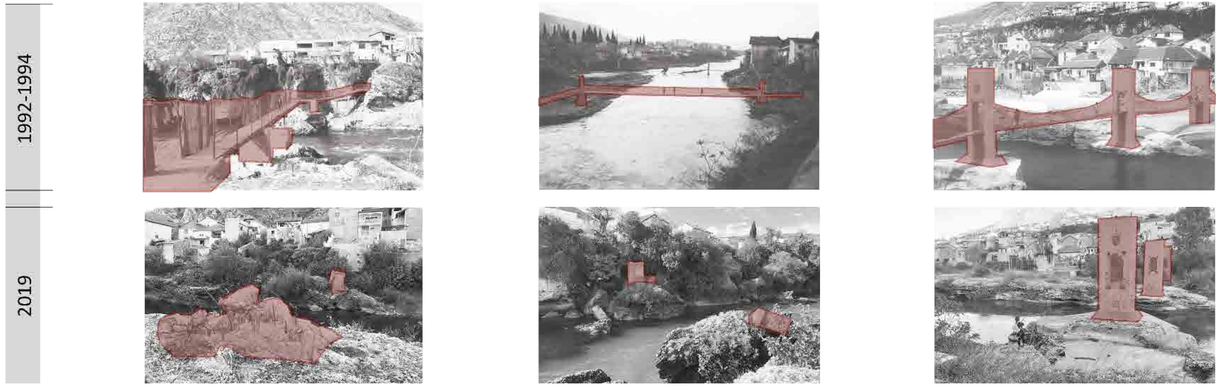


Fig.95 Temporary bridge change process
figure source: author, Photography Jakub Hadžić

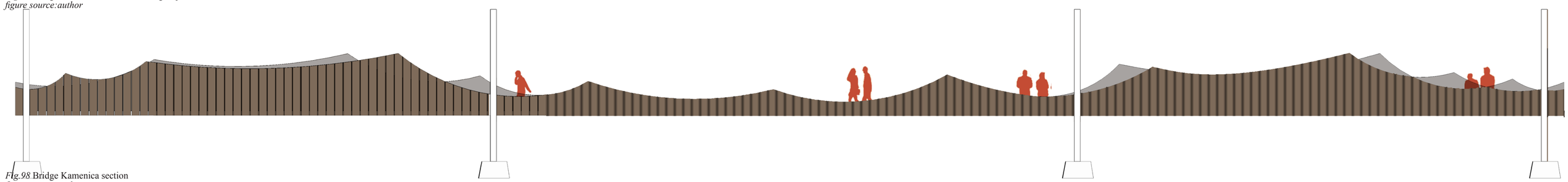


Fig.98 Bridge Kamenica section
figure source:author

Detail Design-The boulevard

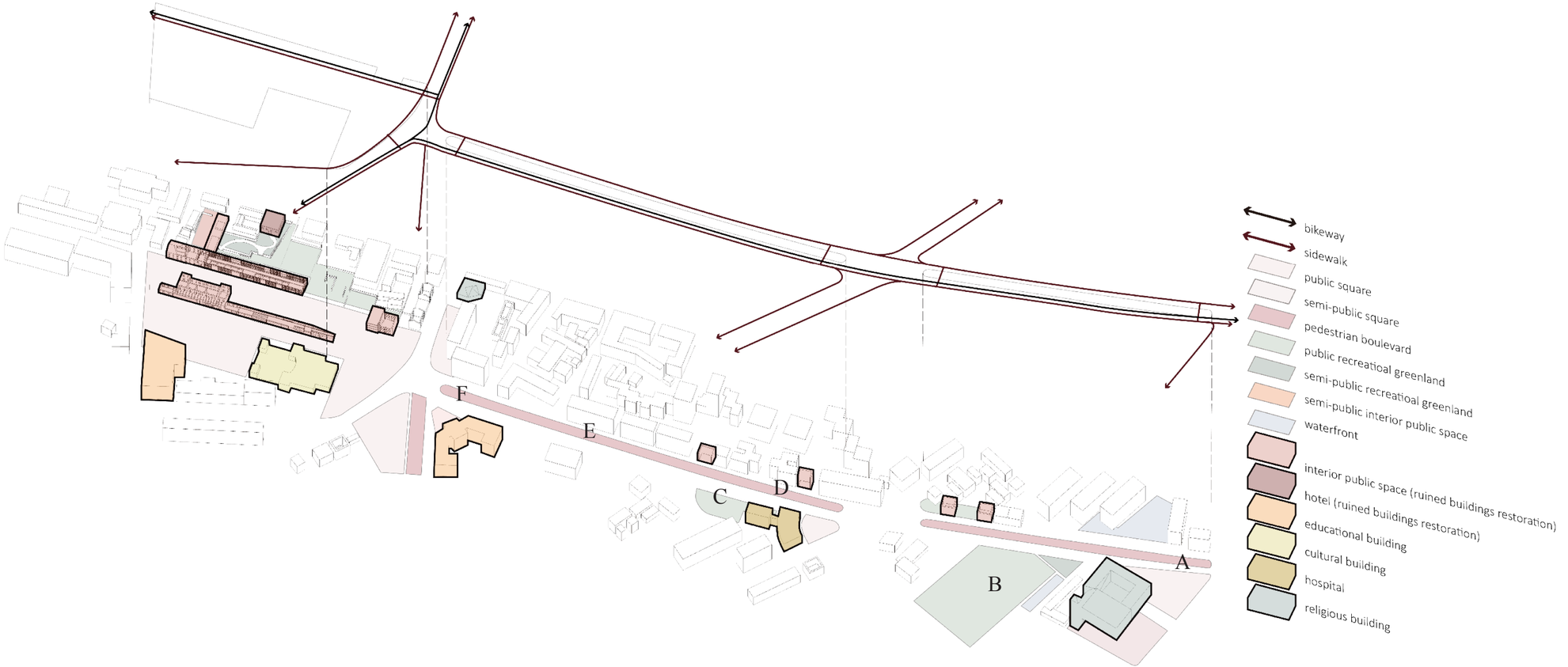


Fig.99 Pedestrian boulevard public buildings and spaces
figure source:author

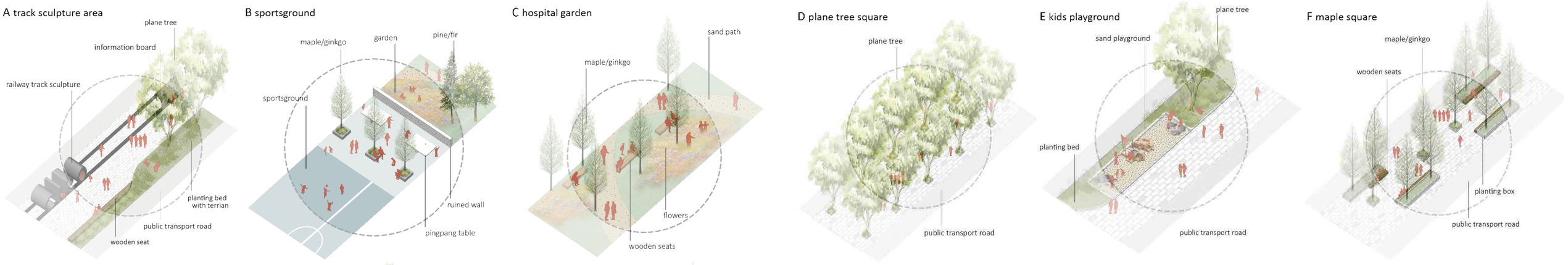


Fig.100 Pedestrian boulevard impression
figure source:author

Adema Buća
youth center
1
2
3
4
5
6
7
8
9
10
11
Dr. Ante Starčevića
Mostar Theater
CKM University
Kneza Domagoja
Kralja Zvonimira
Spanish Square
Mostar Gymnasium
hospital

Master Plan

planetree

oak

ginkgo/maple

fir/spruce/pine

sidewalk pavement

garden pavement
(materials recycled from ruins)

unpaved ground/sand

bikeway

grassland

spring

1. Hotel
The hotel is restored from ruined building and transformed into a hotel aimming at serving cyclists from the CIRO track, providing a place to stay near the old station.

