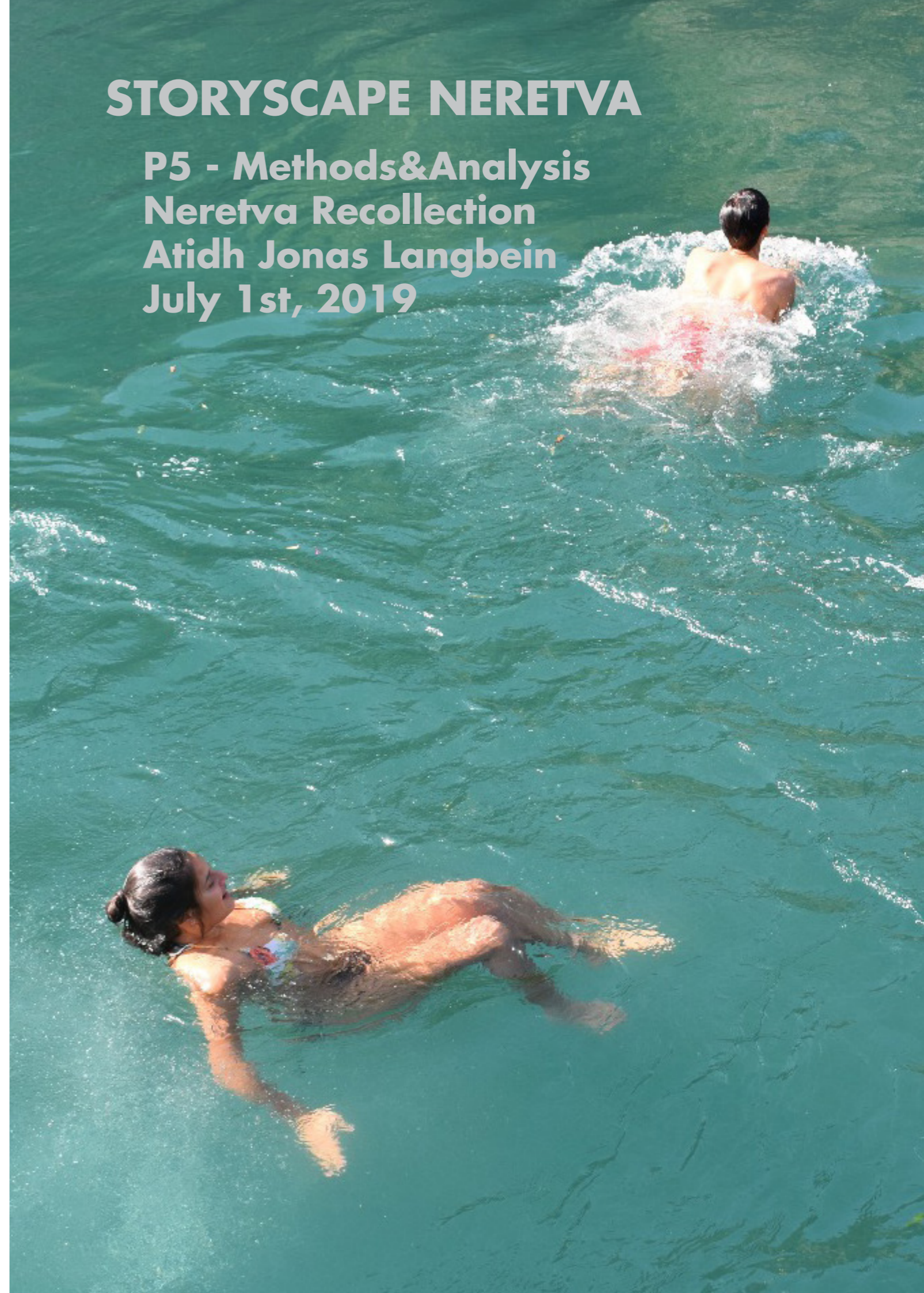


STORYSCAPE NERETVA

P5 - Methods&Analysis
Neretva Recollection
Atidh Jonas Langbein
July 1st, 2019



This graduation project and this wouldn't have been possible without the 10 months of mutual support and assistance by Mr'n'MrsHammond, Mr'n'MrsHammond, Seretva Neretva Hammond, Topla Cokolada Hammond and Lisa and Bart Hammond.

As many thanks do to my other families: my Delfter family Aska Welford and Lea Scholze for making home when other places around are not. And my Munich family Lisa, Sri and Jörg Langbein for sending home to wherever I am and supporting me in all crazy ideas that might not find responses elsewhere.

And of course Ferry Adema and Armina Pilav for teaching this studio together with many wonderful beings in Mostar: Damir Ugljen - at least fictinonally we finally managed to go kayaking, the people in and around Neretva and of course Neretva herself.

Hvala!

*El paisaje es una educación. Educas tu mirada
y tus ojos, las formas de ver las cosas
y las formas de crear espacios.*

*Los ocupas y los imaginas en el pasado,
les otorgas tus propios significados,
los inventas y fantaseas sobre ellos
en un intento de recargar la memoria del ayer.
Hablas de estructuras que alguna vez
fueron un todo.*

*La naturaleza se llena de implicaciones estéticas,
de mitos y leyendas.*

*Dibujamos en la tierra con los dedos
sin darnos cuenta de que eso no son fronteras,
sino líneas
que unen puntos distantes y diseminados por el espacio.
Todo se mueve,
las piedras se mueven,
te das cuenta de que el paisaje es algo totalmente distinto.*

D. Guijarro: Totalidad e Infinito (economías de la transferencia de
otro(s) tiempo(s) para el arte)

WHY MAKING AN ARCHITECTURE GRADUATION PROJECT ON RIVERS, LANDSCAPE AND NATURE?

The history of humanity is a story of organized action upon the land, whether that is considered as a complex ecology that includes living and non-living things or as a functionally empty surface for the imposition of efficient systems and forms. If a place teems with hidden riches then these can be extracted as valuable views and useful materials. Such organization of the natural and its opposite is one of the first and perhaps most fundamental architectural acts.

Our Graduation Lab “Neretva Recollection: Materiality of War, Flowing Memories and Living Archive” intends to research and develop design explorations in the post-war conditions of the Bosnian-Herzegovinan city of Mostar on the banks of the river Neretva. During the Yugoslav wars the bridges crossing Neretva were points of major strategic importance and thus destroyed and rebuilt again and again. Thus, «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. It takes the immaterial and material residuals of the temporary bridges, other human and natural made materials located on the river banks, in the river stream and at the bottom» .

So even though relating the studio explicitly to the river Neretva, this does not mean having to focus on the territorial scale of Neretva, especially not in architecture. But still, with every piece of architecture we produce, soil is being sealed, plants, animals and other forms of life are being expelled, their habitat destroyed. This obvious but often overlooked fact has led to many fights and discussions with my father, a friend of trees and flowers, not of (most) buildings and architecture. Continuing my studies I realised that I did inherit most of this affinity to nature from my family. Kayaking and swimming in clean rivers in the Alps; Hiking, skiing and climbing its peaks, caring not to leave traces; Watering and talking with the plants my Thai grandma Khun Yai has planted in pots on her street, Harvesting and enjoying the fruits and vegetables from our garden or wherever they grow. For me nature has always been that which surrounds us, which nurtures and gives, but can always take and destroy. By being in the world, by daring to step outside our houses into the open, we need to accept this unpredictable. This is complementary to the above mentioned, widely spread conception of architecture as that which intentionally marks traces, draws boundaries that distinguish between the natural and its opposite the cultural. In this field of tension between the division and union of the cultural and the natural is where this graduation project is set.

PROCESS AND DEVELOPMENT

In preparation for the excursion to Mostar end of October 2018, we of course delved into all material about Mostar available in Delft. Of course, also from our main mentor Armina Pilav we heard about the close connection of the inhabitants of Mostar with Neretva, the river passing through it. She also provided us with the book Neretva i njene

obale u Mostaru - Neretva and her River Banks in Mostar – which consists of photographs of Neretva with toponyms of all the different little spots on the river; rocks, eddies, standing waves, river bends, diving spots and beaches as well as descriptions of each area, with swimming and diving opportunities and the name of the families who used to go there. All a sign of a very close relationship with the river, like we kayakers in Munich, have a name for all waves and eddies in which we enjoy practising each summer in the middle of the city. But as we already heard, this relationship has been weakening, unknown to what extent. I hence wanted to investigate into this relationship of the inhabitants of Mostar and Neretva. I redrew views from the river bridges to ask passers-by on that same bridge for the name of the places we can see. Or also just ask for the name of specific beaches or rocks. “Sorry, do you know where Ploča is? – What? Never heard of that place. Are you buying weed there? This is Bunur.” Similarly most of the responses so that I changed my tactic to just asked people very generally about their activities on the river and if they have some relation to specify about places they go or even know names of. In the end only two out of 15 interviewees had multiple memories and stories about the river: a lady around 65 and a 50 year old man reminiscing their happy moments on the river. The bays where they learned swimming, rocks where they jumped into the waters, or the beaches and rocks where they used to go, hang out and sunbath. But all in the past, about 40 years ago. Speaking about Neretva they regret that their children have never swam in Neretva due to the pollution.

The only place where people still go to above all is the mouth of Radobolja below, where the narrative of Neretva as the separation of east and west, bridged and reunified by the finally restored Stari Most, the old bridge, is being created, retold, and sold to the tourists in the alleyways of Stari Grad, the old town. The former activities, once taking place on nearly all sections of the river have moved away to new places in and outside the city; for instance to the public baths or even to the sea, which is with the improved transportation quickly accessible.

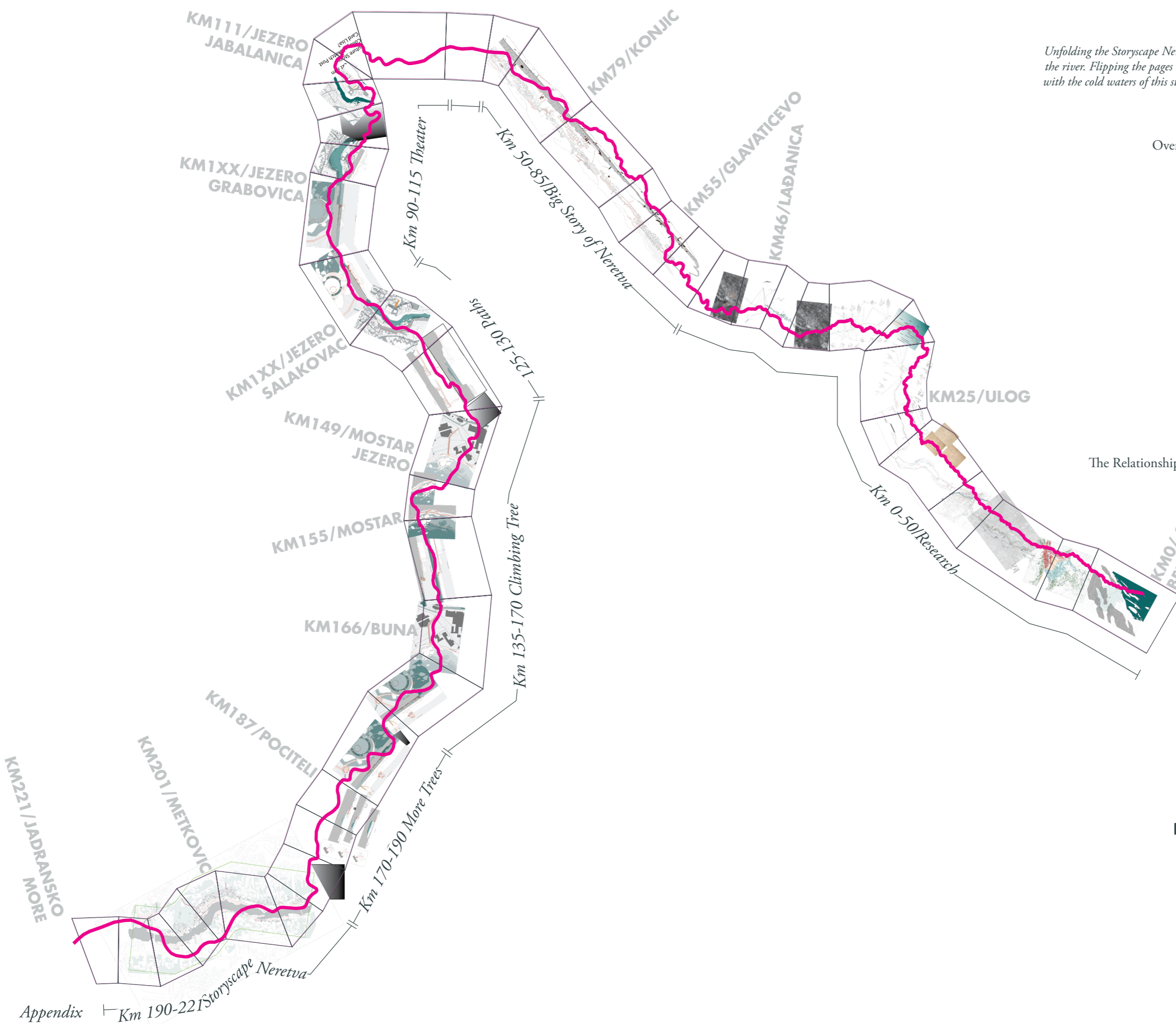
What is left from human activity on the river are some spots where access is formalized in concrete steps and platforms, and mountains of trash beneath the lush foliage of the trees on the shore.

This extreme and quite rapid change of interrelation between a city and its river, or a river and its city was for me the starting point to focus on the relationship between Neretva and Mostar at large. I see it as paradigmatic to the relationship between nature and culture, architecture and landscape and try to rethink with this graduation what it means to build within a organically grown location and not a cleared site in the middle of a city, what it means to cross a territory, to leave traces, to.....

The first examinations, already before the field trip, resulted in first soft maps of swimming and diving spots, former orchards and other memories of the riverscape; a map covered in words, little drawings and other soft, subjective information. Later during the field trip being enriched by interviews, photos and found objects as well as archival material from different times. This research resulted in the production of the panorama of the “Big Story of Neretva” a section through time and space to explain the development of the relationship of the river with the city. Surprising was that the allegedly long connection of Mostar with the river seems to a rather recent phenomena of the last decades or at least century.

CONTENT

Unfolding the Storyscape Neretva you end up having a map of the entire length of the river. Flipping the pages of the book you travel kilometer by kilometer together with the cold waters of this strong river. Instead of page numbers km thus indicate the location in the book



- km 0-50/ Research**
 - Overview Mostar-Neretva-Herzegovina-Dinarides
 - Historic Growth
 - Spatial Interface Neretva Mostar
 - Main Narrative
 - Interviewed alternative Narratives
 - Activity Mapping
 - Story Sections
 - Actors
 - Trash Mapping
 - Trash & Sewage Infrastructure
 - Water Inflow Mapping
 - River Morphologies, Currents, Erosion
 - Dammed Water Regime
 - Pollution
- km 50-85/ Big Story of Neretva**
 - The Relationship of Neretva and Mostar retold from Neretva's perspective
- km 86-90/ Storyscape Neretva**
- km 90-115/ Theater**
 - Extremely Changing Water Levels
 - Local Initiative
 - Trash as Issue
- km 115-135/ Paths**
 - Soft Formalization
 - Trash as Resource
- km 135-170/ Climbing Tree**
 - Phytoremediation
 - Leisure & Awareness
- km 170-190/ More Trees**
 - Small Scale
 - Autarky
- km 190-221/ Storyscape Neretva**
 - Axonometry
- Open Sea/Appendix**
 - Further Information
 - Details
 - Bibliography

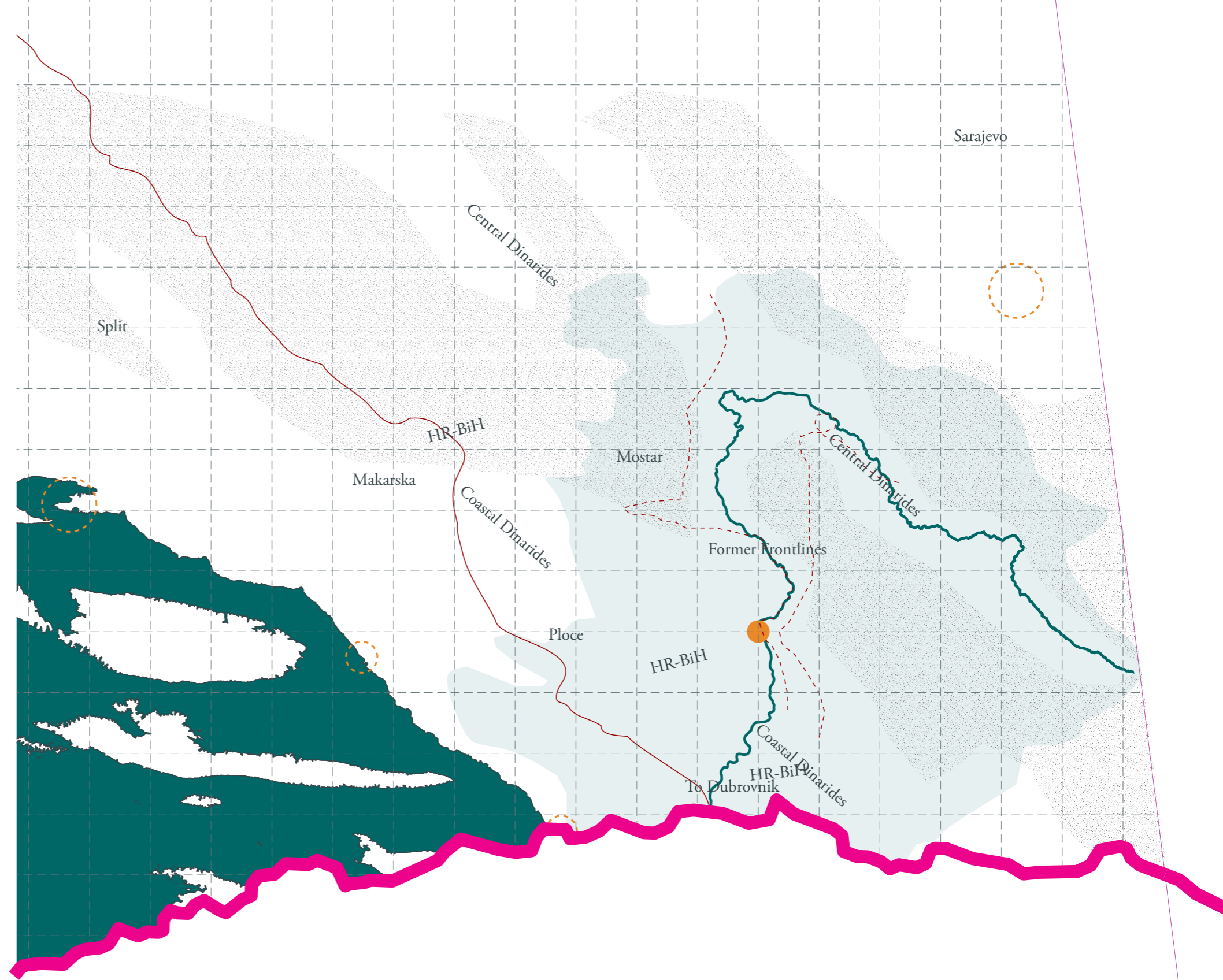
Appendix

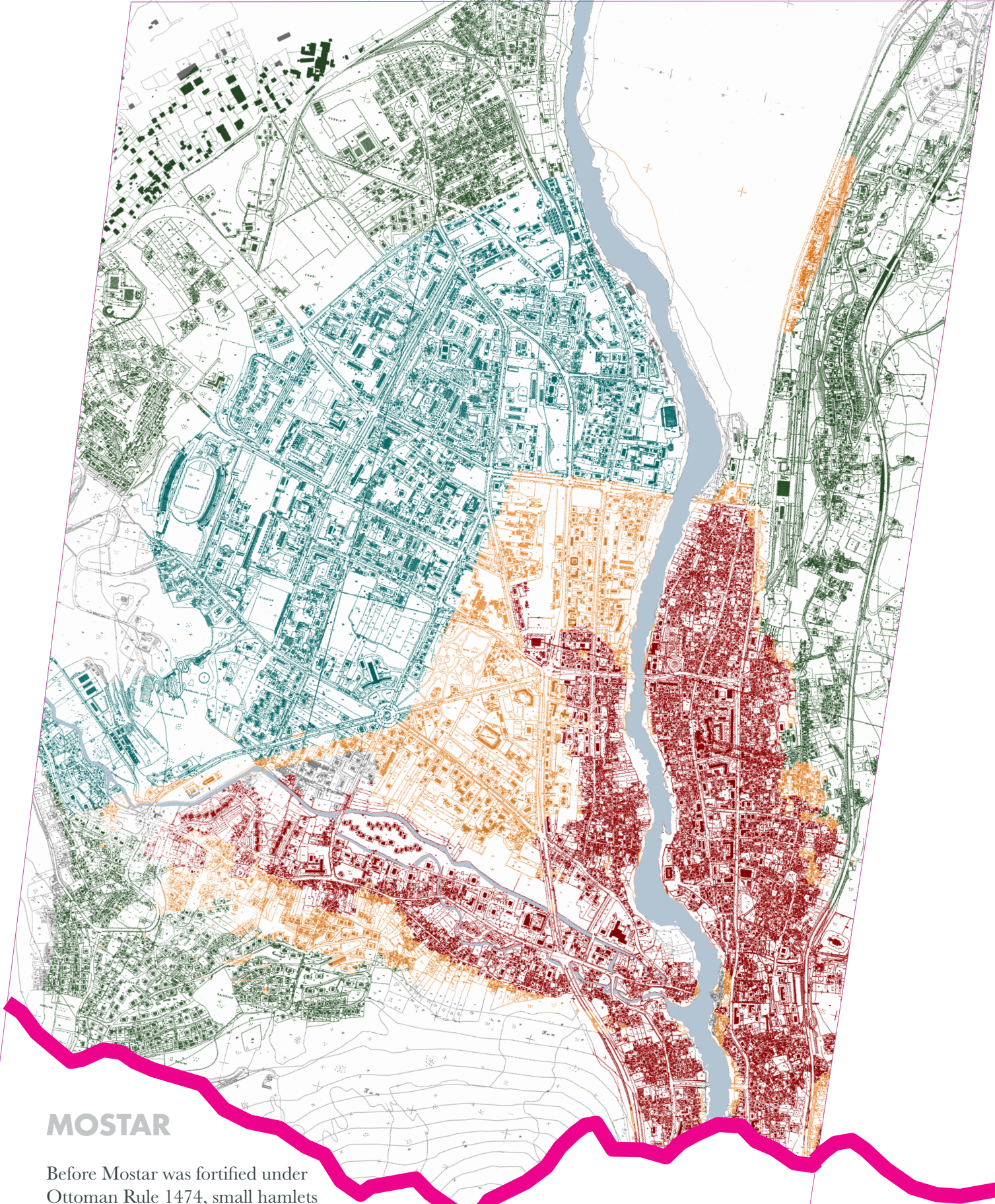
MOSTAR - NERETVA

Neretva, the main river of the Hercegovina, and at the same time the longest river flowing from the Balkans into the Adriatic Sea derives its name from the celtic "Nera Etwa" - flowing divinity. It is the only river of the entire region flowing completely overground from inner Bosnia to the Adriatic Sea. On its way crossing the two higher ranges of the central and the coastal Dinarides. This way connecting the coastal region to inner Bosnia, Sarajevo and the firther Bosna Valley through Ivan Saddle north of Konjic.