2. Youth center theater
The theater is restored from remaining part of ruinhed Hotel Wregg, just besides the Youth Center, is designed as an indoor theater attached to the Youth Center.

3. Old train station museum
The remaining building is restored and designed as an museum about the history of CIRO railway.

4. museum gallery
The gallery follows the original pattern of train station buildings, providing a long corridor for different activities and also place for exhibition.

5. memory planting lab
The planting lab is a reconstructed building of Hotel Wregg, connecting with the Youth Center theater. It is designed as a place to plant people's own medical-used plants.

6. debris garden
Ruined constructions are kept in this area forming different rooms together with planting beds. One of the ruined buildings is accessible and provides a high platform for views.

7. Theater square spring

8. boulevard square
Different small squares on the boulevard providing place to rest.

9. boulevard playground
Playgrounds with sand area and entertainment equipments for kids.

10. boulevard open grassland
Open grassland in the middle of the boulevard with terrains that people can lay down.

11. hospital garden
Transformed from the parking lot of hospital, the garden is used as a public rest area attached to the hospital. The old parking area is moved to abandoned area nearby.

12. ruined building cafe/theater
Ruined buildings transformed into indoor public spaces without roof.

13. square
Transformed from a parking lot, the square follows the pattern of parking lot.

14. garden
Transformed from a ruined area, occupied by vegetations.

15. playground
Transformed from a parking lot, the old parking area is moved to newly planed area nearby.

16. church public square
Transformed from the parking lot of the church, the square is designed as a open public space.

17. boulevard track sculpture
At the beginning part of the boulevard, sculpture of old CIRO railway is placed to introduce the history of the boulevard.

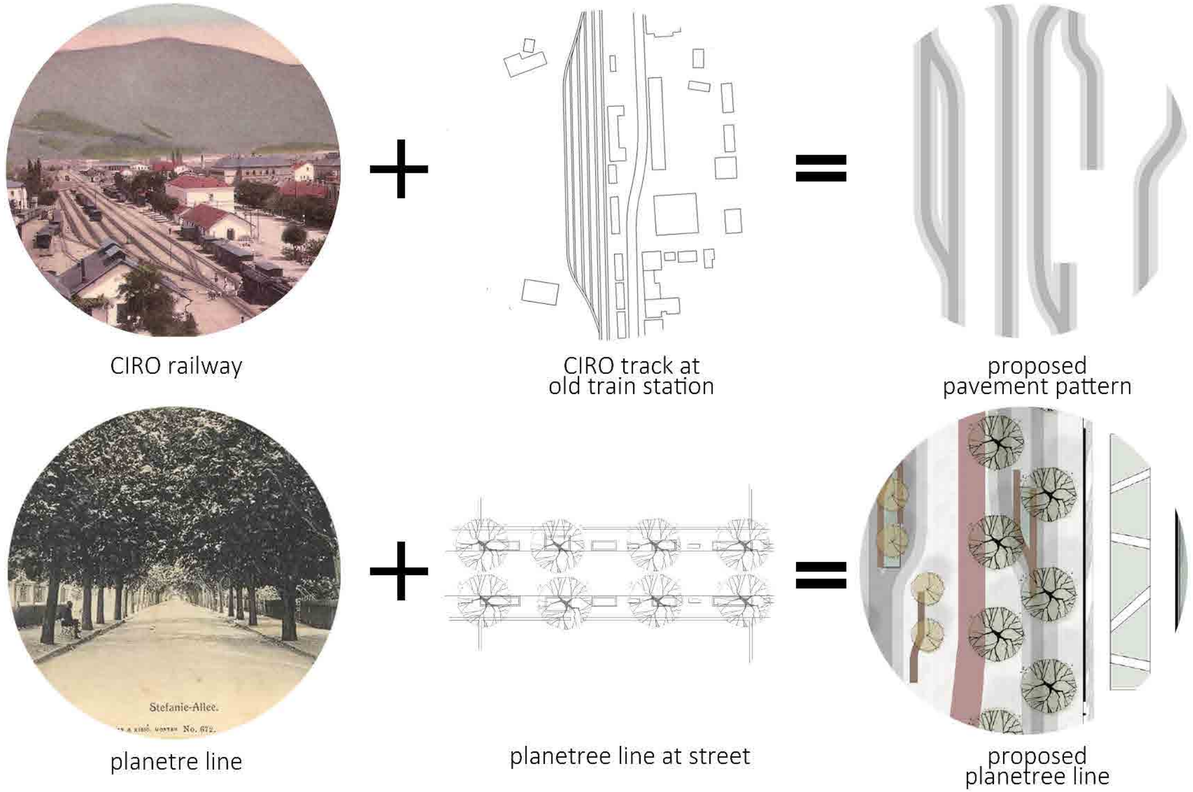


Fig.101 Old pattern transformation
figure source:author

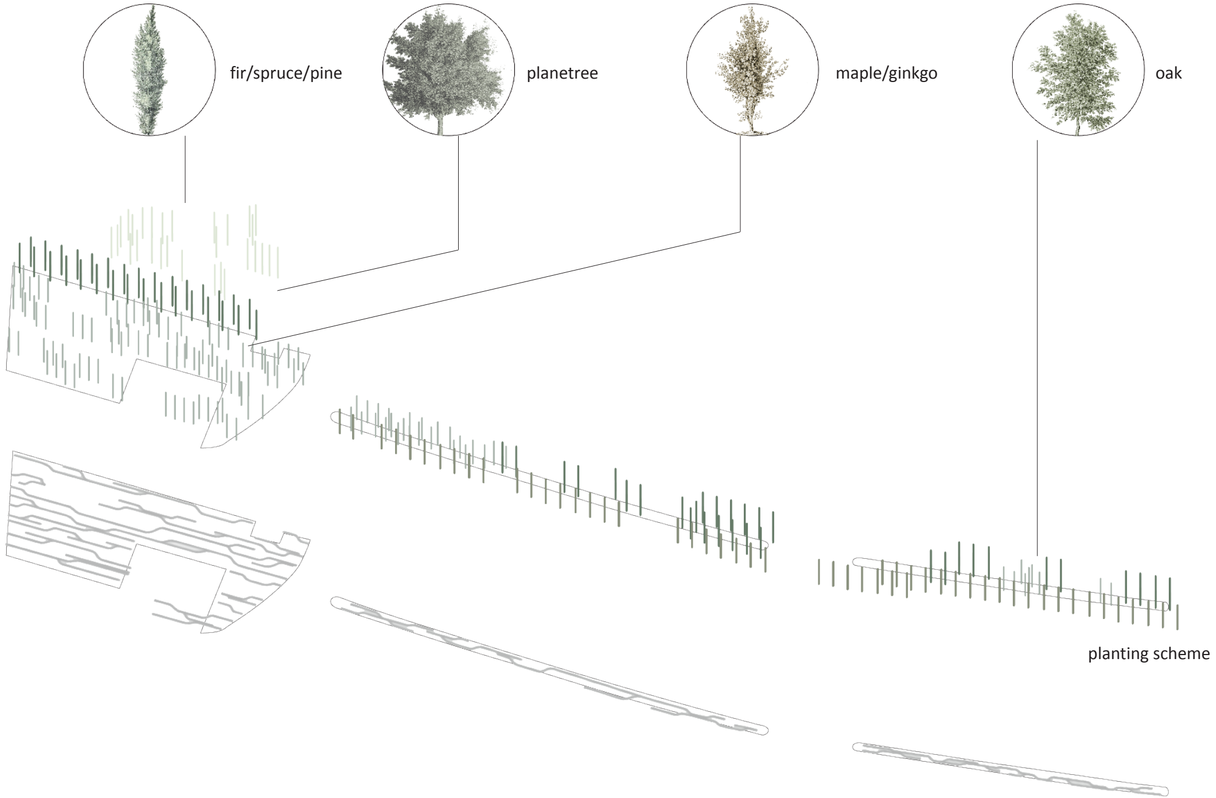
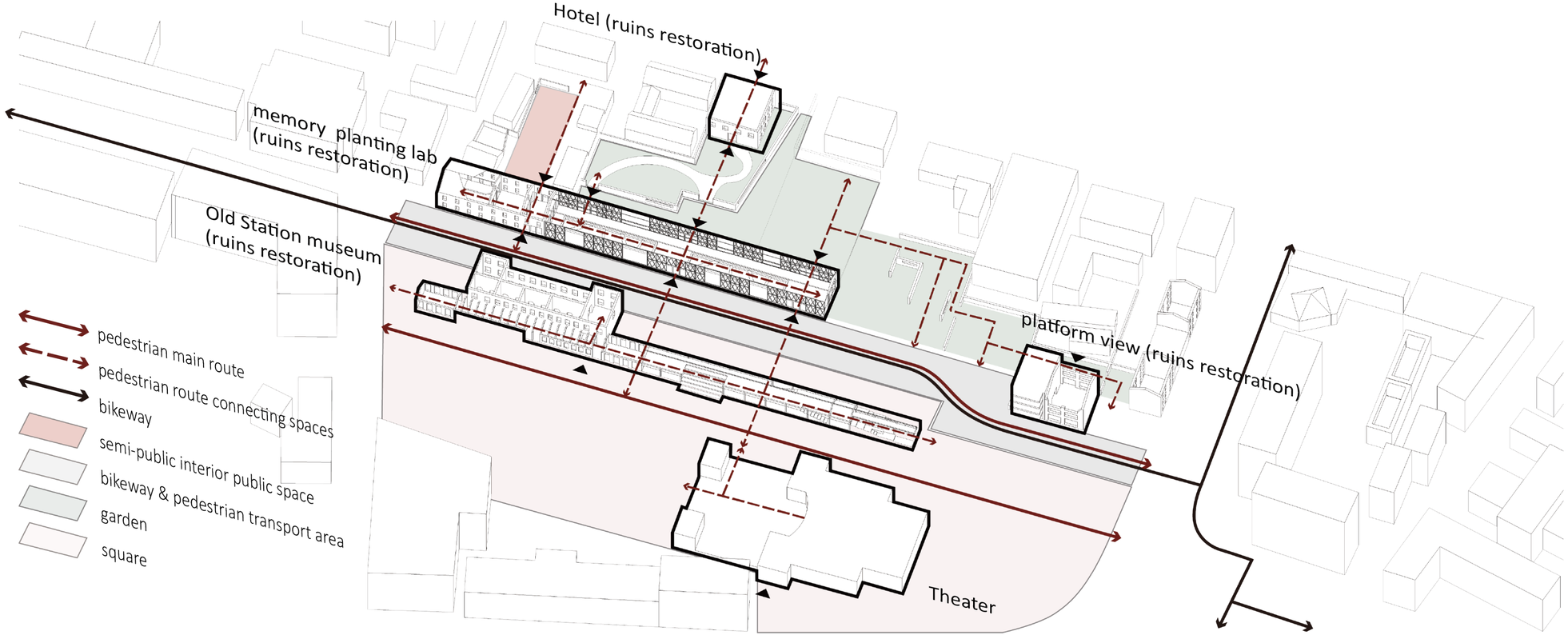


Fig.102 planting scheme and pavement pattern on boulevard
figure source:author



Based on the analysis of urban pattern, this big area consists of two different patterns: modern pattern on the west side and mahala pattern on the east side divided by the street in between. Thus following this pattern atmosphere, the west side is designed as big open square including the theater and museum, the east side is designed as garden area divided into different rooms by remaining constructions, reflecting the old mahala garden. The arae in between is for quick transport, including the bikeway connected to old CIRO route.

Even through the area are designed into different patterns, great sense of transparency is created for transition between different atmospheres and for demand of quickly passing. Instead of blocking the transport area in between, the museum and planting lab provide various accesses to go through and see through by opening the ground level and using transparent materials.