Mostar was founded thus strategically at the opening of this river valley controlling movement up and down along the river. This strategic importance reflects also in the battles fought around it and that the frontline in the Yugoslav wars of the 90s was running through the valley depositing large amounts of war debris potentially contaminating the environment. Also the emergency of the post-war reconstruction left little consideration for the natural environment so that nowadays Mostar and Neretva is littered in many part with trash and often even used as a illegal trash dump.

Due to the geological conditions of the Karst this effects have far wider ranges, as the watersheds of superficial rivers are connected between each other through subterranean streams.



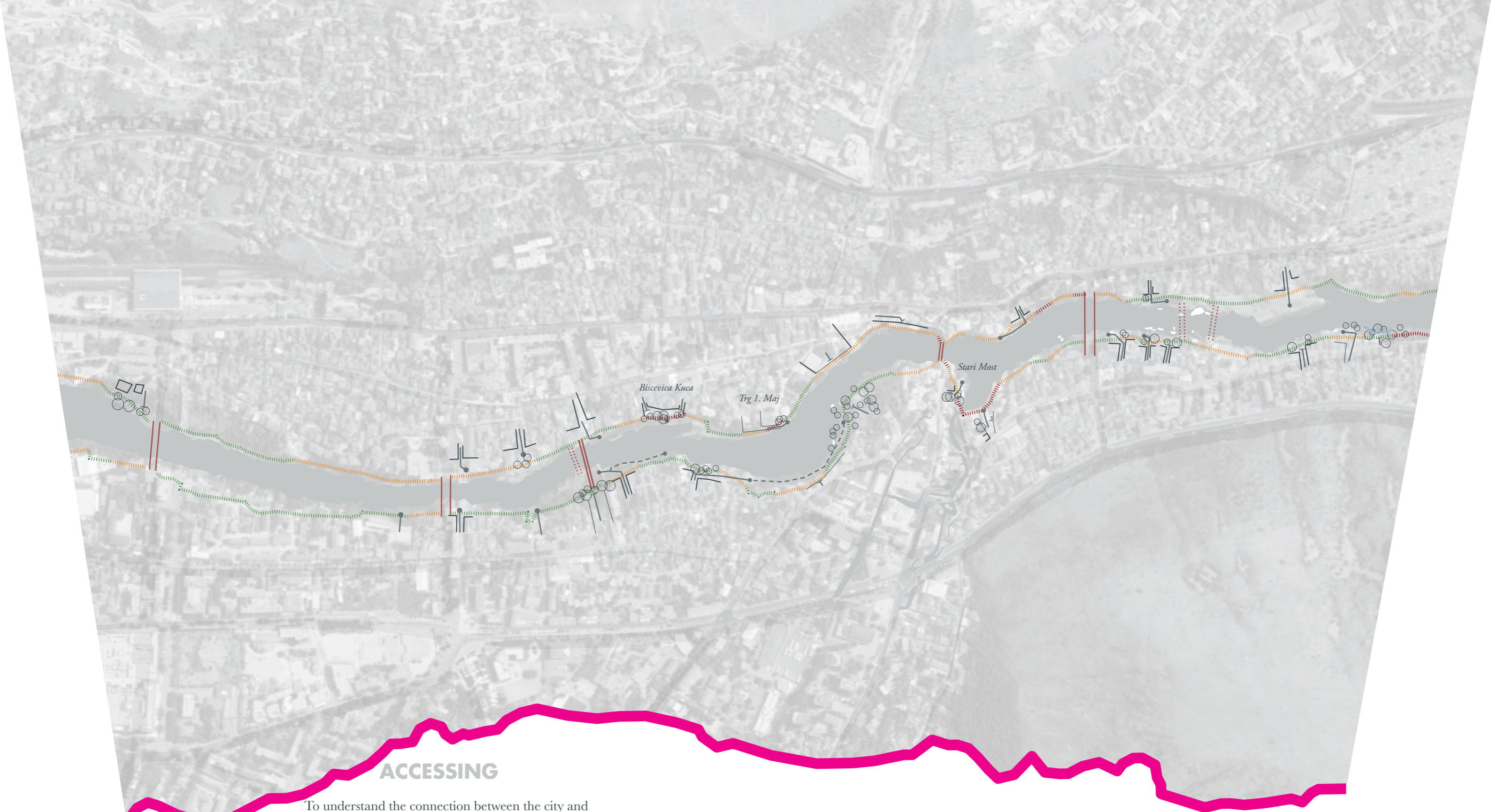


MOSTAR

Before Mostar was fortified under Ottoman Rule 1474, small hamlets were built on the upper slopes of the Bijelo Polje, far away from the potential torrential floods of Neretva.

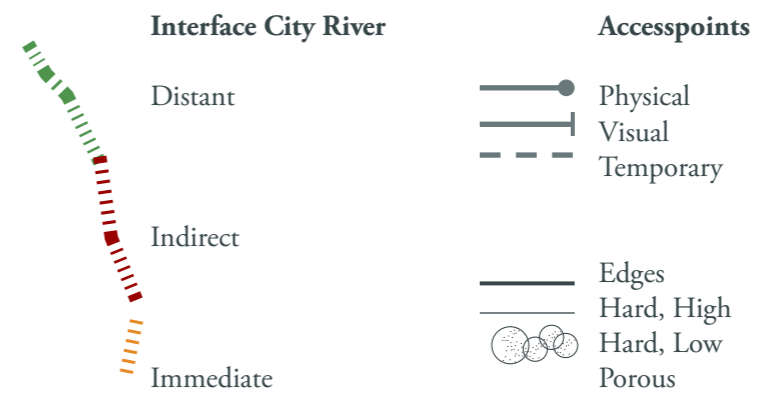
The city grew due to its strategic location, with a denser area on the eastern bank and gardens and orchards stretching far out along Radobolja. 1878 Bosnia fell under Austro-Hungarian rule. A planned city extension on the area of the former gardens is introduced together with beginning industrialisation and urbanisation. The last era is the Yugoslav era under which Mostar's industry grew a lot towards the south, offering employment to many new inhabitants of the city.

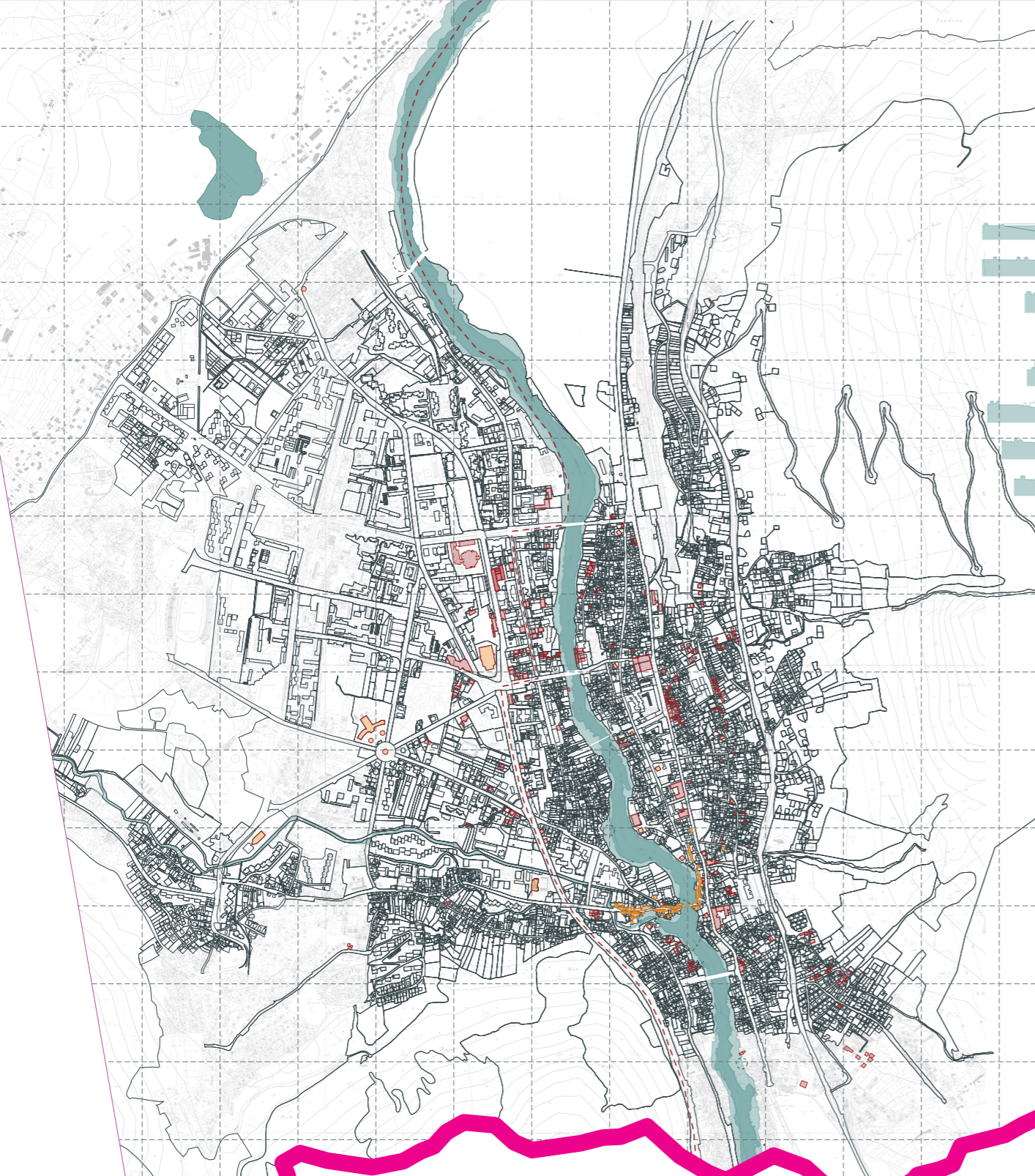
Ottoman City
Austro-Hungarian Extension
Yugoslav
Modernist City
Mostar now



ACCESSING




To understand the connection between the city and the river the spatial dimensions and characteristics have been mapped asking questions about access and connectivity. It turned out that most accesses to the river in Mostar are extremely low scale, hidden alleyways between back garden walls. Only in a few moments the urban street fabric really reaches the riverscape: at Biscevicu Kuca, on a slightly bigger side street, at Trg 1. Maj where the oldest Mosque of Mostar is located and of course at the steps below the Old Bridge Stari Most.



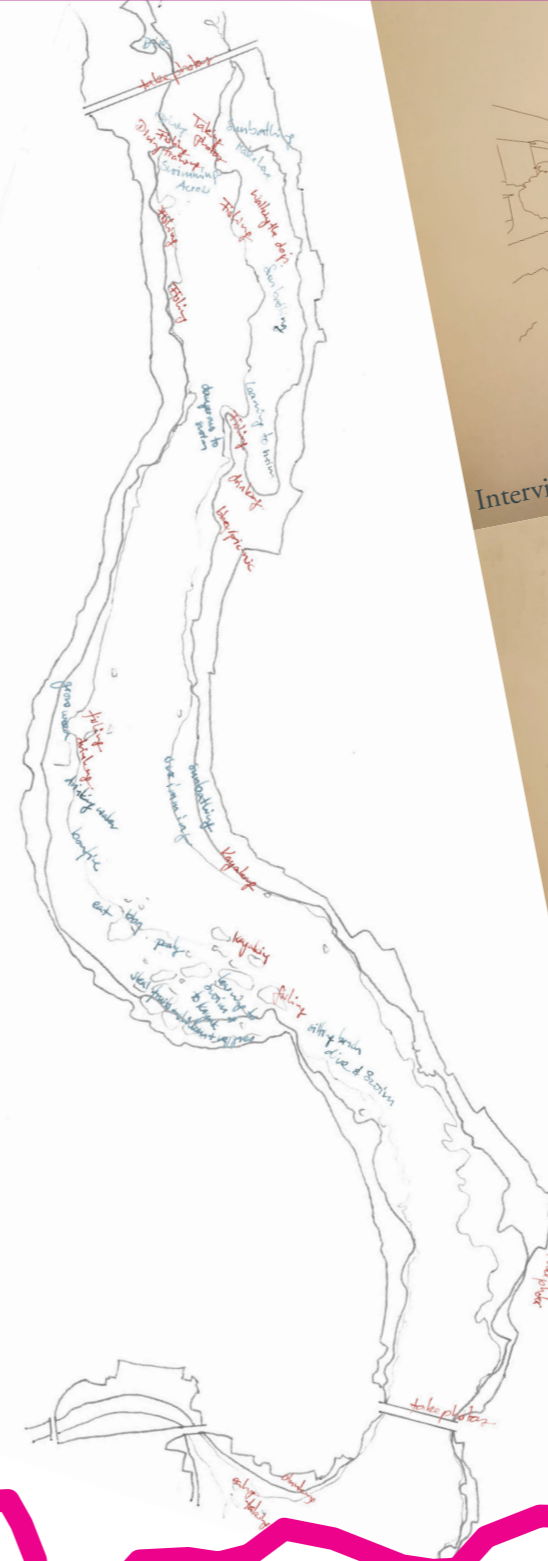


MAIN NARRATIVE

Generally in Bosnia it is impressive and scary how visible the war is still in everyday life. In ruins, bullet holes in buildings and more. But coming to Mostar is surprises even more how this narrative is cultivated. War memorabilia, souvenirs made from fake bullets, and Museums and other institutions that celebrate self-victimization and accuse the other ethnicity for all problems occurring. This way it is also no wonder that the city council has not met since 2012 as too big differences have made it apparently to reach an consensus.

-  Former Front Line
-  Vending Places of the War
-  Places of Accusation and Victimzation

RESEARCH

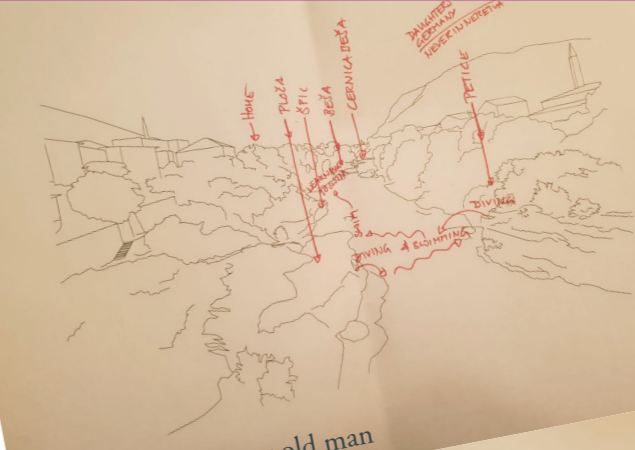


FIELD TRIP INTERVIEWS

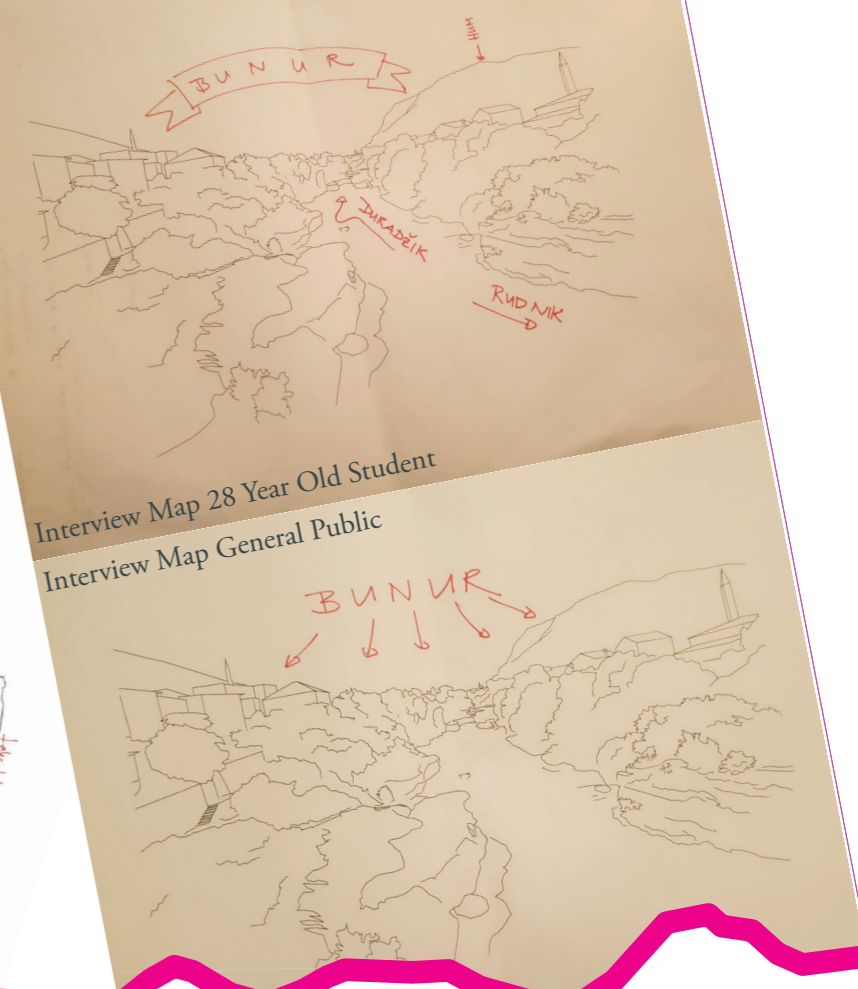
During the field trip I thus tried to unearth and discover other stories that tell us about the relationship with the river. I talked to people if they knew some of the toponyms of the river, but except of one I only got very general replies. Never anything more than the name of the neighbourhood 'Bunur', but at least in one case some stories about other places on the river the interviewee frequents. But the majority only replied to the question: What are your favourite spots on Neretva? - Stari Most.

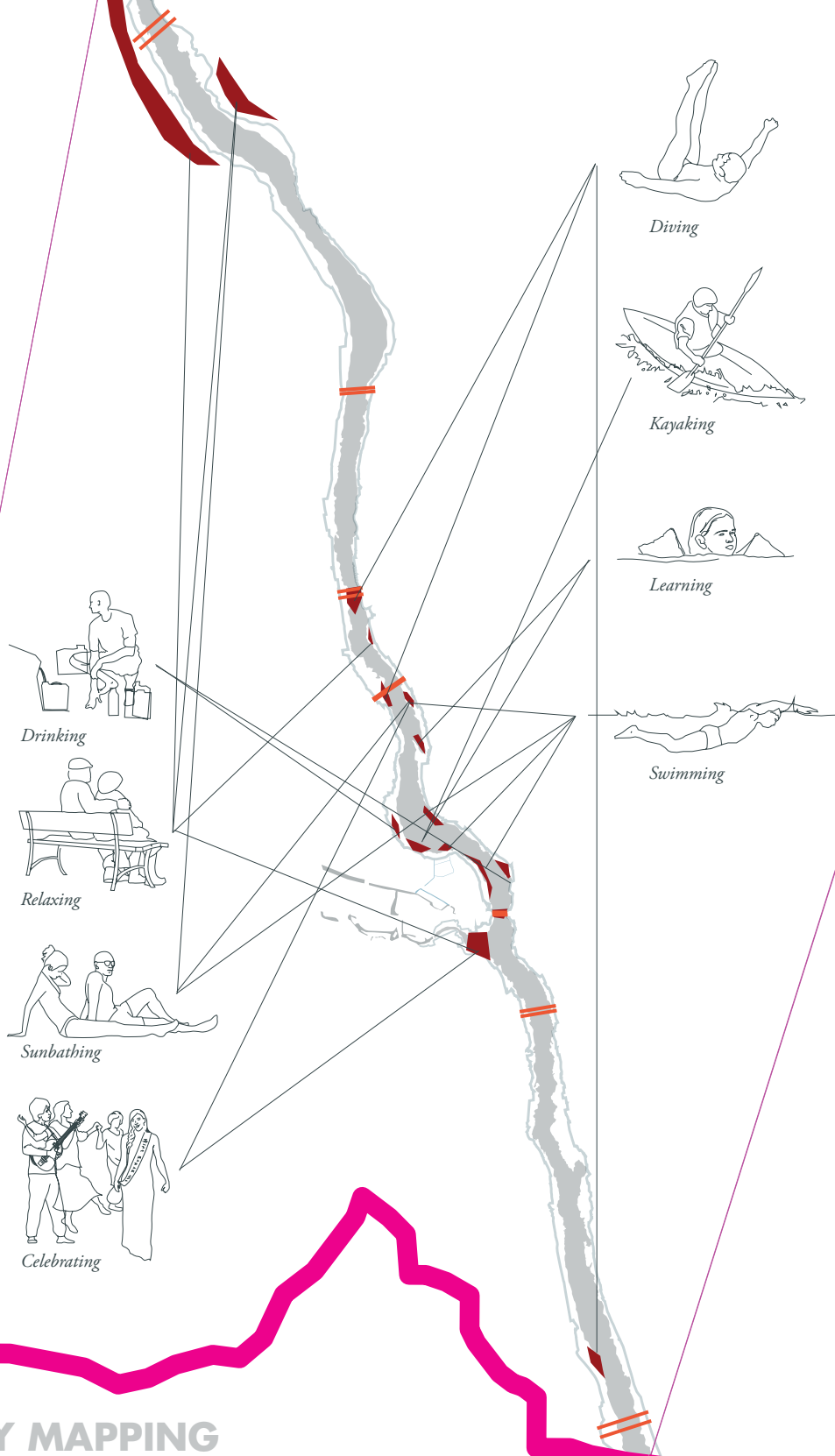
RESEARCH

Interview map 50 year old man



Interview Map 28 Year Old Student
Interview Map General Public





ACTIVITY MAPPING

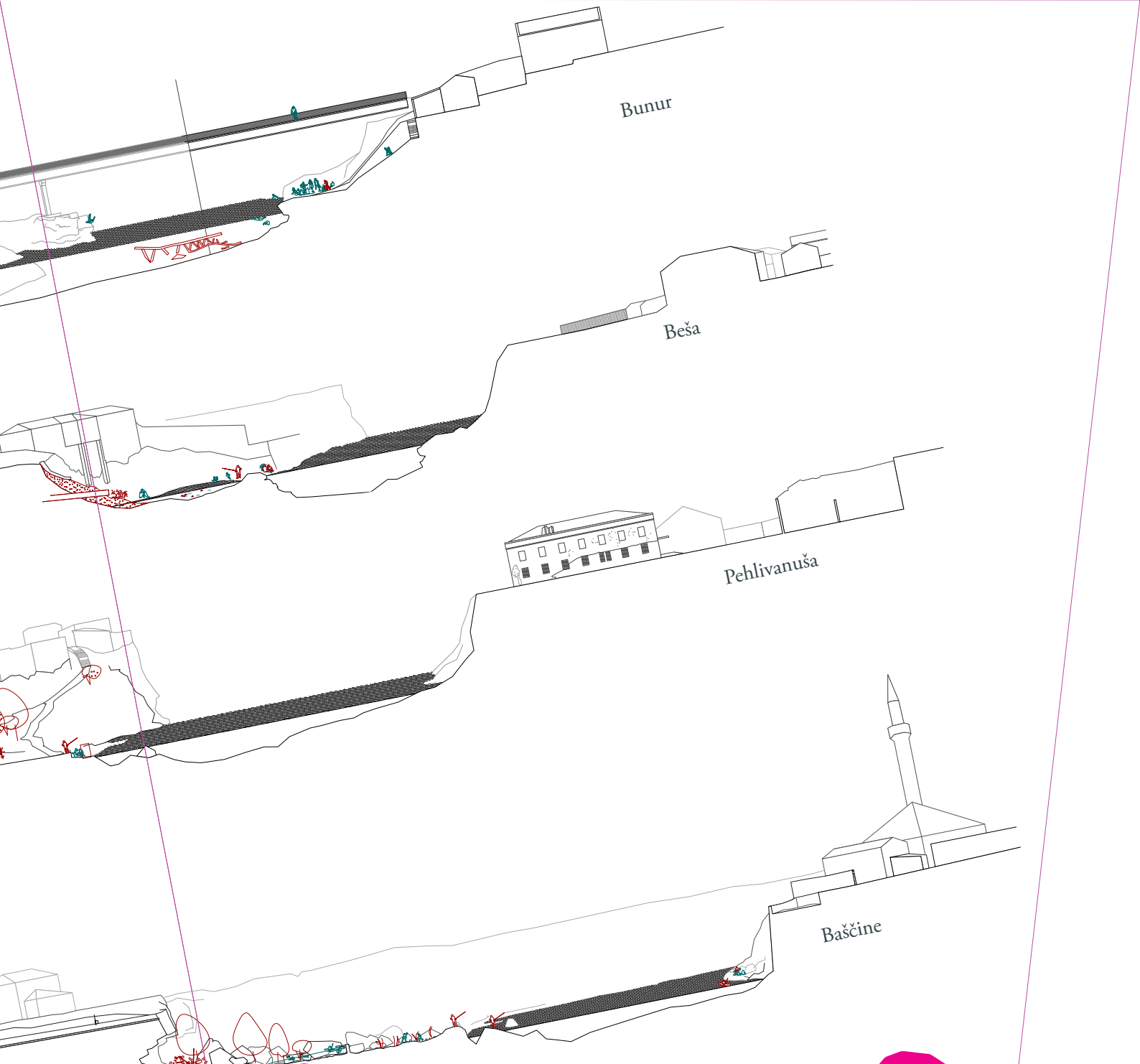
All these interviews and other findings of activities on and around the river are mapped to distinguish certain focus areas. They form a soft map of subjective encounters with the river. Positive celebratory but also negative memories of the war. These encountered existing stories build the base for my design of the Storyscape Neretva



FIELD TRIP INTERVIEWS

Eventually these resulted in the story sections of four particular sections of the river: Bunur, Beša, Pehlivanuša and Baščine, where I then linked these stories to the spatial dimensions of Neretva.