Fig.103 Old station square spaces and route
figure source:author

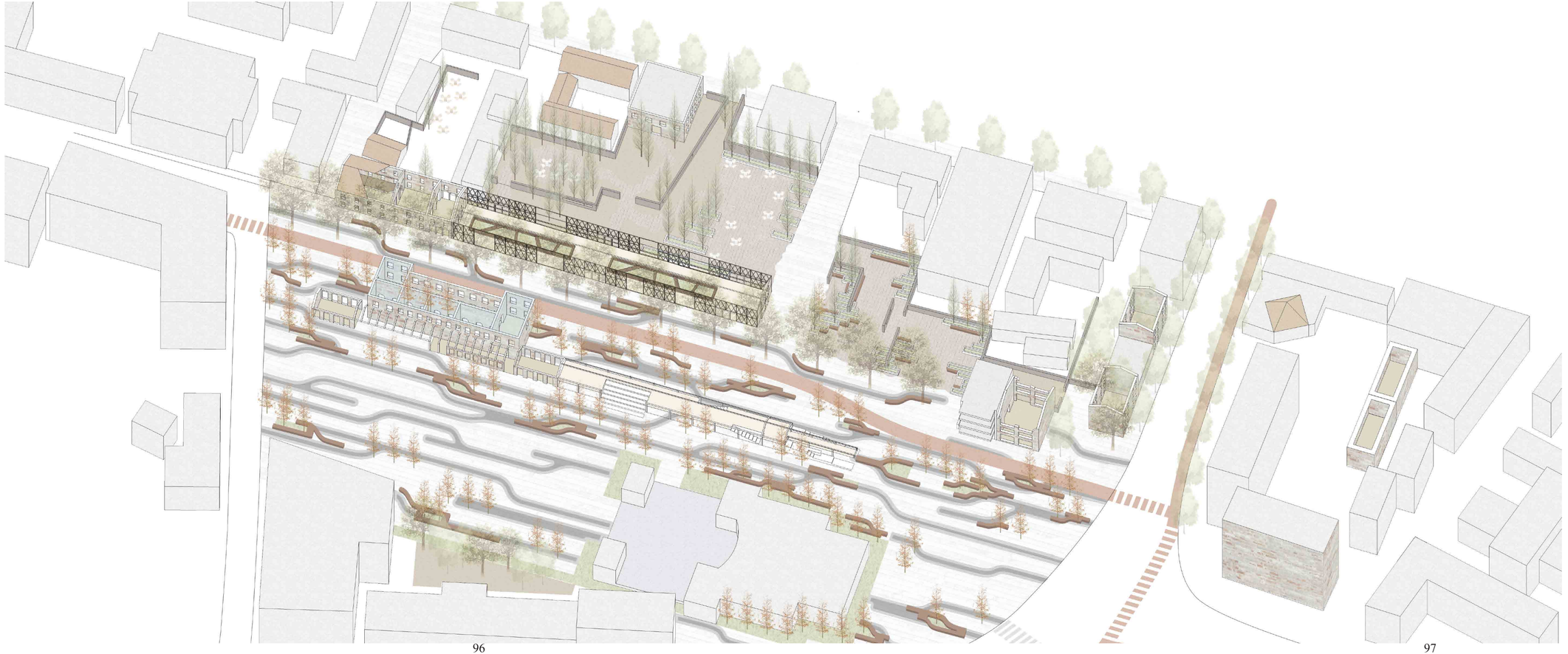


Fig.104 Old station square
figure source:author

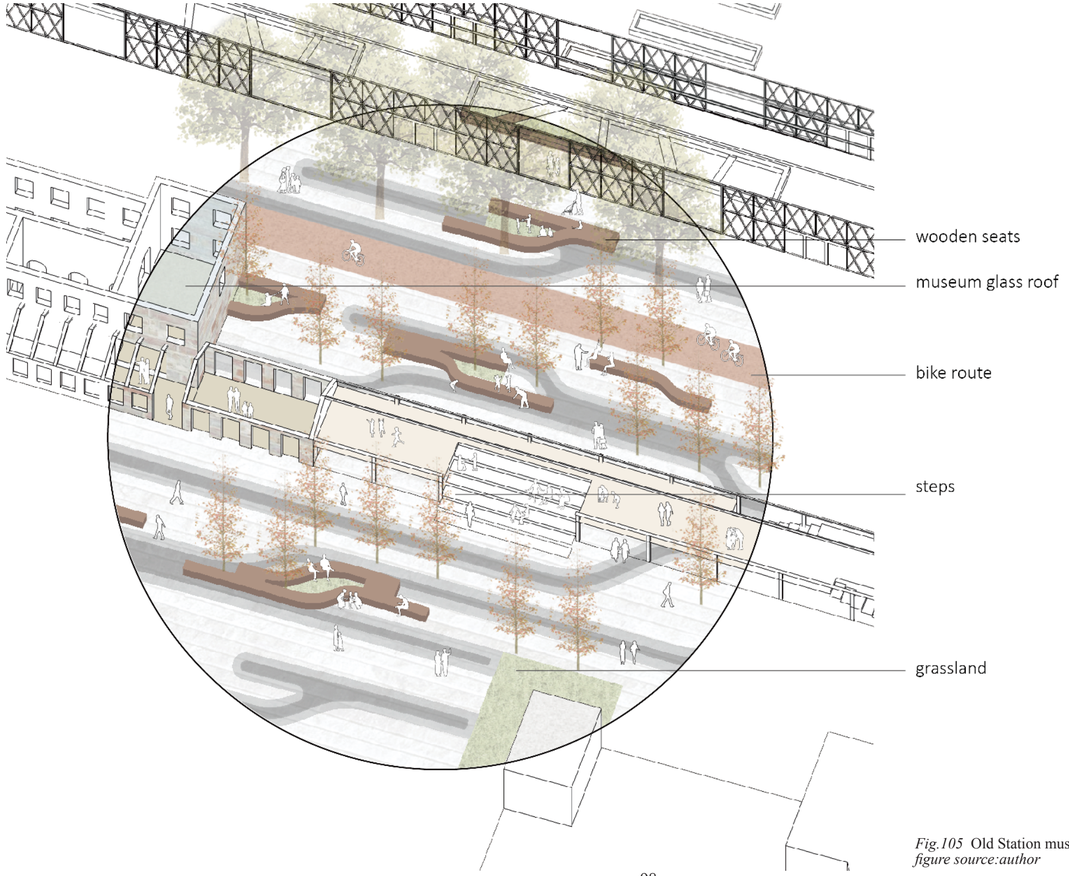


Fig.105 Old Station museum
figure source:author

Fig.106 Old ststion square eyelevel impression
figure source:author