RESEARCH

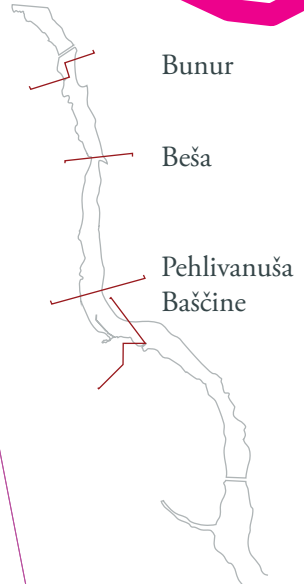


Bunur

Beša

Pehlivanuša

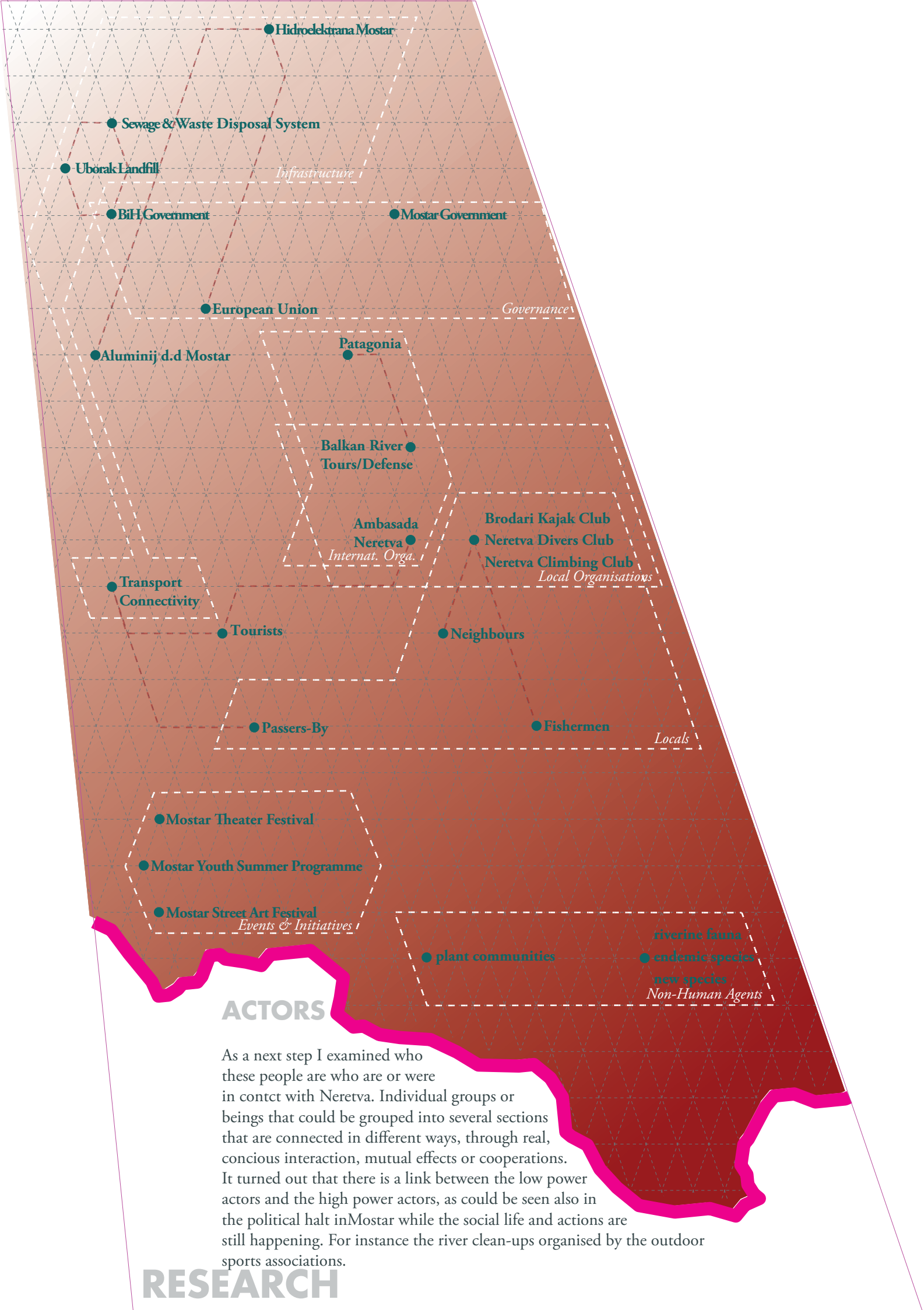
Baščine



Bunur

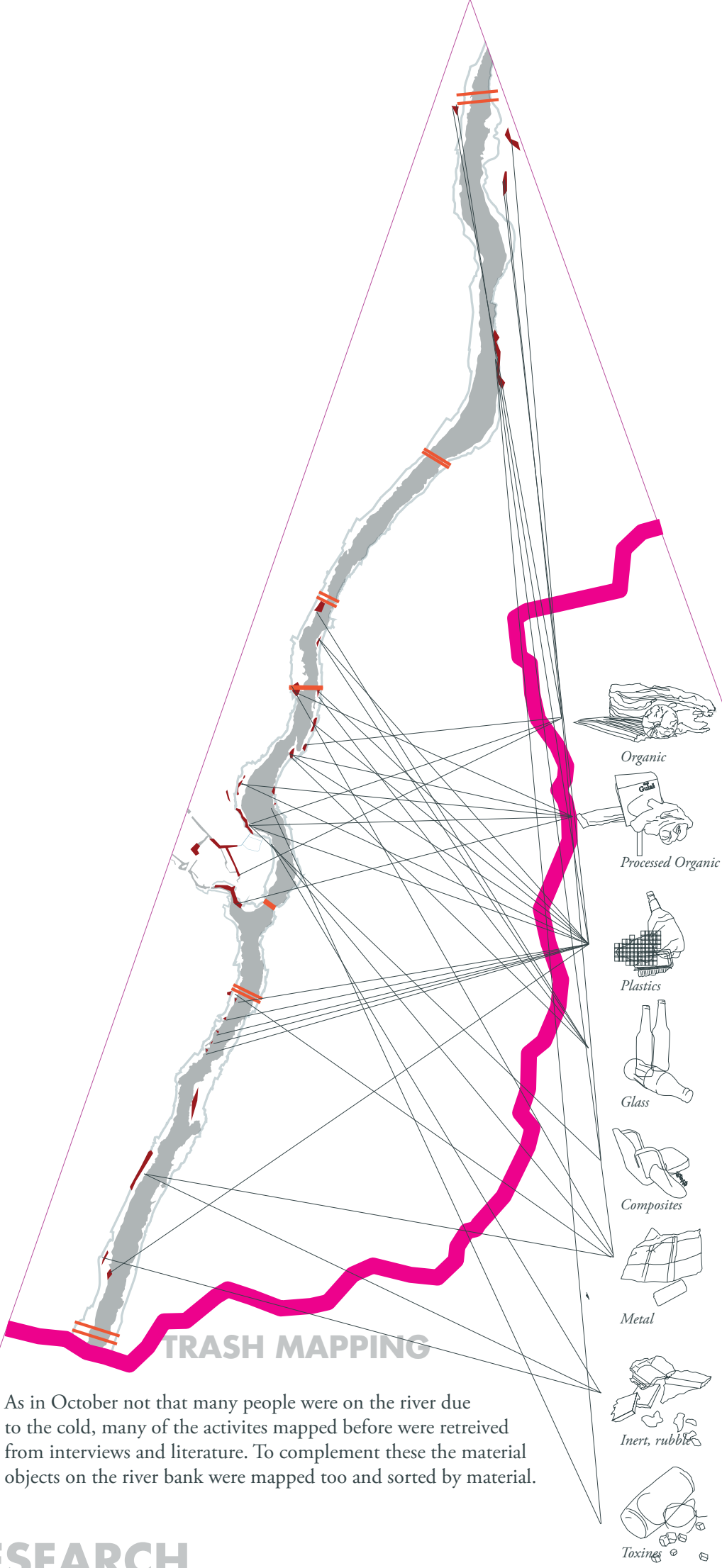
Beša

Pehlivanuša
Baščine



ACTORS

As a next step I examined who these people are who are or were in contact with Neretva. Individual groups or beings that could be grouped into several sections that are connected in different ways, through real, conscious interaction, mutual effects or cooperations. It turned out that there is a link between the low power actors and the high power actors, as could be seen also in the political halt in Mostar while the social life and actions are still happening. For instance the river clean-ups organised by the outdoor sports associations.

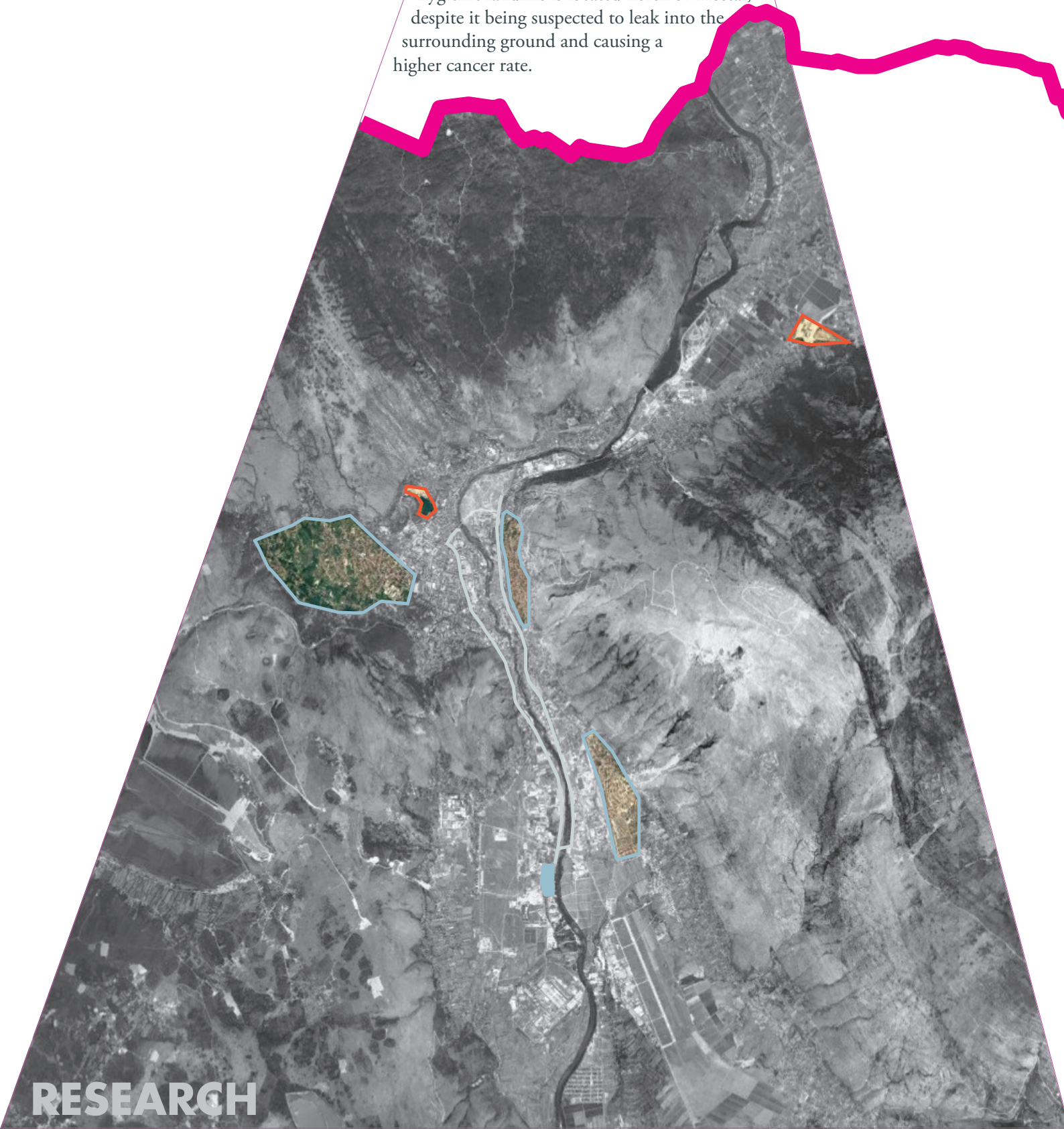


TRASH MAPPING

As in October not that many people were on the river due to the cold, many of the activities mapped before were retrieved from interviews and literature. To complement these the material objects on the river bank were mapped too and sorted by material.

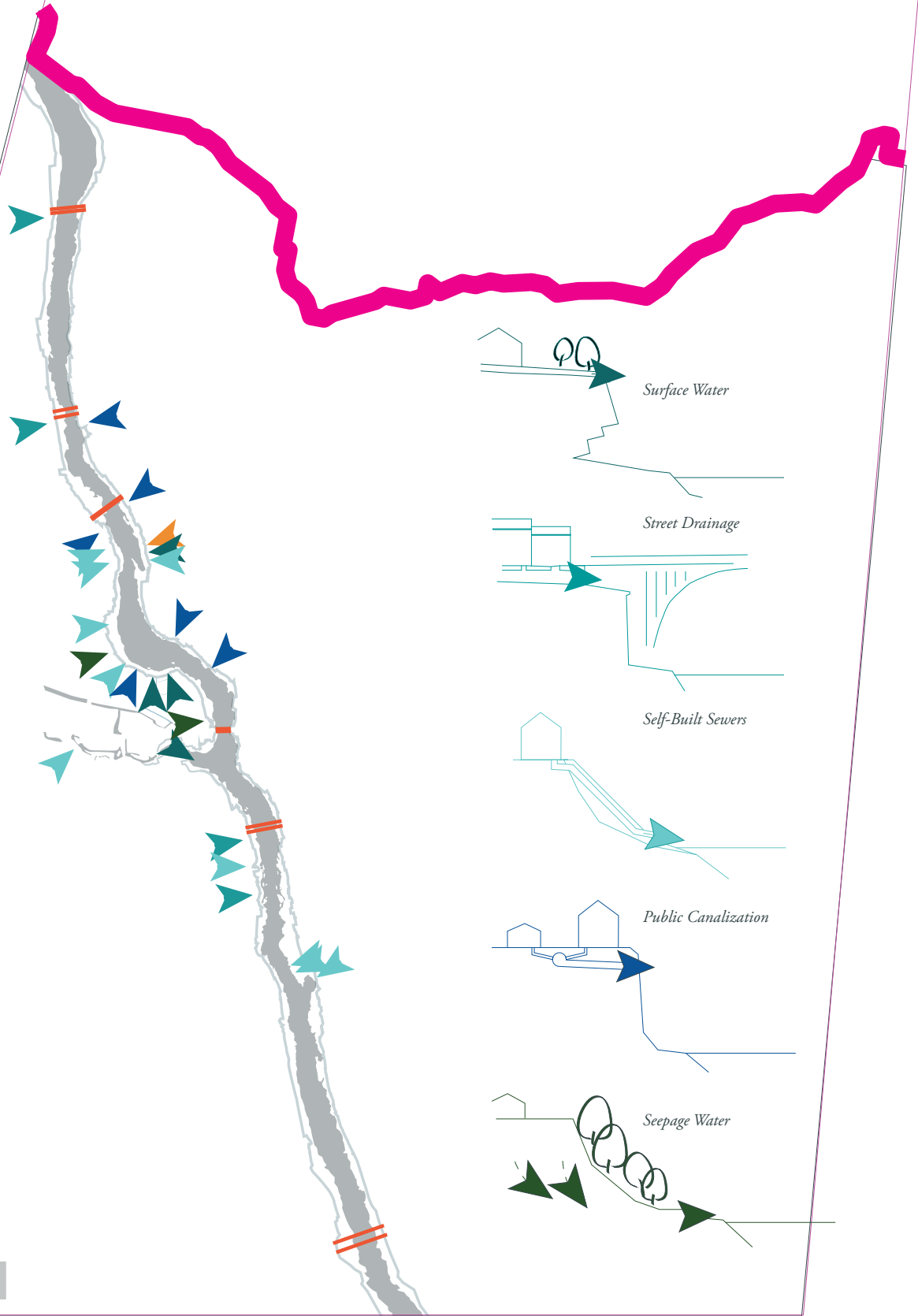
GARBAGE & SEWAGE SYSTEM

The excessive pollution can be traced back to the massive destructions during the Yugoslav Wars. As the sewage system was bombed many people built their own pipes discharging into Neretva, and also the waste disposal system was disrupted. Now, one of seven hygienic landfills is located north of Mostar, despite it being suspected to leak into the surrounding ground and causing a higher cancer rate.



WATER INLET

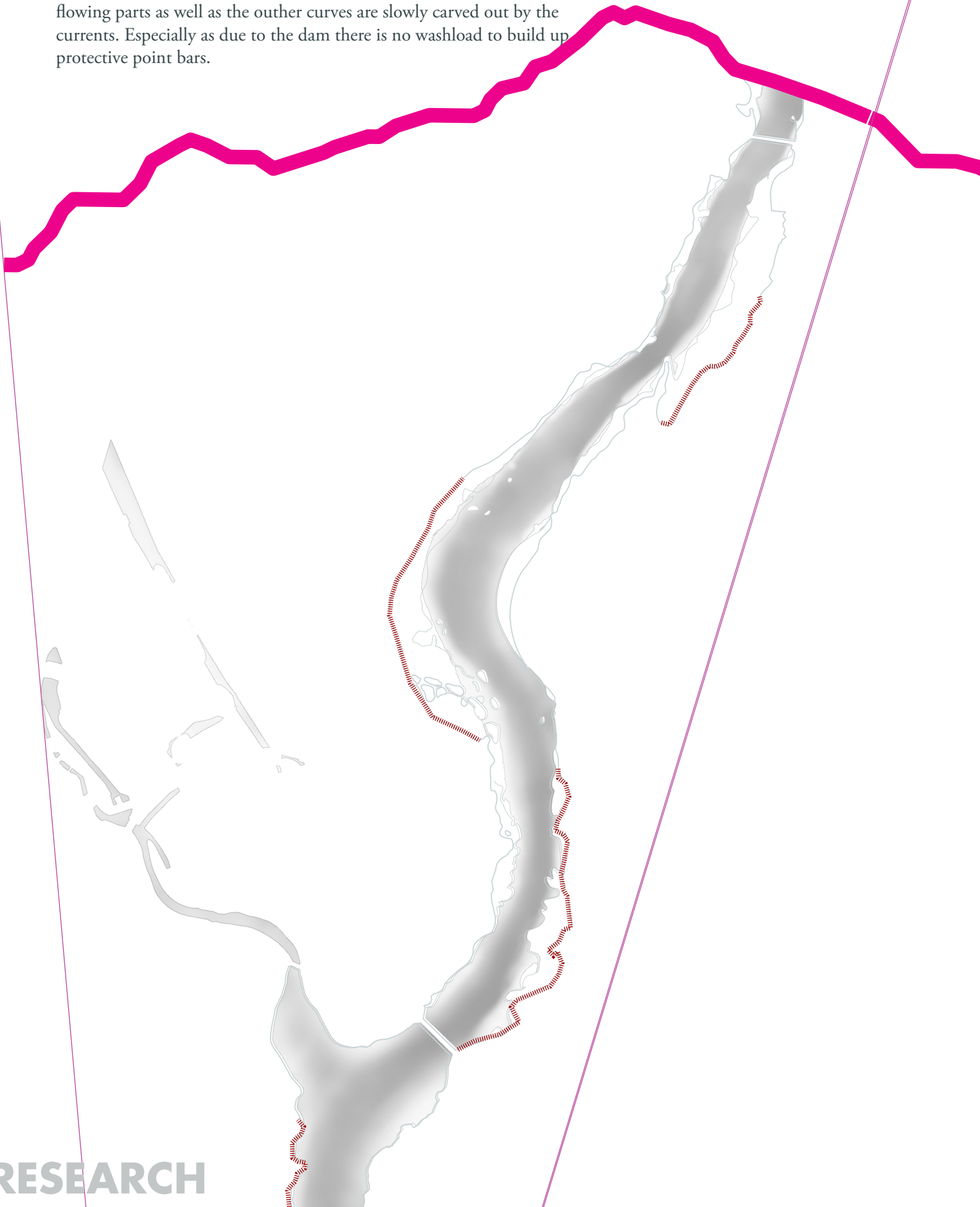
Different types of waterflows discharge into Neretva. During Ottoman times a system of irrigation canals covered large parts of the western Polje. Under Austro-Hungarian Rule they were covered and turned into the public canalization, now carrying grey waters into Neretva. Similar the illegally built sewars in the post-war reconstructions and the street drainage outlets discharge all contaminated waters unfiltered into Neretva.

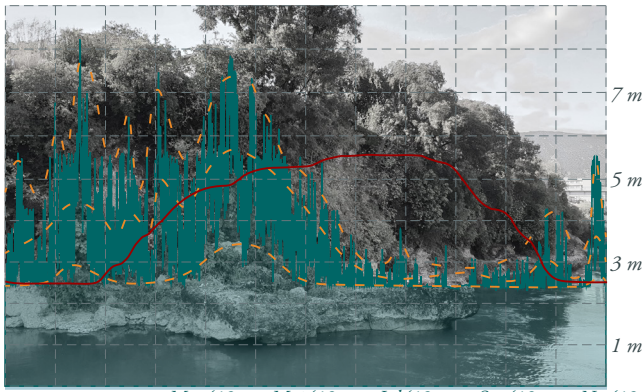


RIVER MORPHOLOGY

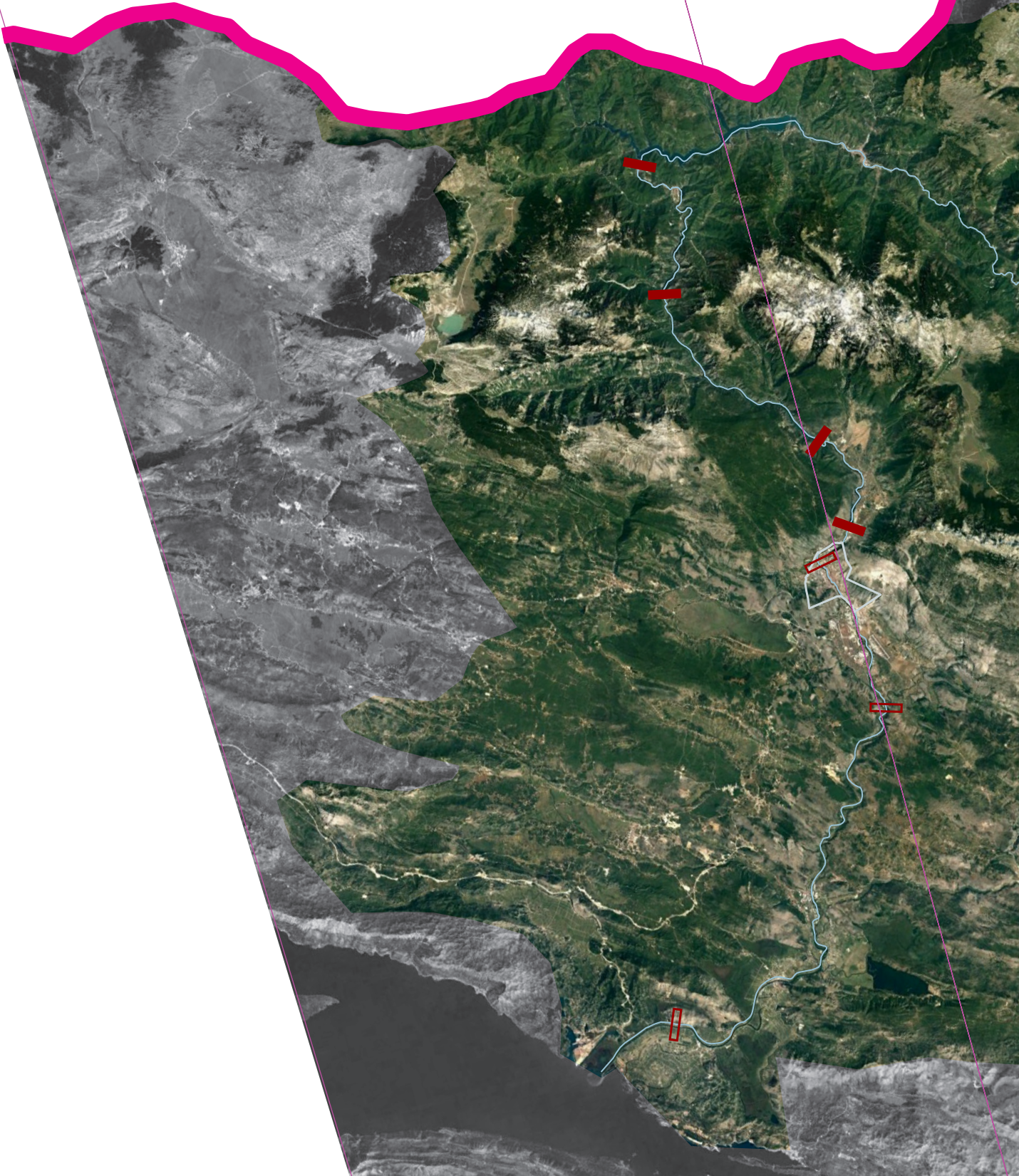
In the observed stretch of the river Neretva is widening in several spots, once preferred swimming spots of the locals, while others with stronger currents and often syphons under rocks were avoided due to the danger they pose.

This force also transposes into erosion where especially the faster flowing parts as well as the outer curves are slowly carved out by the currents. Especially as due to the dam there is no washload to build up protective point bars.





Nov '17 *Jan '18* *Mar '18* *Mai '18* *Jul '18* *Sep '18* *Nov '18*
26/06/18 *4:00* *8:00* *12:00* *16:00* *20:00* *24:00*

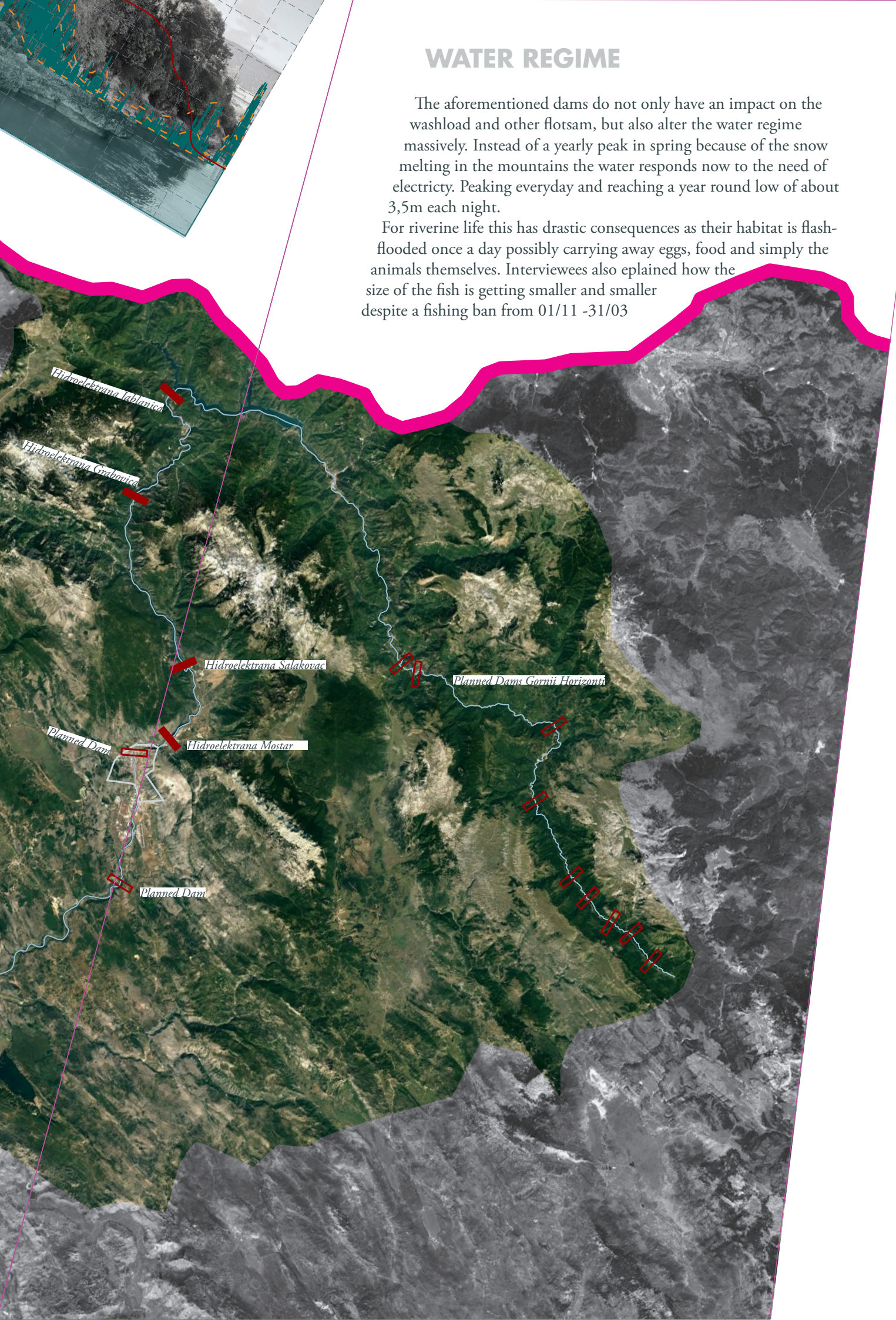


RESEARCH

WATER REGIME

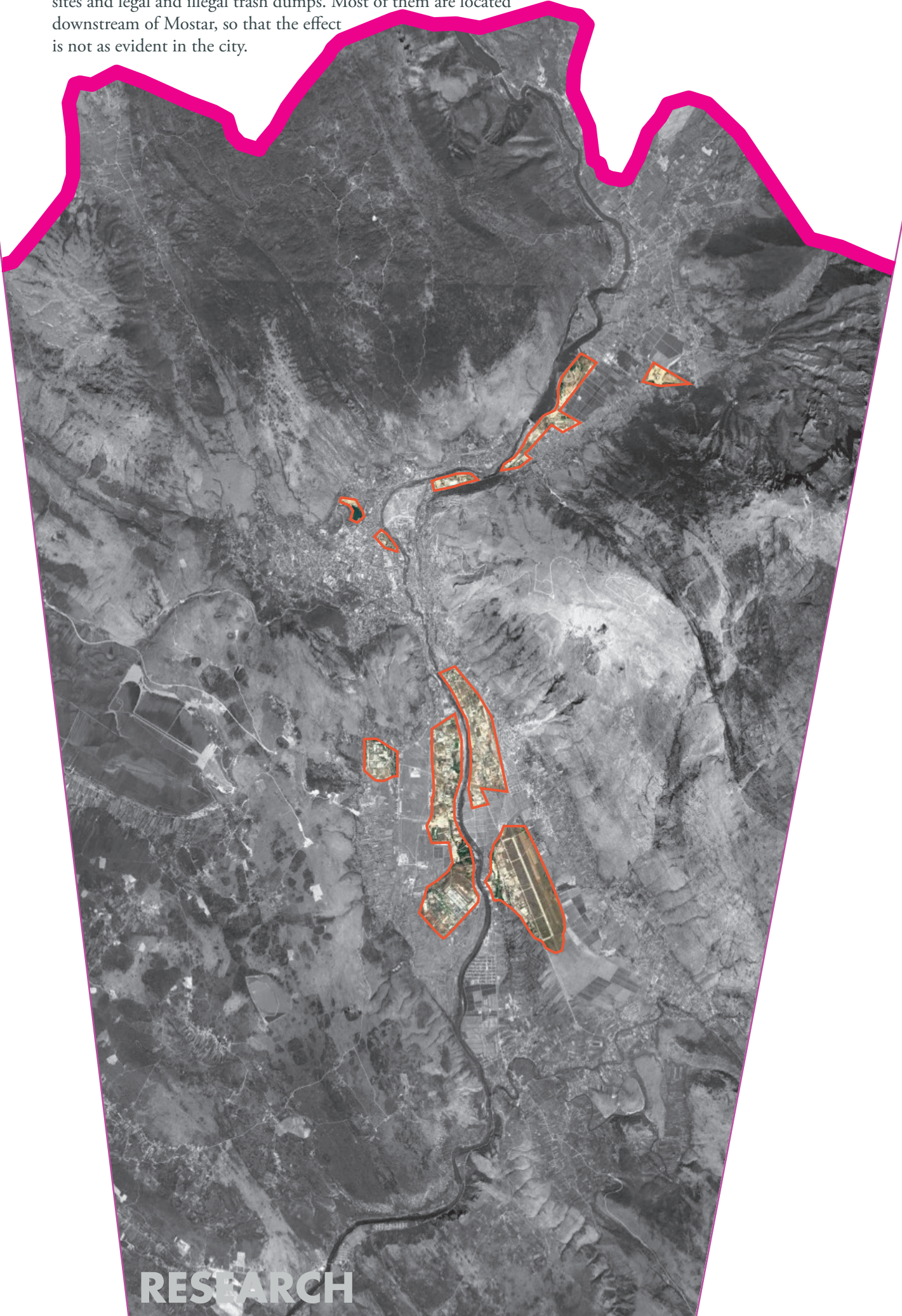
The aforementioned dams do not only have an impact on the washload and other flotsam, but also alter the water regime massively. Instead of a yearly peak in spring because of the snow melting in the mountains the water responds now to the need of electricity. Peaking everyday and reaching a year round low of about 3,5m each night.

For riverine life this has drastic consequences as their habitat is flash-flooded once a day possibly carrying away eggs, food and simply the animals themselves. Interviewees also explained how the size of the fish is getting smaller and smaller despite a fishing ban from 01/11 -31/03



POLLUTION

Not only the domestic sewers contaminate Neretva, but also industrial sites and legal and illegal trash dumps. Most of them are located downstream of Mostar, so that the effect is not as evident in the city.



THE BIG STORY OF NERETVA

Neretva, from the celtic "nera etwa" - flowing divinity - is the main river of the Hercegovina region. It is the only river of the entire Dinaric Mountain range that breaks through the central mountain range and flows entirely overground towards the mediterranean, this way connecting inner Bosnia through Ivan Sedlo with the Adriatic Sea. No wonder the cities along its way owe much of their identity to the river and its blue-green waters. Especially Mostar, named after the mostari - bridge keepers - guarding this old, important river crossing. Stari most and Neretva became the key elements of the city also shown in the coat of arms of Mostar. Also for the inhabitants of Mostar Neretva became big part of the stories and tales they construct in their daily lives. But since the disruptions and destructions of the Yugoslav Wars this close connection seems to have ceased and is under threat of disappearance.

To understand and learn about and from this process, I have researched into the history of the relationship of Mostar, its inhabitants with Neretva, the river running right through its middle.

The product of this research is this panorama of the "Big Story of Neretva". In drawing and text it explains how the river Neretva experienced the changes, mainly induced by human activity. It is thus written from the perspective of Neretva, a territorial entity, telling her own story and how she witnessed the hi/story of Mostar.

This is conducted with a section along the river through time and space. Moving the panorama through the frame, each frame explains the story and context of this specific section of the river, relating it to the wider spatial, territorial developments around. Simultaneously each frame is located in a specific moment in time, contextualizing the geographical changes and developments in a temporal dimension. The main drawing shows an illustrative depiction of Neretva and her surrounding. The changes and specific events or developments of each timeframe are bordered in red. In the window at the bottom of the frame flip-outs reveal more images and information on these events.

The high mountains of Gredelj. Springing up between rocks and pebbles, I am Neretva. Flowing down, more waters join me, Krupac, Pridvorica. More water. It rains, I grow. Snow melts, I grow. In me sand, pebbles, rocks. Leaves, branches, trees. They might stay in my bed, but not for long.

A long arched shadow below Hum. My narrow, traversed by a stone bridge. Around it stones joined to form houses for people. Ruled by the Ottoman Empire they build a stone wall around them and call it Mostar, like the Mostari, guards of the new bridge.

Skakala. Falling, swirling. Fishes jump up the rapid. Upstream, nests, hideouts. Now. Resting in an eddy, a bay. More fish of various kind, hiding and breeding in my arms of various kinds. Lipljen (grayling), Jegulja (european eel). You know them. But also Nertvanska Mekousna Pastrmka (neretva salmon trout) and Zubatak known not even to all my neighbours, such as Bosna, Zeta.

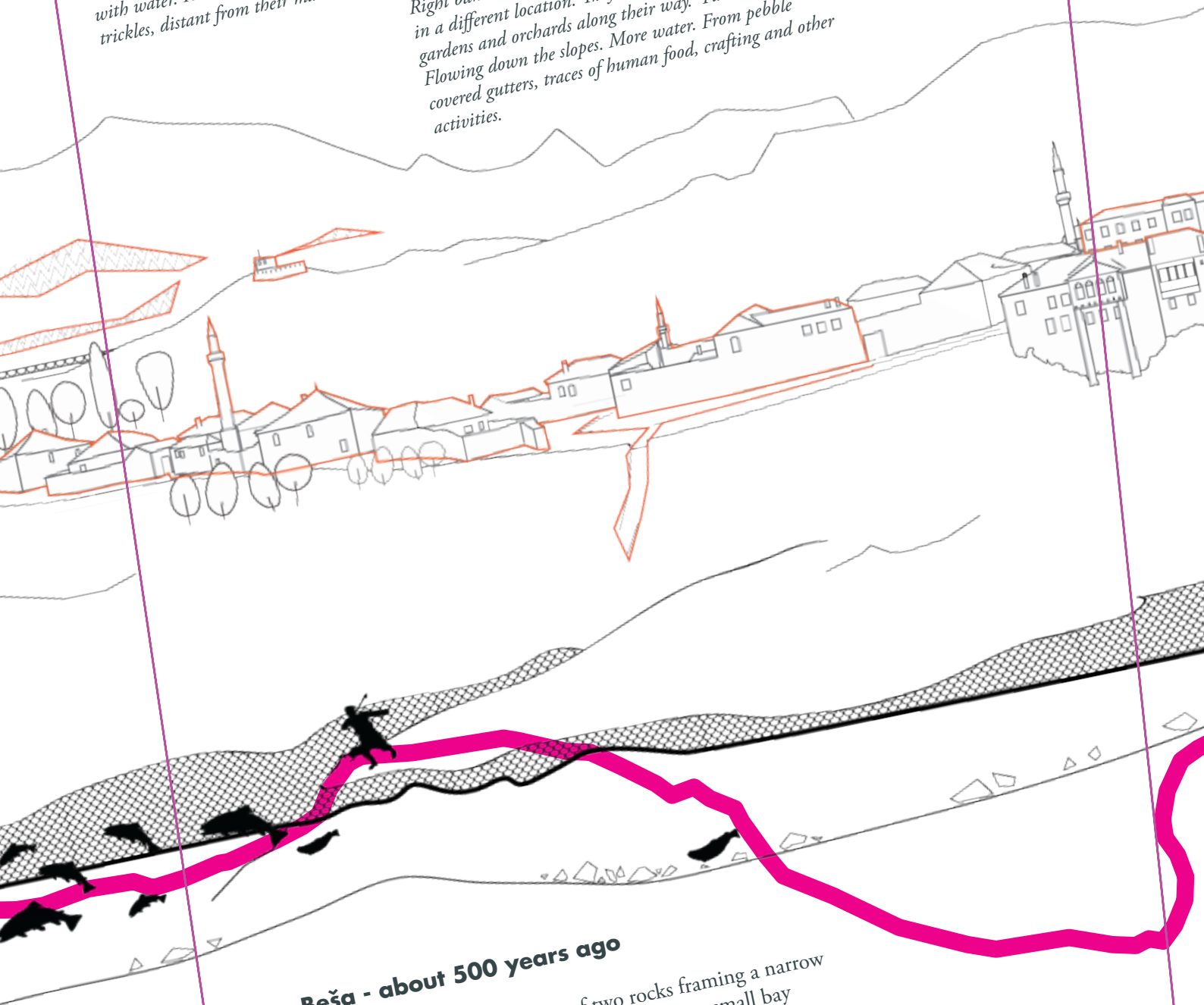
Bunur - about 1000 years ago

Bunur is a calmer area at the northern end of the historic ottoman settlement. Having a gentle sloped bank and platforms it used to be one of the main swimming spots of the local neighbourhood. During the war two bridges crossed Neretva here. We can still find their remains sunken in the blue depths of the river.

Blue. Green. Blue-Green. Less sediment in me after the trees on the mountains were felled. For firearms. Or construction. Rain washed the open soil into me. Bura winds blew it into me. On the mountains is little more left than bare karst. Grey-Blue. Blue-Green.

More little trickles. More people in Mostar, from the territories along the sea or Bosna, Sava and Danube upstream. Water from further away join me in the city as the Mostarci build systems to supply the growing city with water. Radobolja, Djevojačka, falling into me. Little trickles, distant from their main stream

Right bank. Falling down the cliff. Radobolja water, but in a different location. They carry soil and dirt, fields, gardens and orchards along their way. Fall. Left Bank. Flowing down the slopes. More water. From pebble covered gutters, traces of human food, crafting and other activities.



Beša - about 500 years ago

Beša - the cradle - is the name of two rocks framing a narrow bay with some rapids. One of the rocks separates a small bay from the river. The calm and shallow water offers breeding grounds for aquatic life, but is also exposed to the inflow of self-constructed domestic sewage pipes, which at the same time fertilize several crop plants.

My kin is gaining more importance, not just as the sublime, rivers name the land between Danube and Adriatic, the Kingdom of Yugoslavia. Possibly to counter ethnic nationalism. No Bosnia, no Croatia, no Serbia. But. Drava. Sava. Vrba. Zeta. Do the people on my shores also think of themselves as people of Neretva?

Covered canals. Grand villas, sewage, institutions, grey water, small industries, toxins and fertilizers flow, fall, into, me. The extended city needs no irrigation but canalization, but still me, to carry them away. Cleansing, polluting.

Another bridge upstream the old bridge: Franz Joseph bridge. Different name, different people, different rulers. The Austro-Hungarians extend the city on my western bank. Sediment and soil in the streams and canals decrease with the acres and fields. Now they flow down cobblestone, streets, gardens.

Blue-Green in the sun. Light. Reflection. Colour. The new rulers brought a new behaviours to the city and to my banks on which more and more people, city dwellers - not farmers - project the sublime, the pure, their lost Eden into me, they make tours along my course, sitting, admiring, dreaming in the natural landscape opposed to their growing city.