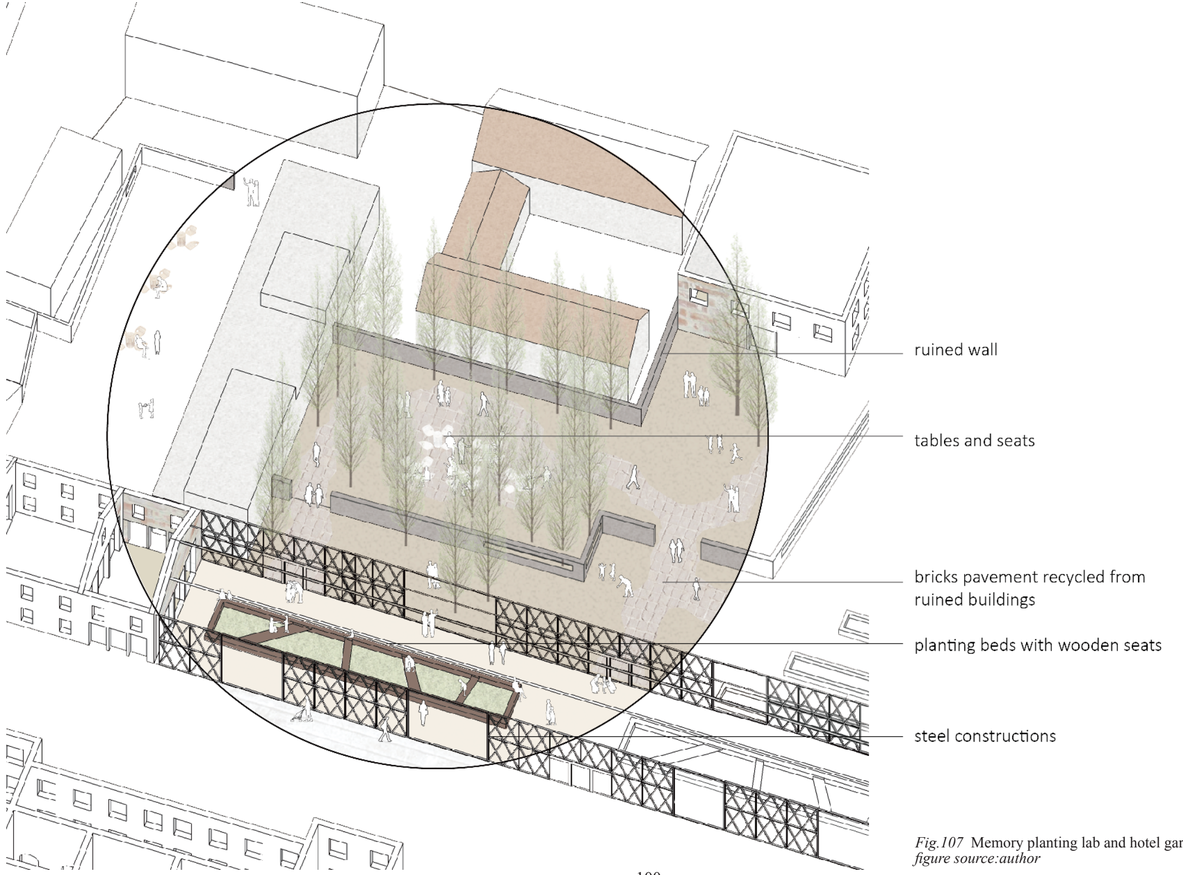


Fig.107 Memory planting lab and hotel garden
figure source:author

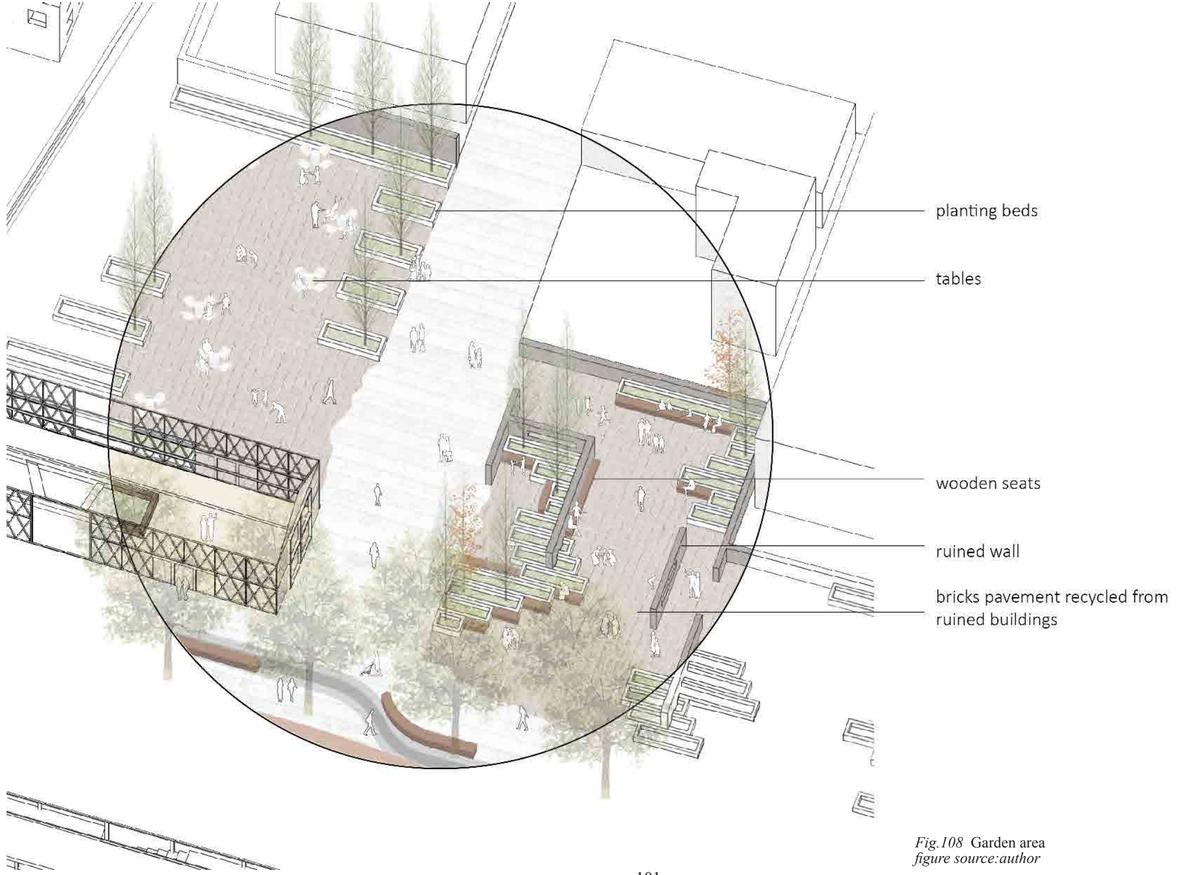
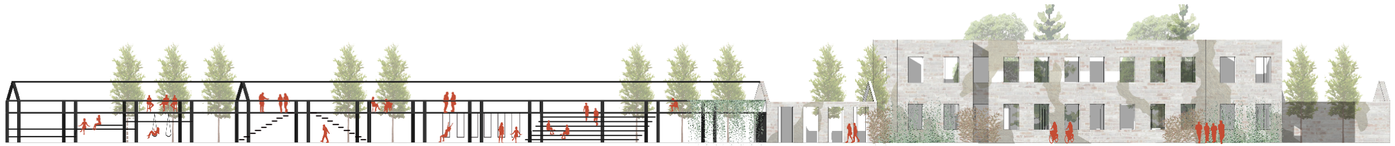


Fig.108 Garden area
figure source:author



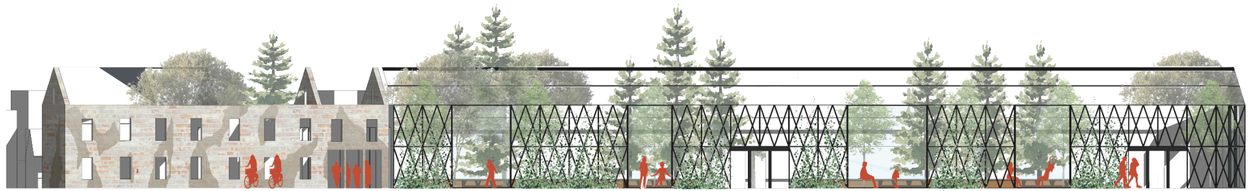
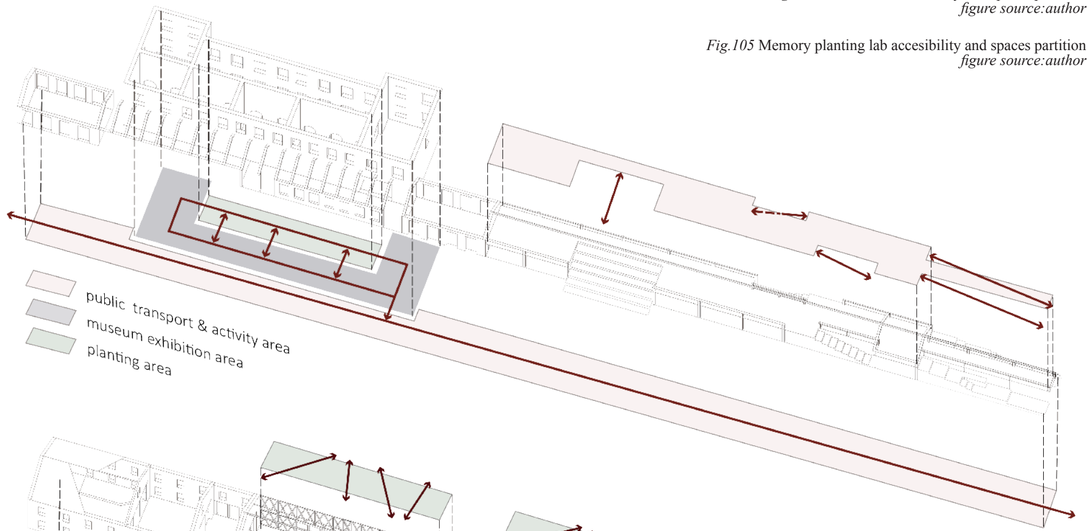