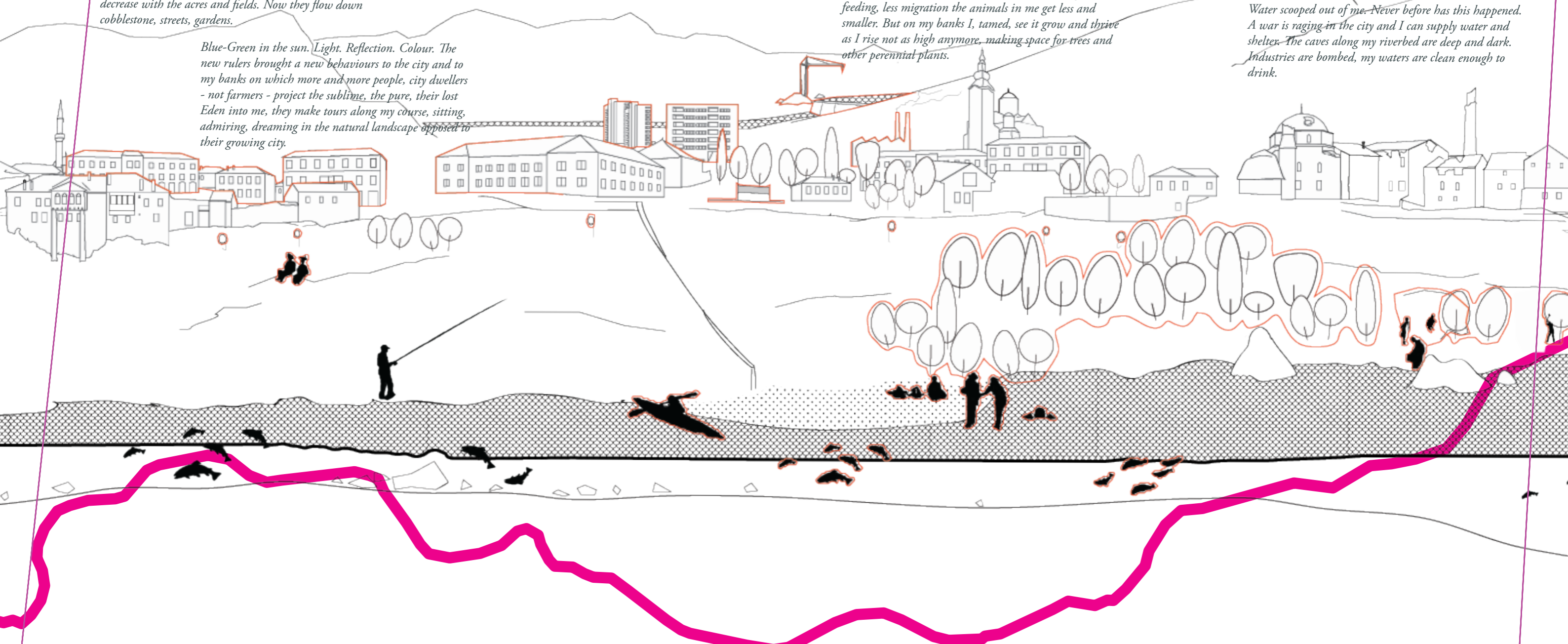
More cleansing, and more pollution. The growing city discharges large amounts of contaminated waters into me. I am oily, smelly, dirty after I leave Mostar. Down towards the sea. On my way more growing cities and industries of the Socialist Republic.

Constructions. I'm diverted. For a while. Back to my old bed I flow with more water growing deeper, wider, longer and slower depositing stones and sediments until I stop. A wall. A dam. Four dams stopping four rivers. Between Neretvas no connection than the turbines. Not for fish. Not for flotsam. No movement. No migration. I dig my bed deeper and deeper. No rocks and pebble to stop me.

Turbines. Releasing water. Who needs electricity? More water. Suddenly. Several meters higher, I flush. Out the habitats of fish, mussels, water plants. Less hiding, less feeding, less migration the animals in me get less and smaller. But on my banks I, tamed, see it grow and thrive as I rise not as high anymore, making space for trees and other perennial plants.

I am under control now. Not rain and snow decide when I grow, but the need for energy. I am not as dangerous anymore. Proving their courage, men dive from the bridges, Mostarci on many rocks and beaches, swimming, diving, celebrating I become a place of leisure and enjoyment getting closer with the hearts, lives and identities.

Water scooped out of me. Never before has this happened. A war is raging in the city and I can supply water and shelter. The caves along my riverbed are deep and dark. Industries are bombed, my waters are clean enough to drink.



Šehovac - about 100 years ago

Šehovac is a section of the river with steep high cliffs on both sides. Not very accessible on the banks the cliff's edge is less flood-prone, thus built on with several private buildings and the now runious building of the Dom JNA. The river widens here again on the flowing gently down the gravel river bed.

Mejdan - about 50 years ago

Mejdan or better Mejdanski Pijesak - *Mejdan's Sands* - a point bar in the shallow and slow flowing bend of Neretva, was the main access to the river besides the Radobolja mouth. The 1st of May Square with the oldest mosque of Mostar, the city archive and the city's diving and kayaking close emphasise the city's face to the river.

Kujundžiluk - about 25 years ago

Kujundžiluk is the street leading up to Stari Most - the famous old bridge. Crossing the narrowest part of the river in Mostar, the river is here very deep and steep so that access to the river in the past took place through a cave. Earlier cellars of a brewery, then shelter in the war it now houses a nightclub.

Dead bodies. Falling over on the spot when hit by a sniper bullet or shrapnel I become dangerous, people see and know where they are under threat and avoid my open banks and beaches and especially the bridges over me.

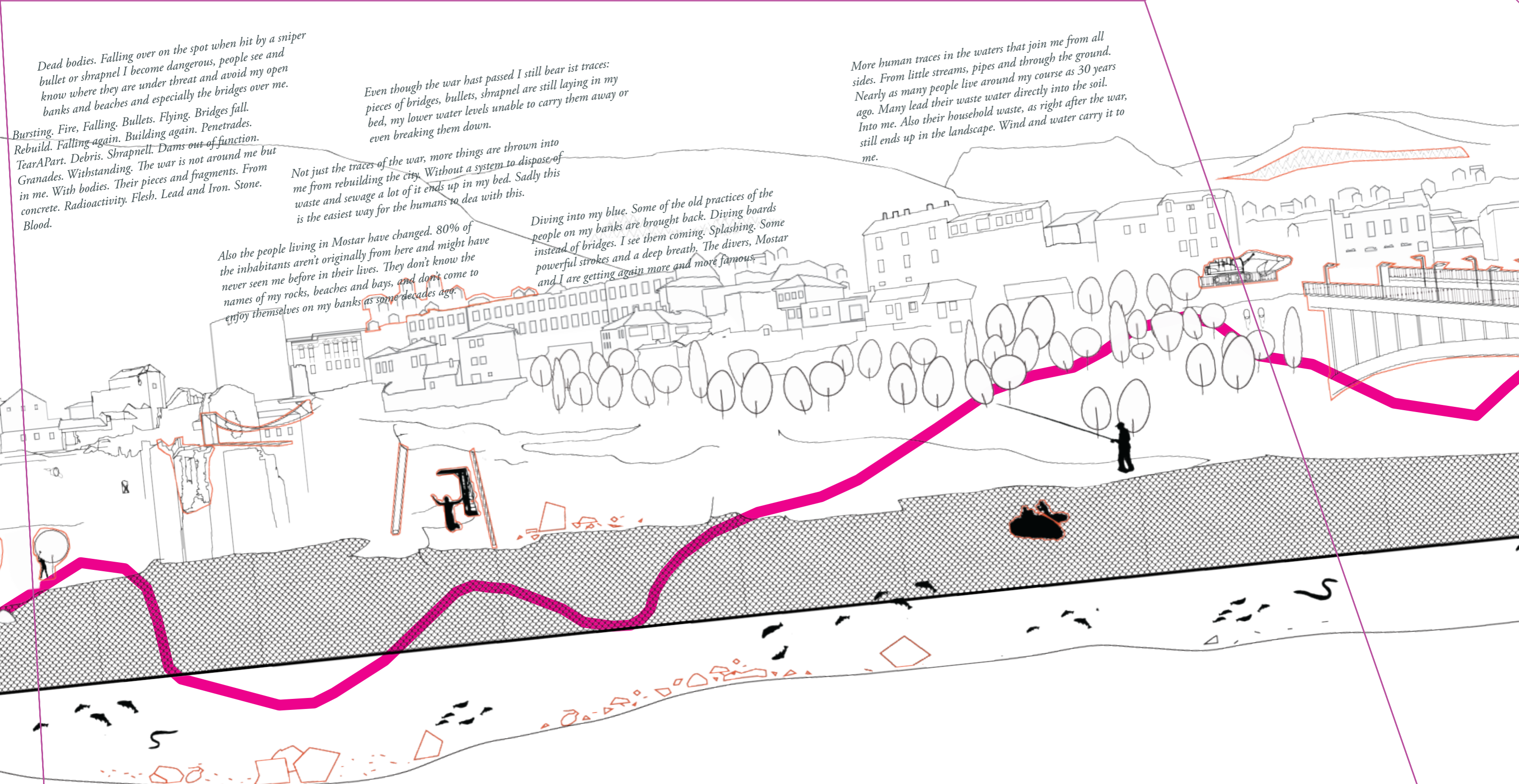
Even though the war has passed I still bear its traces: pieces of bridges, bullets, shrapnel are still laying in my bed, my lower water levels unable to carry them away or even breaking them down.

More human traces in the waters that join me from all sides. From little streams, pipes and through the ground. Nearly as many people live around my course as 30 years ago. Many lead their waste water directly into the soil. Into me. Also their household waste, as right after the war, still ends up in the landscape. Wind and water carry it to me.

Not just the traces of the war, more things are thrown into me from rebuilding the city. Without a system to dispose of waste and sewage a lot of it ends up in my bed. Sadly this is the easiest way for the humans to deal with this.

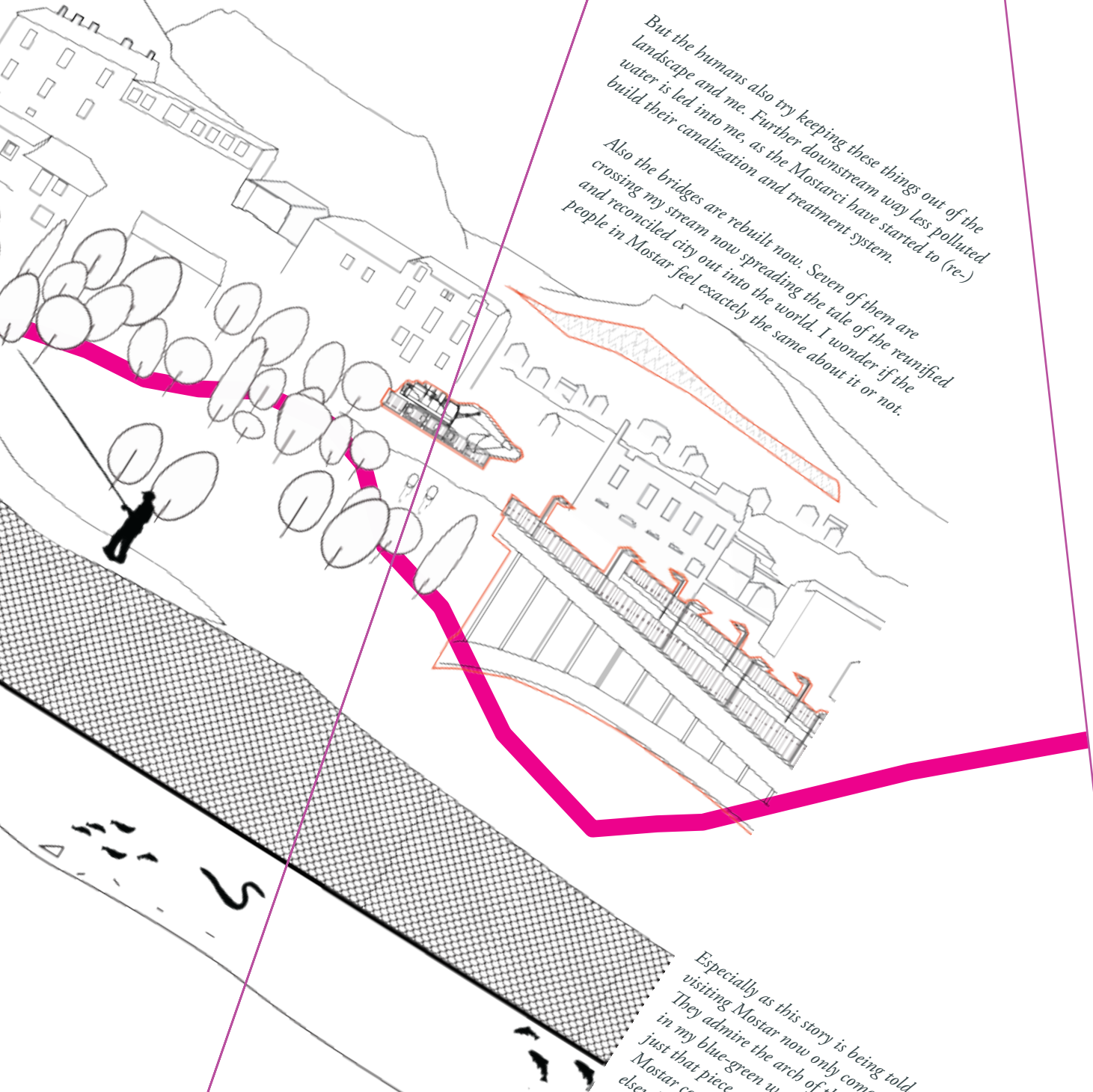
Also the people living in Mostar have changed. 80% of the inhabitants aren't originally from here and might have never seen me before in their lives. They don't know the names of my rocks, beaches and bays, and don't come to enjoy themselves on my banks as some decades ago.

Diving into my blue. Some of the old practices of the people on my banks are brought back. Diving boards instead of bridges. I see them coming. Splashing. Some powerful strokes and a deep breath. The divers, Mostar and I are getting again more and more famous.



Duradžik - about 10 years ago

Duradžik is the area downstream Stari Most, in the very centre of the old fortified city. Still here the canyon is very steep, while the opposite side is wide and open with the mouth of Radobolja, after WWII the stage for the diving from the bridge and their training spots.



But the humans also try keeping these things out of the landscape and me. Further downstream way less polluted water is led into me, as the Mostarci have started to (re-) build their canalization and treatment system.

Also the bridges are rebuilt now. Seven of them are crossing my stream now spreading the tale of the reunified and reconciled city out into the world. I wonder if the people in Mostar feel exactly the same about it or not.

Especially as this story is being told on and on. People visiting Mostar now only come to the mouth of Radobolja. They admire the arch of the old bridge. Its reflection in my blue-green waters. It is not me anymore. It is just that piece of my surface right under the bridge. Mostar condensed into white stone and blue water. I am elsewhere.

Lucki Most- now

Lucki Most is the next bridge downstream the old bridge. The canyon of Neretva is here still steep with a deep and fast flowing water. Rarely small paths, used by fishermen lead down to the water.

PROJECT INTENTION

In between this field of tension of different and partially contradicting ideas about nature and how we interact with it, I tried to step by step, through reading and also through designing, to define my own position in this discussion and the design of the project. Coming actually from that very idea of “wilderness experience” as getaway as contrast to the distant relations in the city. I tried to develop design ideas that allowed Neretva to stay the most ‘natural’ possible, without actually realizing how much the inhabitants of Mostar already had interfered in the riverscape and the entire landscape all around, realizing that that there is no way of living without leaving traces. It just depends what kind of traces. This means that engaging with nature in a productive relationship doesn’t necessarily mean exploitation. The dichotomy in wilderness and city there is the wide middle

ground that Cronon calls Home, a place that can integrate city and wilderness; “the place where finally we make our living. It is the place for which we take responsibility, the place we try to sustain so we can pass on what is best in it (and in ourselves) to our children.” Still from a more romantic, but also more social perspective children do not just consist of “human kind in general” but the “whole sensitive creation.” One could go even further with this, like Donna Haraway with her call to “Make Kin, Not Babies!”

Translated to architecture, the drawing of a line, the construction of a differential, making a distinction, a building cannot allow “only the chosen few who decide to live there” into its interior. Instead of building a controlled interior “in the heart” of something (nature), architecture has to rather be “alongside” something, making the area of contact soft, “minimizing the membrane which, from aggressive,

insuperable frontier, goes on to become a benign, discreet demarcation.” Instead of taking this line as the central point of demarcation we could rather see the spheres in between. Spheres that are distinguishable by gradients of local, fragile, and complex “atmospheric conditions” Envisioning these ideas in the territory of Neretva we come to think about the vagueness of physical dimensions, the daily and yearly changes of water level, vegetation, sediment... The fluctuating demarcation line that grows and thickens to a sphere of liminal space between water and land. It is “where we are betwixt and between the familiar and the completely unknown.” This marginal space “allows us to invert the ratio by which we measure what is significant, and what has agency” A place where different forms of life can mutually live “the equitable sharing of – unfortunately not inexhaustible – resources.” “In dwelling in the world, we do not act upon it, or do things to

it; rather we move along with it.” When Kengo Kuma says: “I want to ‘erase’ architecture”, he speaks to a feeling that had been always present in my studies of architecture. The feeling that architecture is focussed merely on the appearance, looking inward in a somewhat self-contemplating meditation. “To prevent an object from appearing, that is to erase architecture. We must reverse our form of perception. Instead of looking at architecture from the outside, we must look at the environment from inside out.” The aforementioned membrane separating inside and outside ceases to exist or be visible. Neretva for me became thus not the space of the wild nature that we can only access as guest. It is our common ground from which we all, in a multi-species understanding, make a living and also gain our freedom to choose our own story and take the responsibility for our doing. “People have their freedom in the sense that they build it by entering into

the chain of life, wherein they know that they must make concessions to others by knowing how to refuse life-destroying forces. From the moment one choses life-celebratory spaces, performs a sharing of what makes one human, one is free. The obstacle to freedom, here, is to destroy the other, nature, for life is a pact between humans and the elements.”

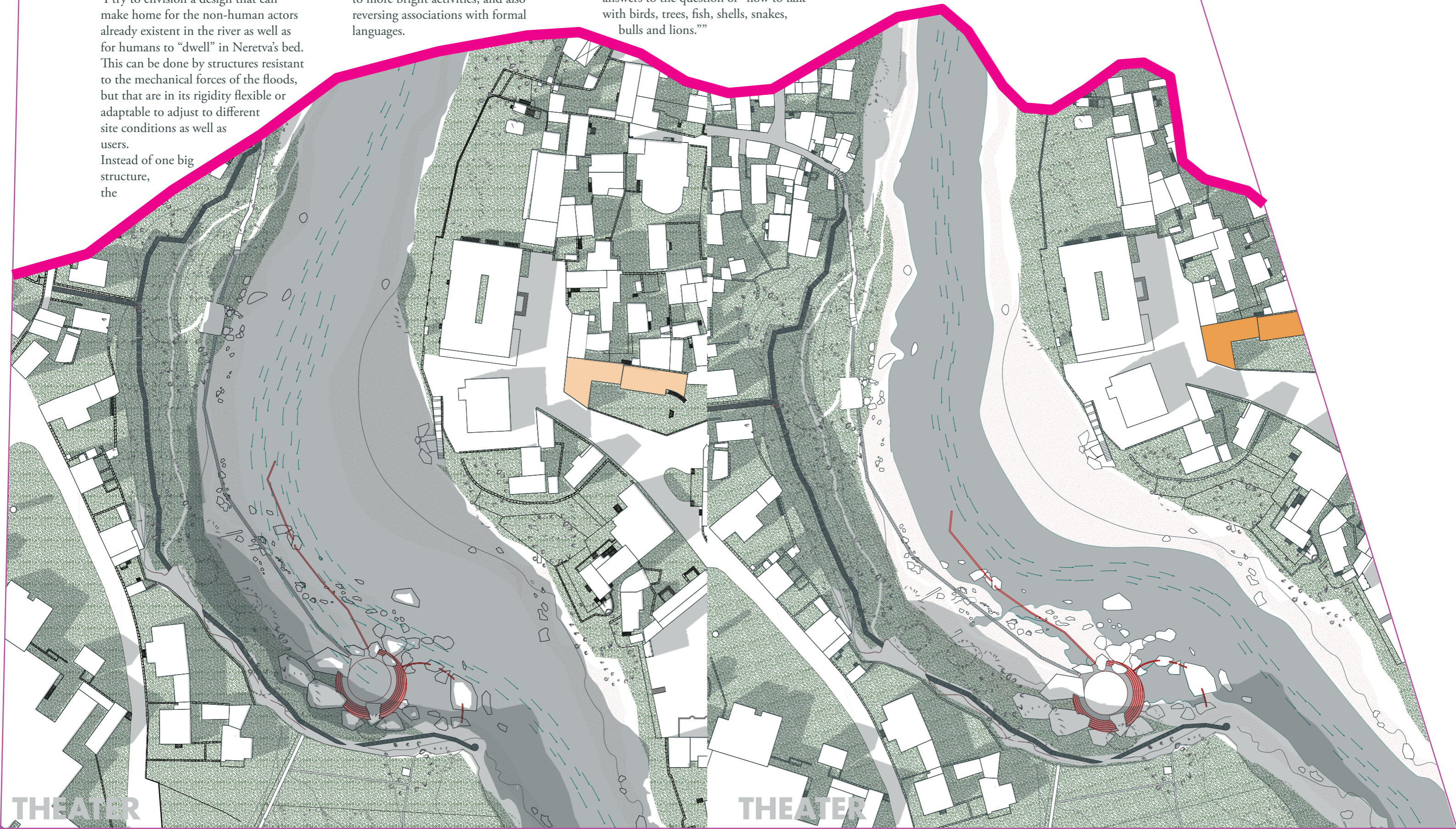
I try to envision a design that can make home for the non-human actors already existent in the river as well as for humans to “dwell” in Neretva’s bed. This can be done by structures resistant to the mechanical forces of the floods, but that are in its rigidity flexible or adaptable to adjust to different site conditions as well as users.

Instead of one big structure, the

intervention spreads into small pieces, each self-containing it itself. But in their combination, in a possible growth from a one or two sites to a network of lines of communications that make the natural environment experienceable and by on the one hand exposing critical problematics, but also by not connecting these with a bad consciousness but relating them to more bright activities, and also reversing associations with formal languages.

Storyscape Neretva tries to make Neretva part of the overall landscape of Mostar. It tries to widen the margins of the different realms to give mutual understanding and communication and give new vague and open meanings to the spaces along the course of Neretva.

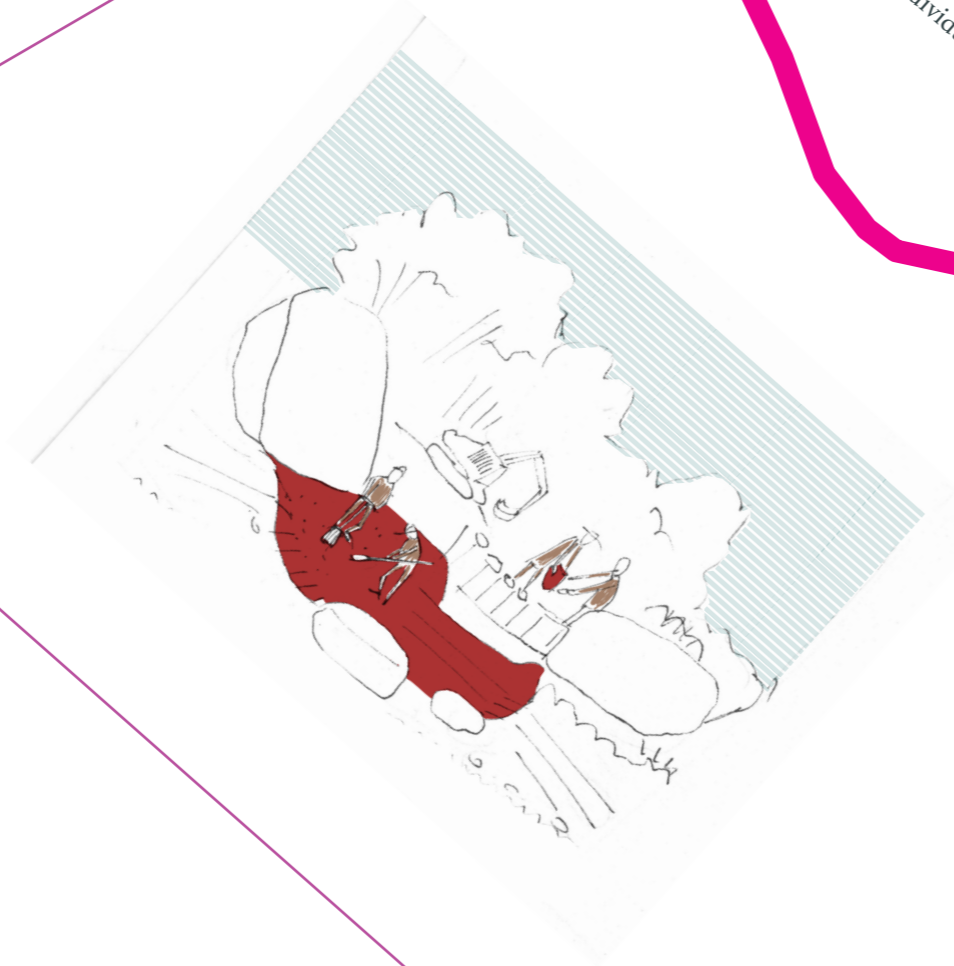
A margin is a “place between Sun and death”. It guides us towards new answers to the question of “how to talk with birds, trees, fish, shells, snakes, bulls and lions.””



THEATER

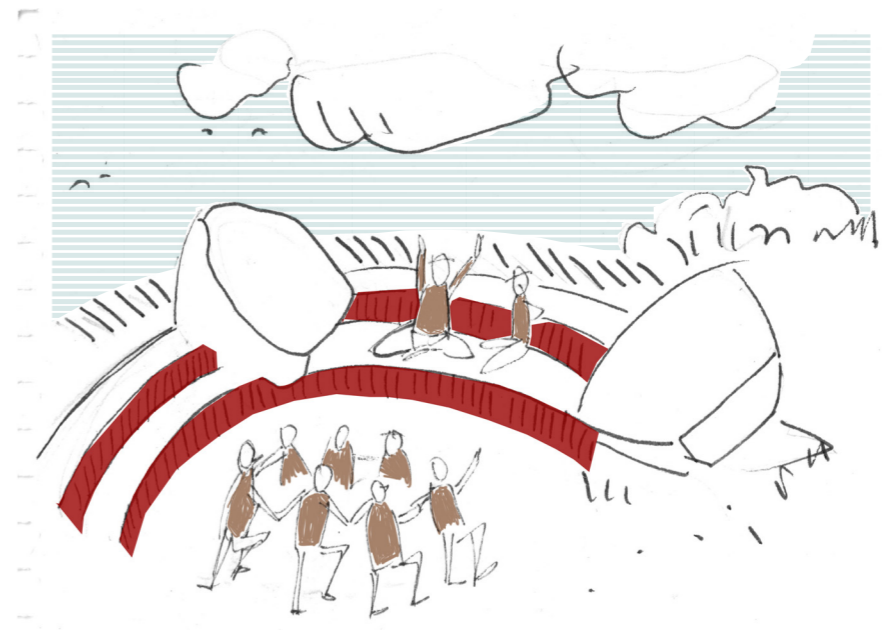
THEATER

THEATER

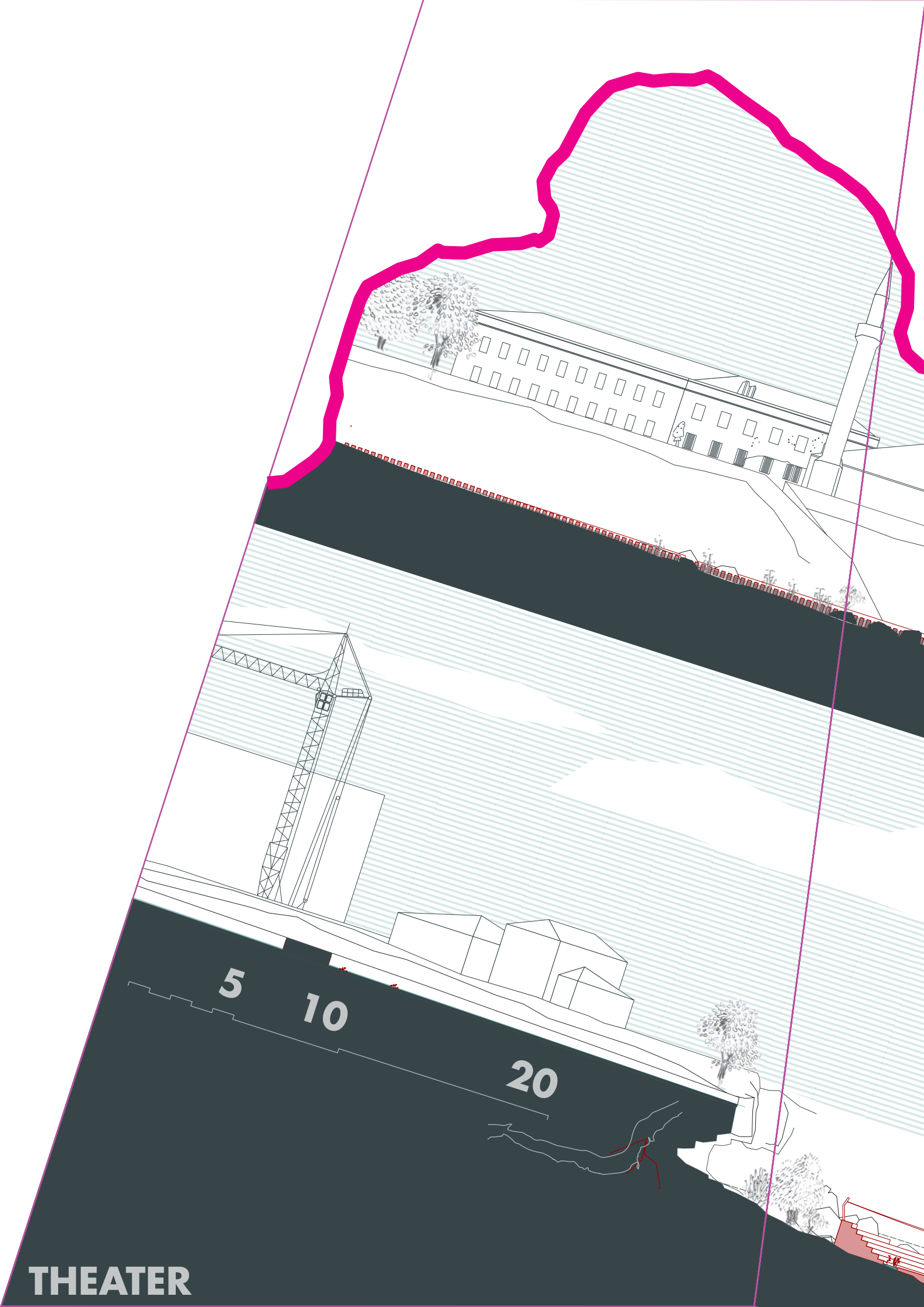


As already mentioned above Storyscape Neretva works with solidifying and continuing existing communication lines that access the liminal space between water and land, river and city, to eventually create an infrastructure that achieves an infrastructure that creates spaces and niches for different beings while allowing humans to also partake in the endeavour of understanding the other agents in the riverscape of Neretva. Through that the spaces which embody traumatic memories or narratives can be filled with new meaning. It doesn't mean erasing these memories, but trying to work with them and create smaller individual, subjective meanings

that do not necessarily counter the dominant narrative of the traumatic war, but complement it with other dimensions, and other realities. The structures are correspond to the way the people of Mostar are still in communication with the Neretva. Mainly these are the outdoor sports associations Brodari Kayak Club, Neretva Mountaineering Club and the Diving Club Neretva. All interventions combine the encountered problematics, for instance by collecting trash, purifying water or creating hideouts for aquatic life, with cheerful, ludic or cultural opportunities. The first ones related to the activities of the people still in contact with the river.

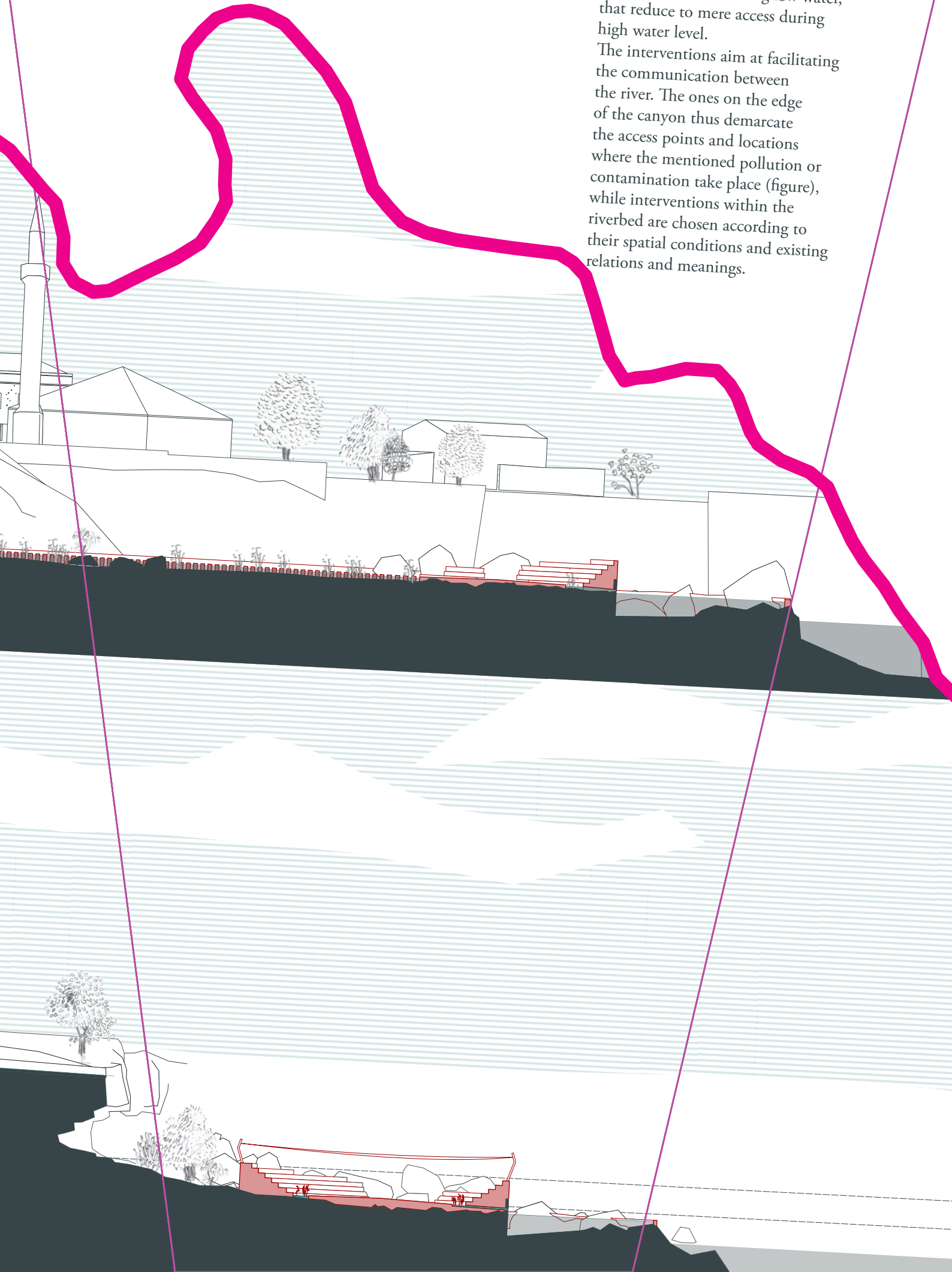


THEATER



THEATER

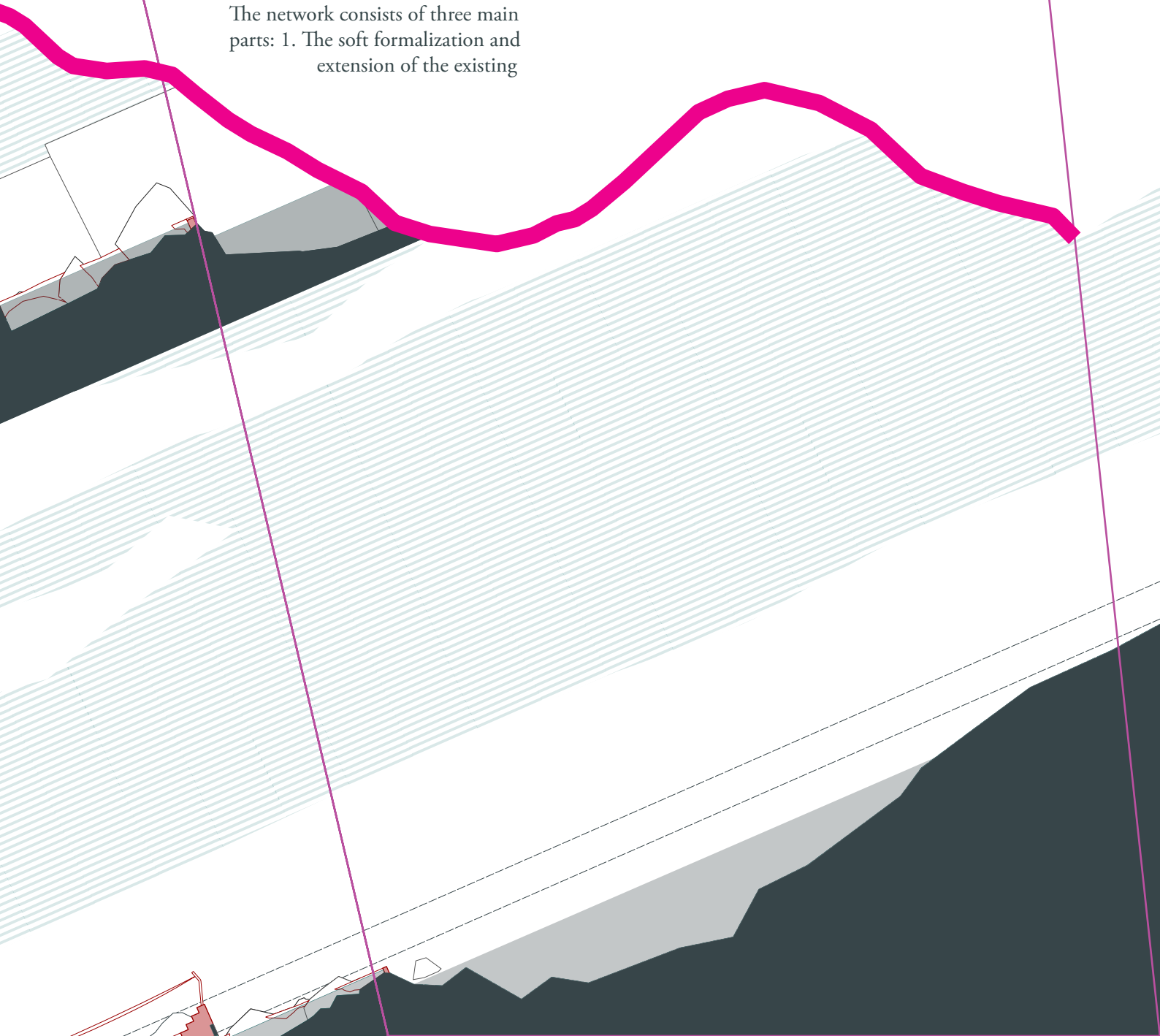
that are accessible during low water, that reduce to mere access during high water level. The interventions aim at facilitating the communication between the river. The ones on the edge of the canyon thus demarcate the access points and locations where the mentioned pollution or contamination take place (figure), while interventions within the riverbed are chosen according to their spatial conditions and existing relations and meanings.

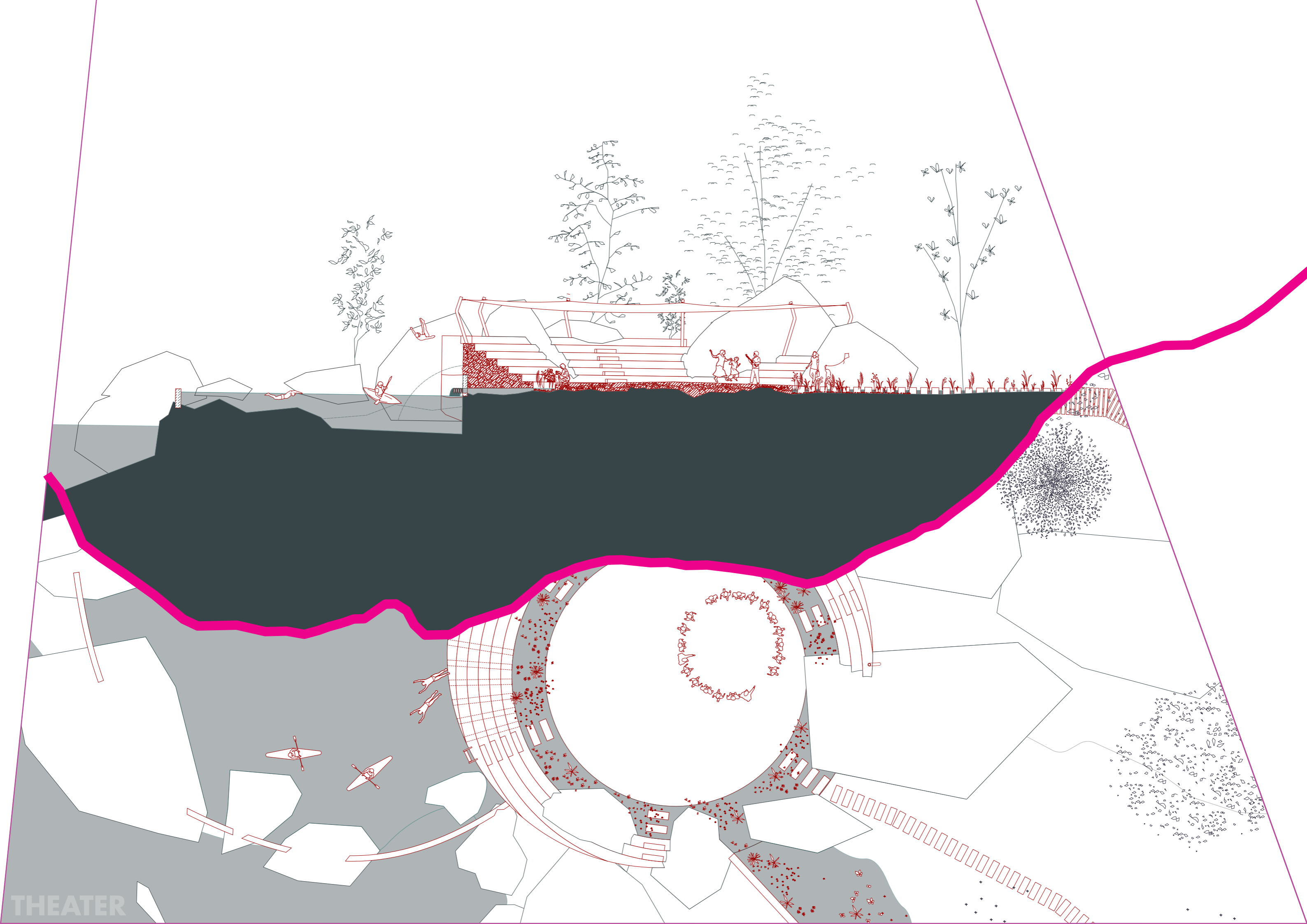


Therefore depending on their exact location within the riverbed, the interventions take different strategies. Within the flood zone, structures are made of durable material, preferably sourced from the riverbed itself, like natural stone or gravel, while structures in the higher areas of the riverbed are made of more lightweight materials, reflecting the question of what traces we want to leave in our environment. As long as there is plastic waste, this is thus recycled into structural plastic lumber. The productive use of the waste can create economic incentives to further invest in more high-tech fabrication technologies such as CNC which eventually could be also used for normal timber structures. So, the structures are later envisioned to be out of wood, as the generation of plastic waste hopefully decreases in the future.