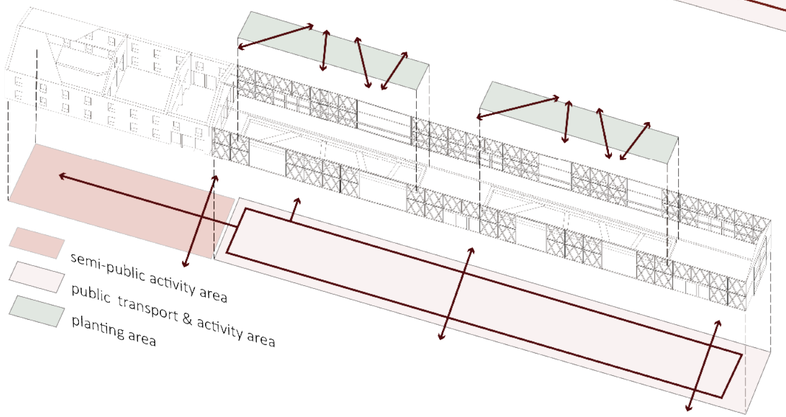
Fig.109 Old ststion section
figure source:author

Fig.110 Memory planting lab section
figure source:author

Fig.104 Old station accesibility and spaces partition
figure source:author

Fig.105 Memory planting lab accesibility and spaces partition
figure source:author





Old Train Station Museum

The building is restored and keeps the original structure of the Old Train Station. As an important stop on the new CIRO cycling route, the station is proposed to be transformed into the museum of this railway. The building partly keeps the natural growing vegetations as a memory and the transition of indoors and nature. The museum consists of a series of continual rooms as the exhibition area and a long hall in middle as the nature area (*Fig.104*).As the roof of the station was destroyed during the war, the building now use a glass roof to cover the exhibition area.

An extra gallery is attached to the station following the original pattern of station building group.

Memory Planting Lab

The building is reconstructed to follow the original pattern and reform the profile and facade of this old building (Hotel Wregg), whose remaining part is proposed to be the indoor theater of the Youth Center. Thus this building also has an entrance connecting with the theater. All facade is transparent using glass or steel structure and has multiple entrances, people can easily go through or see through this building.

The planting experience is both for encouraging people from different backgrounds to participate in the design of landscape and establishing a historical memory monument by abstrat symbolic language. People are invited to pick the seeds and grow their own flowers in the planting beds. All species are indigenous species used for emotion treatment from the old time. Each species represents an emotion based on the medical function of that species and all species are obviously different in figure. By planting the specific species in different beds, people also plant their precious memory in a specific period as different beds represent for different great history periods. When the planting beds are filled with flowers, each flowers reflect an indivial memory and the overall flower landscape reflect the collective memory.

Fig.111 Old ststion interrior hall impression
figure source:author

Fig.112 Memory planting lab impression
figure source:author

Memory Planting Step

Step1

Pick a seed ball from the marked seed box. The seed you choose might represente your emotion and memory during the past period: before the war till now.

Step2

Watering it and wait for its blossom. You can use the flower/leaf/fruit of your plant to make tea that treat with the memory emotion and feeling.

Step3

After the planting bed is full with plants you may chose to make your plant a hanging plant hanging on the steel structure of the wall, then more room in the planting bed for others' plants and also able to keep your memory and enjoy the tea from it.

LOVE
-Rosa rugosa-

Generally, A red rose is an unmistakable expression of love. Florescence is in Summer May-June.

HAPPYNESS
-Tussilago Farfara-

It's visited by honeybees, providing pollen and nectar. Florescence is in Spring February-May.

SORROW
-Calamintha officinalis-

The Bosnian name for this plant comes from a Turkish word for sorrow and is traditionally used for treating the disease behind which lies depression. Florescence is in Summer July-September.

FEAR
-Glechoma hederacea-

This plant was used in the ritual of fear elimination or another type of shock which appeared after a traumatic experience . Florescence is in Spring April-June.

Fig.113 Memory planting step
figure source:author

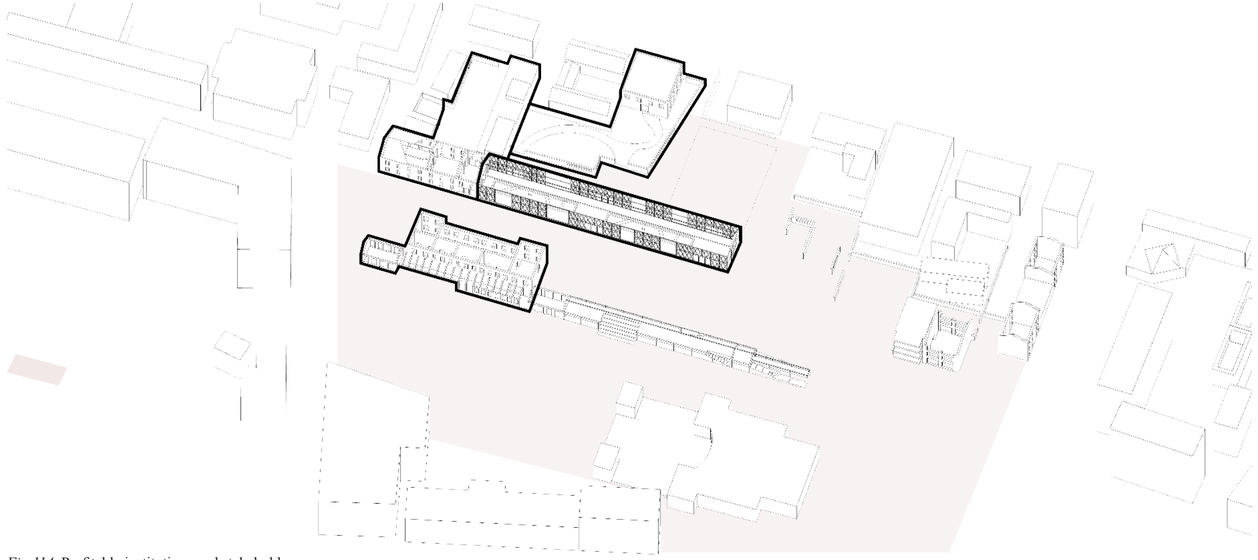


Fig.114 Profitable institutions and stakeholders
figure source:author

This new cultural and recreational center also consider the proper combination of public space for inhabitants and economic institutions run by organizations or individuals. The mixturre of different functions can invite various stakeholders to activate this area and support the sustainability of economy.

1. Youth Center: A hot place mainly for young generations. The stakeholders run cafe and pub in the Center, but also cooperate with other organizations to hold a variety of outdoor and indoor performances.

2. Hotel: A hotel mainly serve visitors travel along the CIRO railway, a best place to stay and know more history about the CIRO. The hotel and its affliated garden are restored from the ruined constructions following the original pattern. The stakeholder can cooperete with the Old Train Station Museum in the future to stimulate the tourism.

3. Memory Planting Lab: A planting lab that invite the public to experience the medical-used flower planting and record the collective memory in the past. The stakeholder would provide relative flower knowledge and planting guide to the public and also help them to harvest and make their own product of flowers.

4. Old Train Station Museum: A museum that educate the history of CIRO railway. The stakeholder is in charge of the exihibition in museum and also help hold extra exhibitions in the outdoor gallery.

Reflection

1.The relationship betwenn research and design; Whether the design answer the research question?

Based on "Research by design" process, the research and design parts do not always have clear hierarchy but support of and get feedback from each other. Generally, there are two parts of research in this project. The first part of research, consisting of methodology framework and theoritical framework, works as the theoritical foundation of the design part. The methodology framework clarify the supportative relationship between research and design during the whole process. The theory background indicates relative directions to focus based on existing theories under the same post-conflict background. The second part of research includes site relative division problem analysis, history analysis and current condition analysis. This part helps to have a better and deeper unstanding of the challenge and working objects, exploring a promising working area and also strategies. All the potentials coming from conclusions and the strategies work as the toolbox to guide and support the follow design part.

The main research question is: How can the historical and social value of public spaces in Mostar be enhanced by landscape interventions to mitigate the mental division between people?
In this project, public spaces in working area are tackled from three aspects (the strategy): 1) history and memory (historical aspect); 2) activity (social aspect); 3) network continuity (physical aspect). In the physical aspect intervention, an improvinng pedestrian network is developed to connect the east and west bank, beside which public spaces are distributed. This pedestrian network would guide people to gather and put the Neretva River and its river bank back to their important status as the central bond of this network. This part of intervention works is the basic foundation and structure of the design for enhancing the physical connection.
The historical and social aspects intervention mainly focus on valuale historical remains and maximize their historical and social value through 1) emphasising their historical image and function to evoke collective memory; 2) inviting people to interact with ruins and develop new public spaces. This part of intervention would bring people together by collective history background and activities.

2. Whether the design share the big goal of the graduation lab?

As described in the lab guide:
The lab focuses on the river in relation to the city starting from the war because the war was violent and extraordinary spatial condition that significantly changed Neretva, Mostar, human existence and overall narrative about the city. In the research and design process, the lab will observe Neretva as the living archive of Mostar that can be used as a counter project to the processes of official creation of monuments and spatial narratives that are relating prewar, war and post-war Mostar, and as an entry into a design assignment that in itself will add to the living archive.

This project share the perspective that regarding Neretva as a living archive, and extent the target area from river to a boder area include boulevard. In this project, places, activities and remaining ruined constructions are seen as the carriers of memory,. With the appearance and disappearance of these carriers in the city, the city itself is an archive collect not only objects but also layers of stories and collective memories attached to the environment along the long history. The design intervention would make this living archive more active to the public and invite the public keeping adding their contributions to the archive.

3. Whether the design is practical and reliable? Problems encountered during the design process?

1) The biggest intervention is the transform of pedestrian boulevard, thus bring challange to the existing transport system. After transforning a main road with great traffic flow into a pedestrian boulevard with single line public transport, traffic pressure would be shared by other roads beside and should work together with traffic department. While looking towards the traffic network in the future, this intervention has a pilot significance for the public transport network construction.

2) As for the memory planting, it is still controversial to be a practical proposal due to maintainess and florescence. The original idea is to invite people to plant specific flower species along the boulevard to represent their personal memories, and the blossom scene would show a collective memory landscape.
Finally due to different challanges, this memory landscape would be narrowed in a reconstructed building at a most popular site on the boulevard. Different native flower species are choosen by their therapeutic value in dealing with different emotions. The prospect to show the colletive memory when flowers bloom would not be shown in a best way because of different florescence, but as a way to create new public space and invite people to interact with the new landscape, this small memory planting landscape can play the role as memory monument to gather people.

Conclusion-Answer of sub-research questions

1. How to conceptualize public spaces in Mostar for this project?

As explained in the theoritical background part, the public space in this project refers to the places where people can spontaneously come and experience public and individual activities in their daily life, including open spaces in a board sense and also semi-public places under roof like coffee seats along the street. Specially in this site, the Neretva River and bridges are also seen as public spaces as they are also public gathering spots.

2.How to understand the mental division through public space analysis?

The mental division is presented in the ethnic distribution and public service system distribution. Bosnians and Croatians are distributed in the east and west banks and have respective public service institutions. But the mental division can also shown in the use of public spaces. Compared with the past, people are less actively gather on the boulevrd, which was the front line during the civil war. It is on one hand due to the poor quality ruined abandoned areas on the boulevard, on the other hand due to the ruined images that evoke the war-related memories.

3. How to make use of the remaining historic heritage elements to bring history and memory to the public space?

Public buildings and public infrastrucutres are of considerable historical value. Firstly, the images of themselves are symbolic languages reflecting corresponding history, like the temmporary bridges are related to war period and the old station is related to prosperous period in begining of last century. Emphasising these images aims at recalling knowledge and memory of the history. Secondly, native materials and heritage elements are used to reuild the environment reflecting the scenes in the past. When people get into the spaces, outer environment would stimulate the memory people having between themselves and the heritages and spaces.

4.How could the designed public space contribute to a more cohesive society? How can it contribute to tackle the existing mental divisions in the city?

According to the strategies, the objective is acheived by three aspects.

From physical aspect, transport network and public space network in the city are improved and more continuous public spaces would guide the people flow to meet. This is also the most basic aspect of this project.

From use aspect, the cleaning and redesign of the ruined area make people reduce the fear memory arising from the ruined ground scenery but regard the ruins and heritages as new active public spaces.

From mental aspect, recalling city hstory and collective memory can tie the public again with their city and futher bring them some thoughts about the current division situation and probable future.

References

Angelidoua, M., Karachalioua, E., Angelidoua, T., & Stylianidisa, S. (2017). CULTURAL HERITAGE IN SMART CITY ENVIRONMENTS. International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences. 2017, Vol. 42 Issue 2W/5, p27-32.

Brandão, A. L., & Brandão, P. (2017). Public Space, Infrastructure, Landscape: an interdisciplinary matrix for urban spatial continuity. The Journal of Public Space , 2(1), 123-134. doi:10.5204/jps.v2i1.55

Boutros-Ghali, B. (1992) An Agenda for Peace. New York: United Nations.

Beijaert, L., & Mačkić, A. (2014). Mortal Cities: the Irreversible Disappearance of Mostar. Retrieved from http://studio-la.org/research/the-irreversible-disappearance-of-mostar-2/

Brown, R. D., & Corry, R. C. (2011). Evidence-based landscape architecture: The maturing of a profession.[Landscape and Urban Planning at 100]. Landscape and Urban Planning, 100(4), 327-329. doi: http://dx.doi.org/10.1016/j.landurbplan.2011.01.017

Borislav Puljiæ. (2011). Mahalles in the City of Mostar: Topography, origins and urban features. Tehniêke znanosti / Arhitektura i urbanizam, 19 [2011] 1 [41].