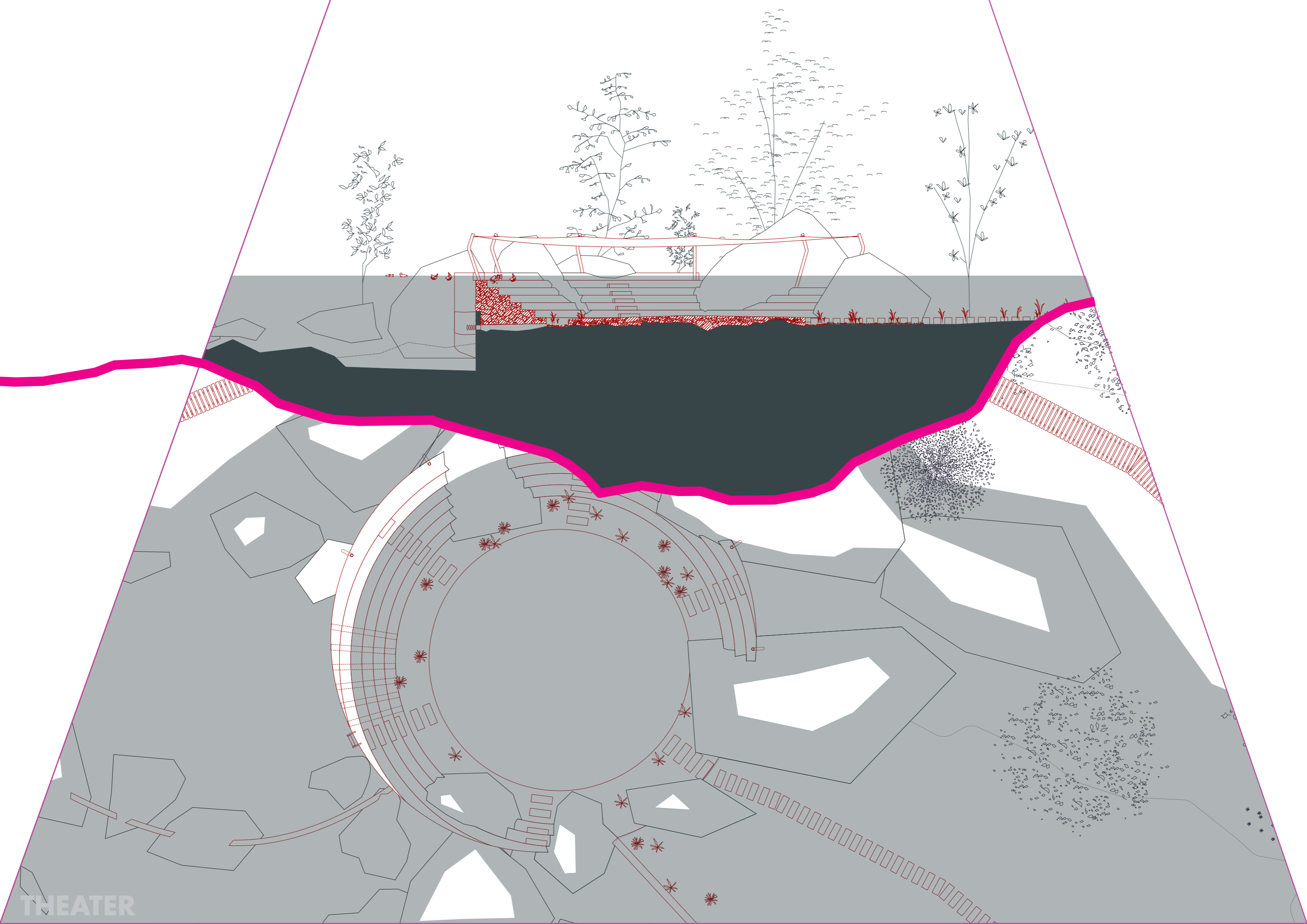
The network consists of three main parts: 1. The soft formalization and extension of the existing

trails along and towards the river;
2. At the identified spots tree like structures bridging the height difference between the city's and the river's level;
3. In fewer locations within the river structures that become meeting and communication spots for people of Mostar, metaphorically creating their home in the river.

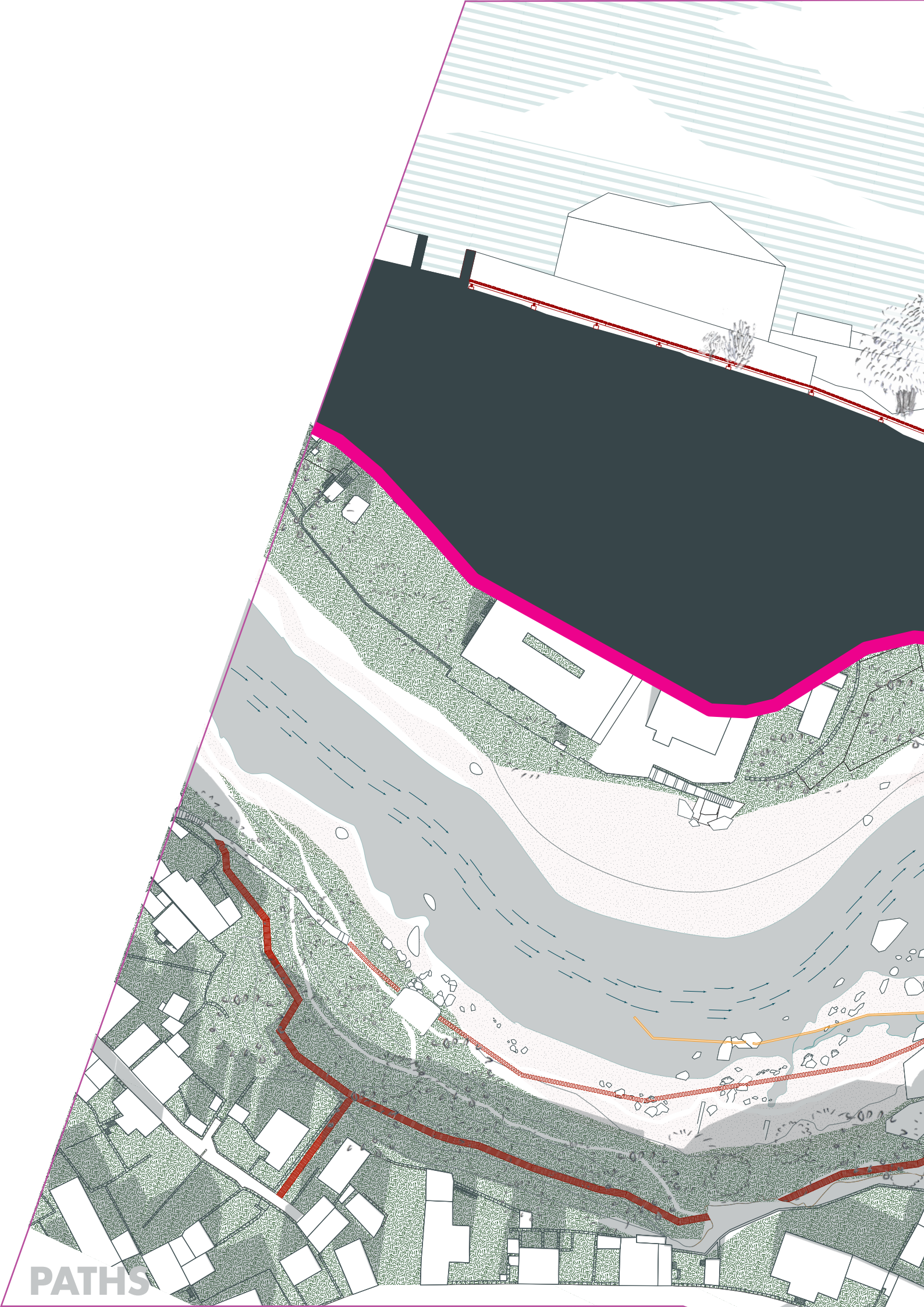




THEATER



THEATER

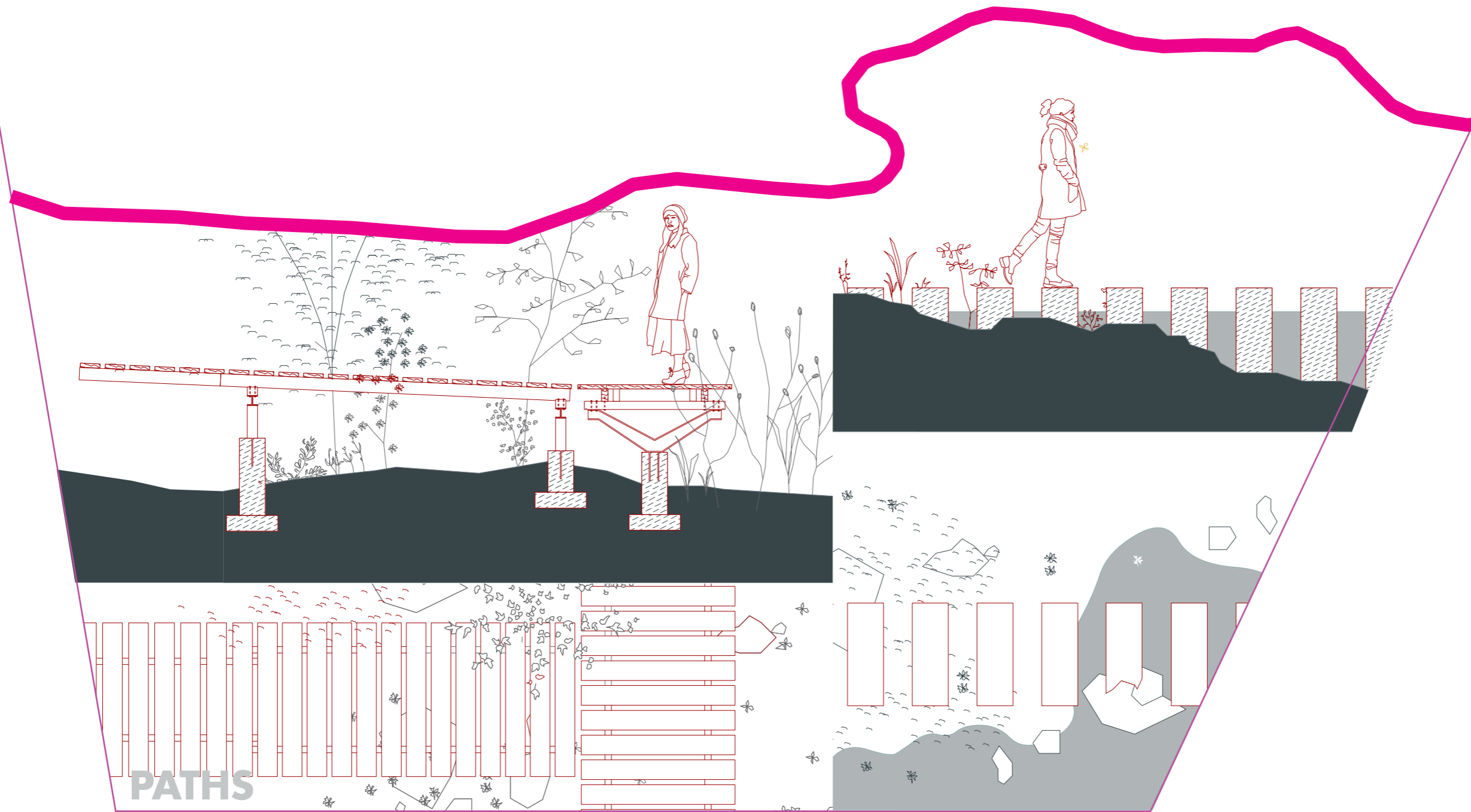




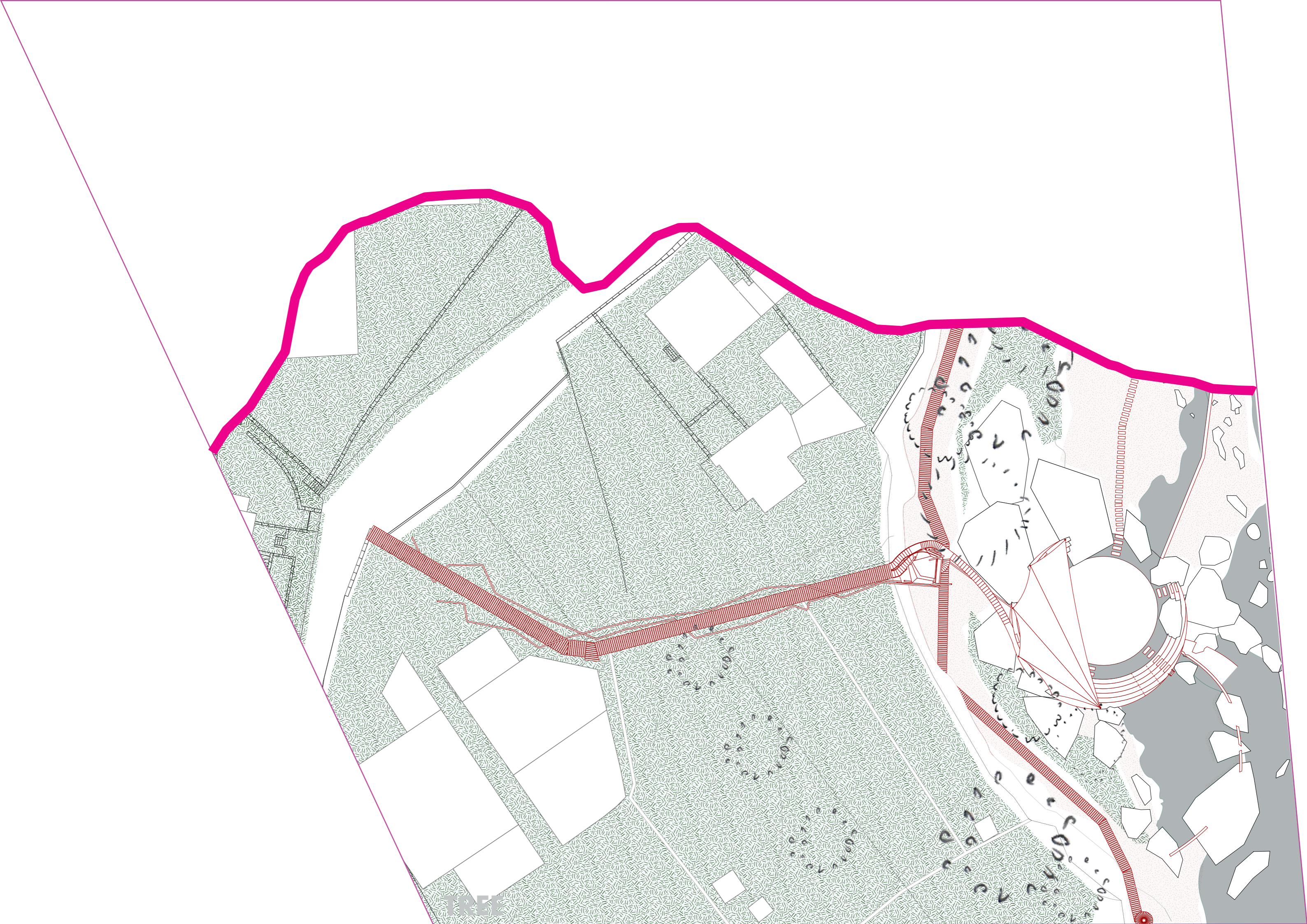


The existing paths down into the gorges of Neretva are, with a few exceptions of concrete paved stairs, only muddy trails that were cleaved down to the river by fishermen, finding the best spots for fishing: calmer eddies behind rocks where the fish hide from the strong current in the middle of the river. Opposite Bunur they have even cobbled a little spot with stones and build a raised path along the river. With normal water level this accesses several smaller bays in which small beautiful waterfalls cascade into the river. Getting closer you realize from the smell that they are the old irrigation canals, that serve now as sewers for the Austro-Hungarian expansion of the city. The formalization as mentioned depends on the location within the river bed. The paths coming from the built

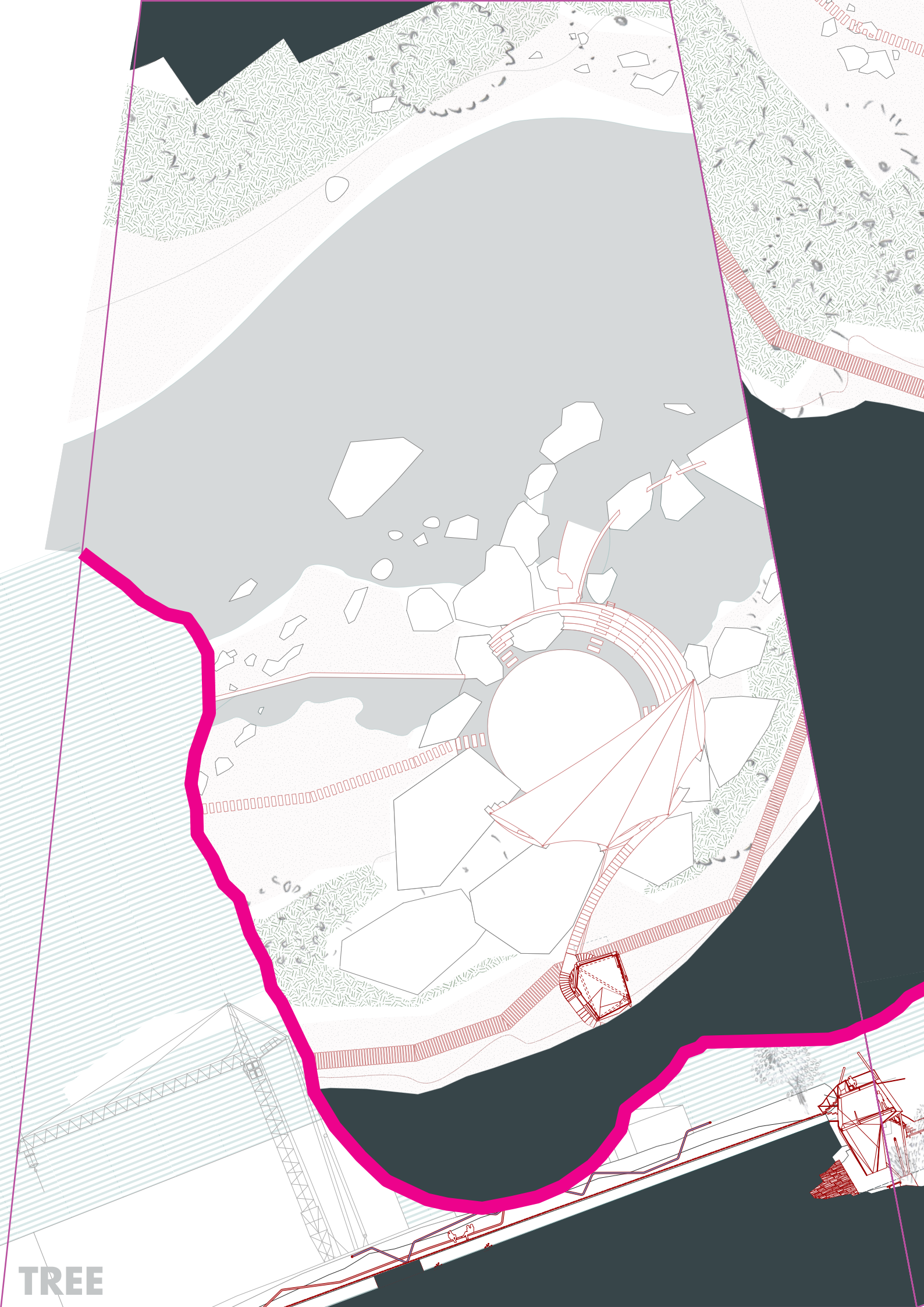
zones and in the higher areas are raised on low stilts, allowing water and also plants and animals to pass underneath. They are covered with structural plastic lumber from the recycled plastic waste of the river and the city. They either follow the existing routes, giving account to the “The people who inhabit the territory [who] are the ones who can really create and transform them, they shape them every day by inhabiting them, going through them, perceiving them and creating them.