Carr, S. Francis, M. Rivlin, L. G., & Stone, A. M. (1993). Public Space: Environment and Behavior. USA: Cambridge University Press

Conflict in Cities and the Contested State. (2012). Sharing Space in Divided Cities. Retrieved from http://www.conflictincities.org/

Department of the Environment and Heritage. (2004). Adaptive Reuse: Preserving our past, building our future. Retrieved from http://www.environment.gov.au/heritage/publications/adaptive-reuse

DeWolf, E., Girani, S., Sinatra, C., & Sirkis, P. S. (2014). Dynamic Reflections on Sarajevo: an open dialogue on memory, identity and the city. In Kotzen, B (Ed.), LSE Cities Reconstructing Sarajevo: Negotiating Socio-political Complexity (pp. 38). Retrieved from www.lse.ac.uk/LSECities/citiesProgramme

Gehl, J. (2013). How to study public life. Washington, DC: Island Press.

Gehl, J., & Gemzoe, L. (2006). New City Life. Copenhagen: Danish Architectural Press.

Goodyear, S. (2012). How Urban Design Affects Ethnic Or Religious Tensions. Retrieved from https://www.citylab.com/design/2012/06/how-urban-design-affects-ethnic-or-religious-tensions/2252/

Garcia, S., & Kotzen, B. (2014) The politics of memory and division in postconflict Sarajevo. In Kotzen, B (Ed.), LSE Cities Reconstructing Sarajevo: Negotiating Socio-political Complexity (pp. 23). Retrieved from www.lse.ac.uk/LSECities/citiesProgramme

Gašparović, S, Mrđa, A., & Oberman, T. (2011). Can Public Spaces Initiate The Recovery Of A Town? - Research Based On Student Workshop - Mostar (BiH). Proceedings from Congress "Architectural Design Between Teaching and Research". Bari, Italy.

Glover, T. (2003). The Story of Queen Anne Memorial Garden. Resisting a Dominant Cultural Narrative. Journal of Leisure Research, Vol. 35, No. 2, pp. 190-212.

International Criminal Tribunal for the former Yugoslavia. (2017).

Institute For Advanced Architecture Of Catalunya. (2015, August 26). IN-BETWEEN REALITIES: TOWARDS A SOCIALLY SUSTAINABLE URBAN STRATEGY FOR BEIRUT CITY. Retrieved from http://www.iaacblog.com/projects/realities-towards-socially-sustainable-urban-strategy-beirut-city/

Irwin, R., & Šarić, V. (2010). Calls for War Memorials Divide Bosnia. Report for Institute for War & Peace Reporting. Retrieved from https://iwpr.net/global-voices/calls-war-memorials-divide-bosnia

Jacobs, J. (1961). The Death and Life of Great American Cities. New York: Random House.

Jorda, J. A. (2006). STRUCTURES OF MEMORY: Understanding Urban Change in Berlin and Beyond. Stanford, California: Stanford University Press.

Jalkh, R. (2017). Placemaking for Peacemaking. Retrieved from https://www.pps.org/article/placemaking-for-peacemaking

Kappler, S. (2017). Sarajevo's ambivalent memoryscape : spatial stories of peace and conict. Memory studies, 10 (2). pp. 130-143.

Kent, F. (2005, May 31). Streets are people places. Retrieved from https://www.pps.org/article/transportationasplace

Knezevic, G. (2017, August 08). Mostar, Bosnia's Most Divided City. Retrieved from https://www.rferl.org/a/balkans-without-borders-mostar-bosnias-most-divided-city/28665807.html

Krishnamurthy, S. (2012). Memory and form: An exploration of the Stari Most, Mostar (BIH). Journal of Ethnopolitics and Minority Issues in Europe, 11(4), 81–102.

Lynch, K. (1960). The image of the city. Cambridge, Mass. : MIT Press.

Lien, I., Rafiq, S., & Walker, T. (2014). The Olympic Bulevar: Inbetweenness and peripheries in Sarajevo. In Kotzen, B (Ed.), LSE Cities Reconstructing Sarajevo: Negotiating Socio-political Complexity (pp. 60-66). Retrieved from http://www.lse.ac.uk/LSECities/citiesProgramme

Lenzholzer, S., Nijhuis, S., & Cortesão, J. (2018). Research Through Design in landscape architecture: a first State of the Art. From Conference: Design Research Society, Catalyst conference, At Limerick, Ireland

Mackic, A. (2016).Mortal Cities: Forgotten Monuments. Park Books.

McEvoy-Levy, S. (2012). Youth Spaces in Haunted Places:Placemaking for Peacebuilding in Theory and Practice. International Journal of Peace Studies, Volume 17, Number 2.

Nijhuis, S., & Bobbink, I. (2012). Design-related research in landscape architecture. Journal of Design Research,10(4), 239-257. doi: https://doi.org/10.1504/JDR.2012.051172

Piquard, B., & Swenarton, M. (2011). Learning from Architecture and Conflict. The Journal of Architecture: 16 -1:1-13

Project for Public Spaces. (2007). What Is Placemaking?. Retrieved from https://www.pps.org/article/what-is-placemaking

Project for Public Spaces. (2008). An Idea Book for Placemaking: Semi Public Zone. Retrieved from https://www.pps.org/article/semi-public-zone

Pašić, A., & Siravo, F. (2004). Rehabitating The Historic Neighbourhood. In Aga Khan Historic Cities Programme (formerly Historic Cities Support Programme), Conservation and Revitalisation of Historic Mostar. Geneva: The Aga Khan Trust for Culture

Pimlott, M. (2015). The public interior as idea and project. Heijningen: JAP SAM Books.

Schaer, C. (2009, July 2). Landscaping the Death Strip: A Vision of the Berlin Wall as a Giant Garden. Retrieved from http://www.spiegel.de/international/germany/

Salem, E. (2018, January 2). Post-War Cities: War And Memory In Beirut, Sarajevo, and Medellin. Message posted to https://progrss.com/communities/20180102/memory-post-war- beirut-sarajevo-medellin/

Shaftoe, H. (2008). Convivial Urban Spaces :Creating Effective Public Places. Trowbridge, UK: Cromwell Press

Siláči, I., & Vitková, L. (2017). Public Spaces as the Reflection of Society and its Culture. IOP Conf. Series: Materials Science and Engineering. doi:10.1088/1757-899X/245/4/042009

Steves, R. (2018, March). Mostar's Bridge. Rick Steves Audio Europe. Podcast retrieved from https://soundcloud.com/rick-steves-audio-europe/

World Heritage Committee. (2005). Nomination Dossier “The Old City of Mostar” (Fail Name: 946rev). Retrieved from https://whc.unesco.org/en/list/946/documents/

White, B. (n.d.). Landscape of Memory. Retrieved from http://www.riverstreethistory.com/landscape-of-memory/

Wollentz, G. (2017). Making a home in Mostar: Heritage and the Temporalities of Belonging. InternationalJournal of Heritage Studies,23(10), 928–945. doi:10.1080/13527258.2017.13 47891.

Whyte, W. H. (1980). The Social Life of Small Urban Spaces. Washington, D.C.: Conservation Foundation.

Wollentz, G. (2017). Making a home in Mostar: Heritage and the Temporalities of Belonging. InternationalJournal of Heritage Studies,23(10), 928–945. doi:10.1080/13527258.2017.1347891.

Whyte, W. H. (1980). The Social Life of Small Urban Spaces. Washington, D.C.: Conservation Foundation.

Youth, Continuity and Change: How young people experience contested cities and each other. Retrieved from https://www.urbanconflicts.arct.cam.ac.uk/downloads/briefing-paper-3