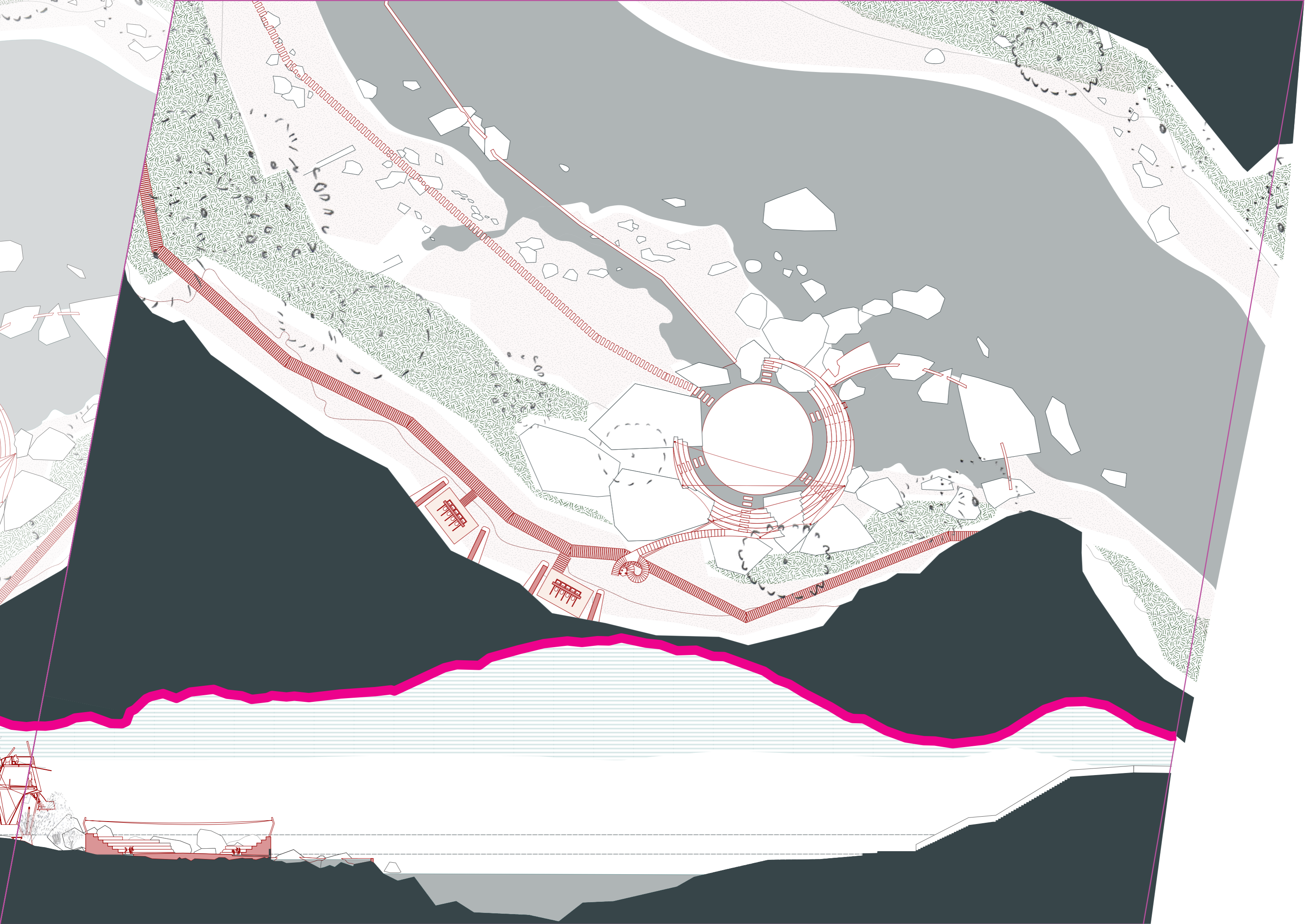
PATHS

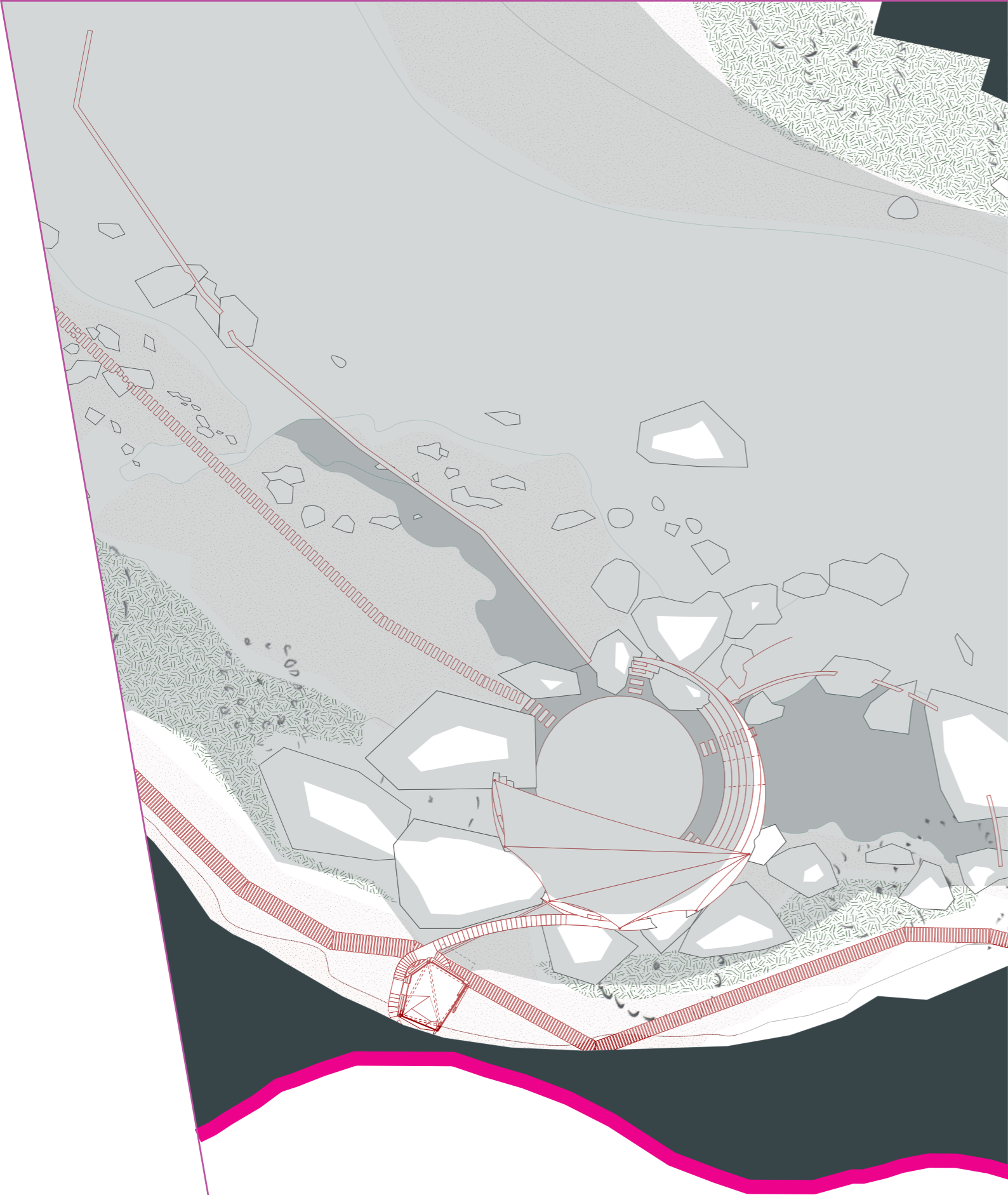


TREE



TREE





Where the access paths are facing the cliff of the gorges, metal trees are growing from the river bending their branches and following the paths up to the street network of the city spreading the fresh water of Neretva into the city. In the branches objects had been caught, like the trash that gets flooded into the trees closer to the river. But there objects are no trash at all, maybe they collect it, or clean sewage, but they also house platforms and rooms from which to observe the river, practice climbing or even dive into Neretva's blue.

Transforming the formal language of the trash washed ashore into a positive, productive relationship also the remediation, loses its potential guilt and trauma and is transformed into a judgment-free activity.

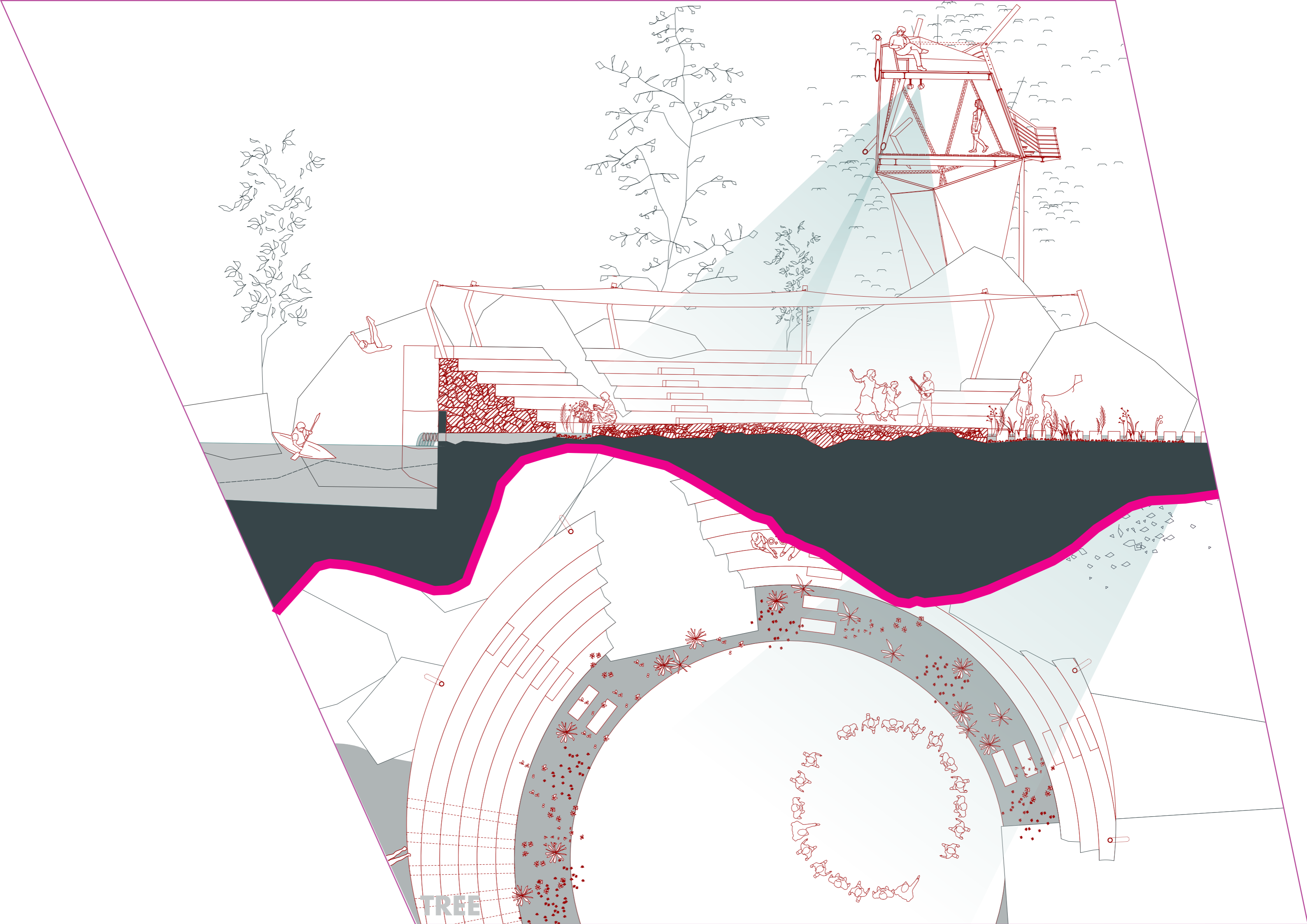
The tree is formed of steel pipes that together with steel beams form space frames that are supported by a base in the river and a moveable bearing on the cliff. Depending on the site then either platforms or volumes are constructed together that enable different activities to the builders. The tree in Baščine for instance is designed to resemble boulders hanging in the tree, allowing the climbers to exercise and practice outside their climbing gym, but still in the city. Another one collects the sewage from Cernica opposite Bunur and offers new diving spots for the cliff diving where they can practice their daring feats. Starting from these two three locations other groups of citizens can initiate more of these trees with their own desired function in location that require remediation or other sort of engagement with the riverscape.

But to really make Neretva home again also of humans that can spend parts of their everyday life on the river, we don't

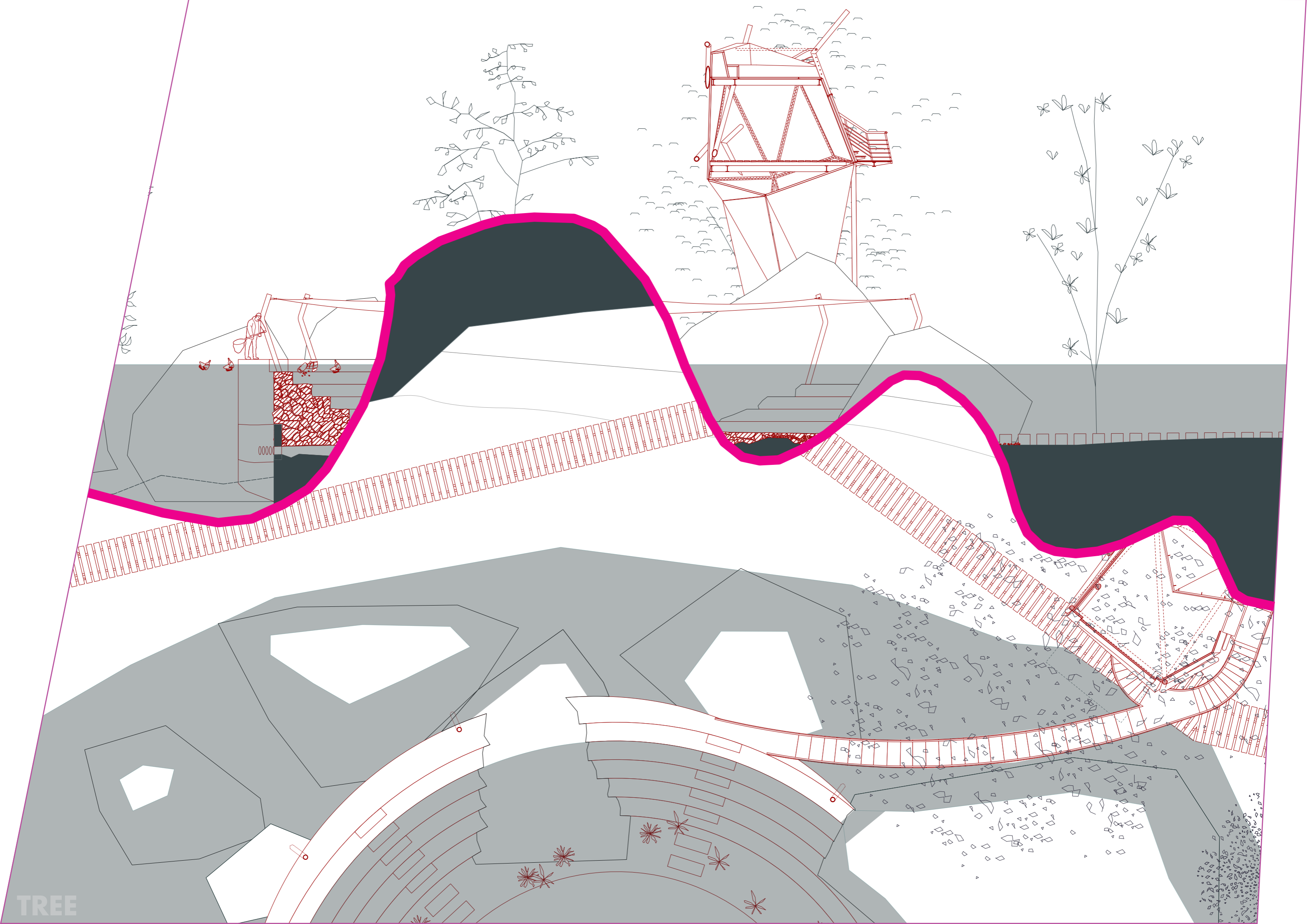
just need access, but also places to gather, to play, to discuss or to simply be.

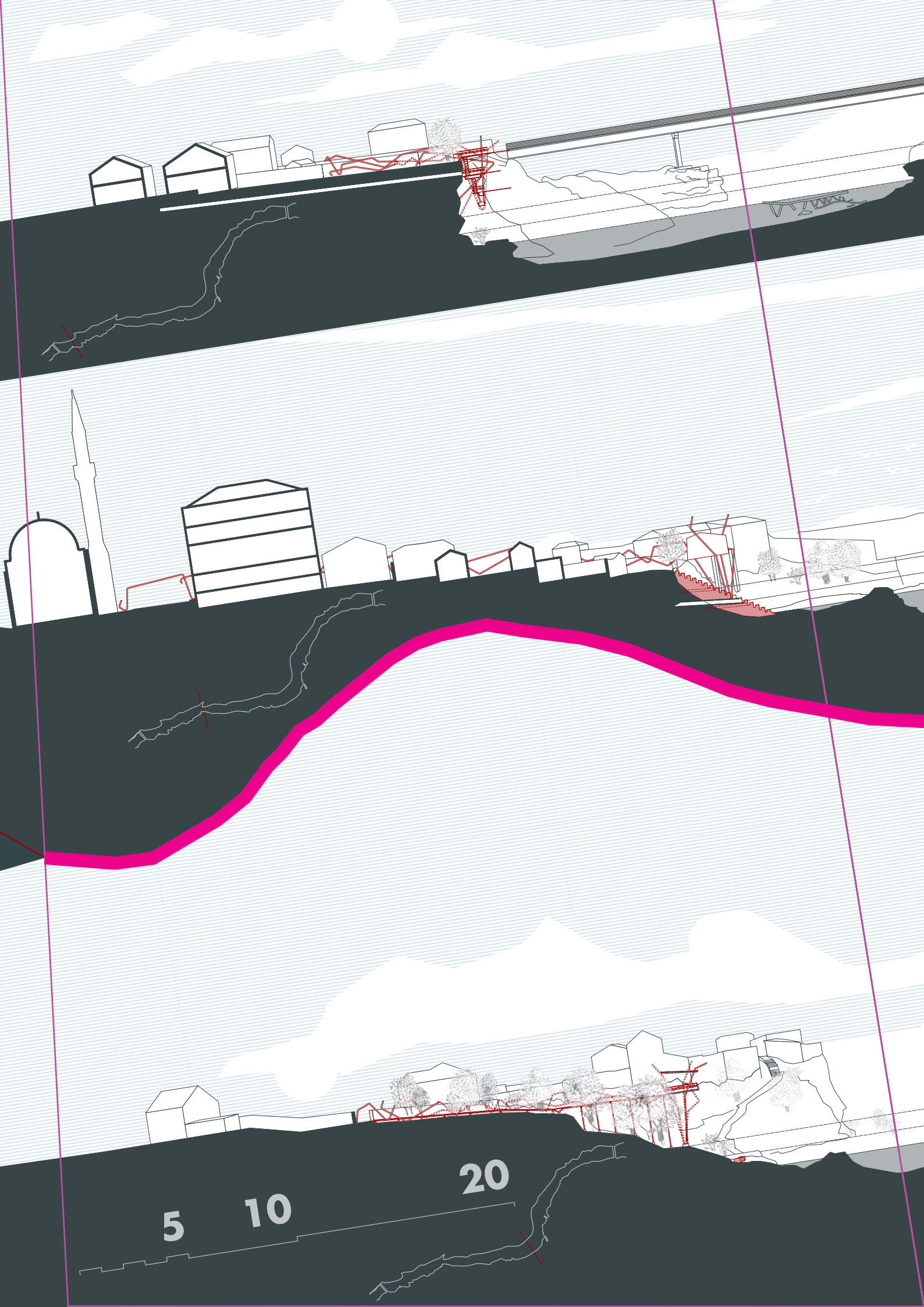
For that fewer interventions are found in some flatter and wider locations in the river. They offer seating, place to meet and celebrate, or just to contemplate. Their form stands in the way of the current in high water, to reduce the force of the waters and offer hiding spots and also collect drift objects such as trash or wood. Build from natural stone the surfaces are porous enough to be inhabited by other forms of life. When the water level is raising the area accessible to humans reduces but is always accessible to paths bridging from the trees.

The first of these interventions is the theatre below Baščine. Located on the area of the former pool it takes advantage of the existing edge as the outside of a circular theatre where a little stream with water from Neretva is flowing through. In little steps of shallow pools reed and other water plants grow, cleaning the water and also offering breeding spots for amphibians. Eventually the now cleaner and warmer water flows down. New concrete walls catch the water and form a new pool that invites to swim and gives the Kayakers from Brodari again a spot where the beginners can practice without currents or difficult whirls.



TREE

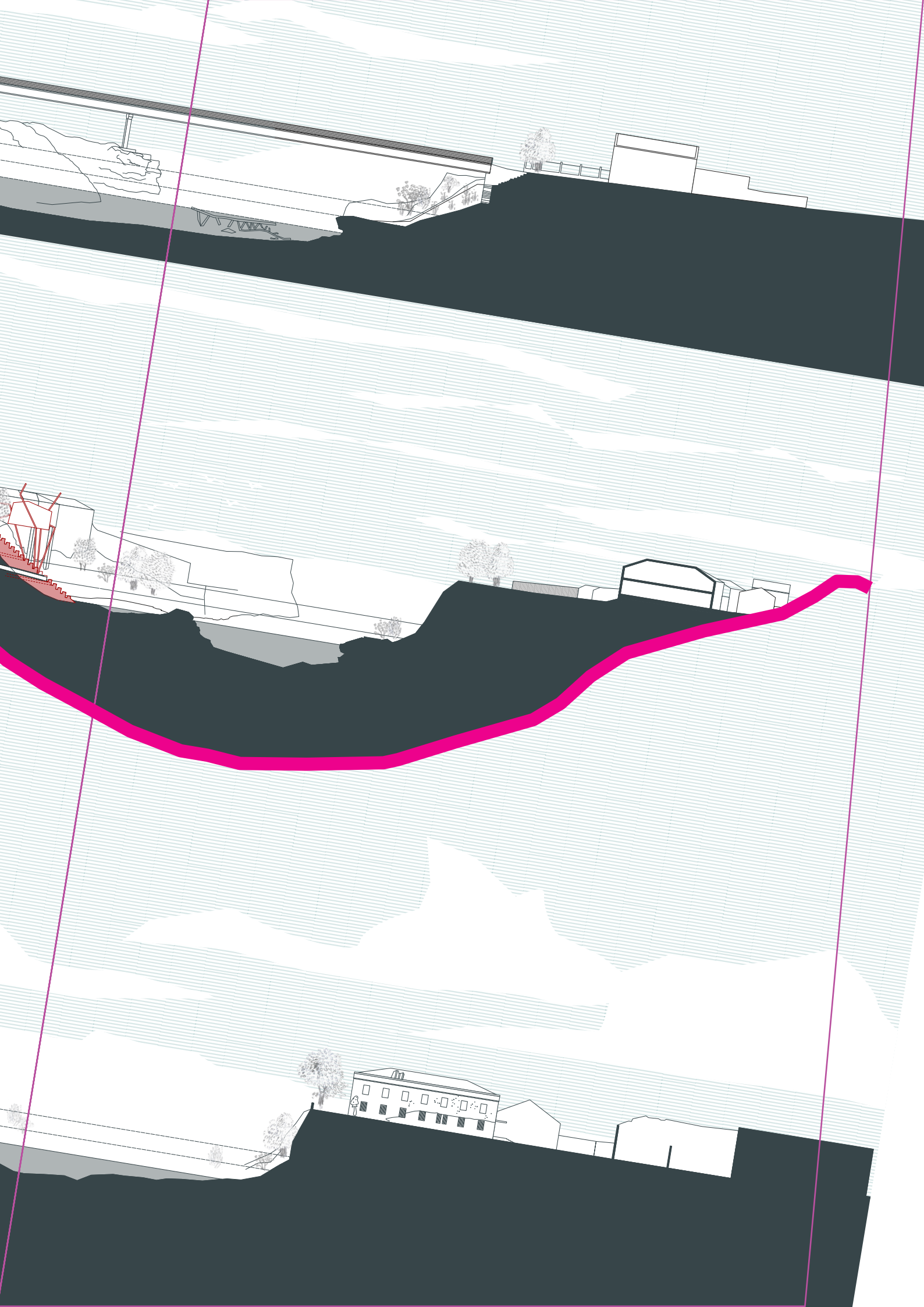




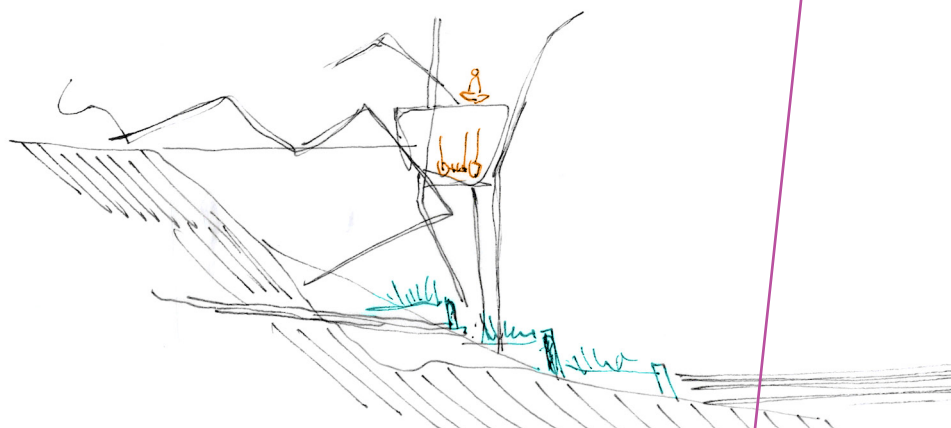
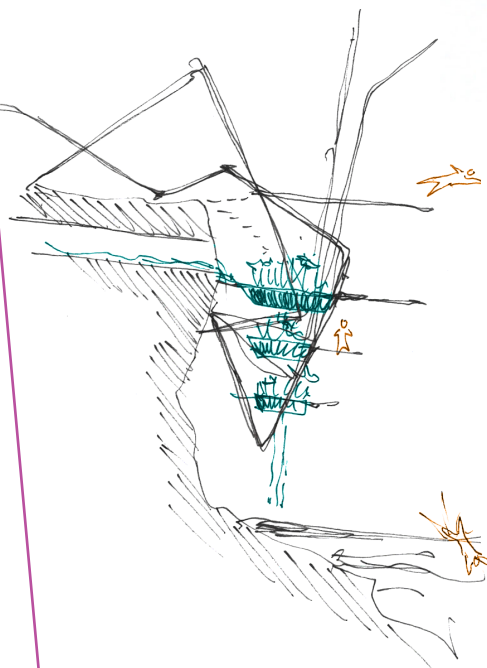
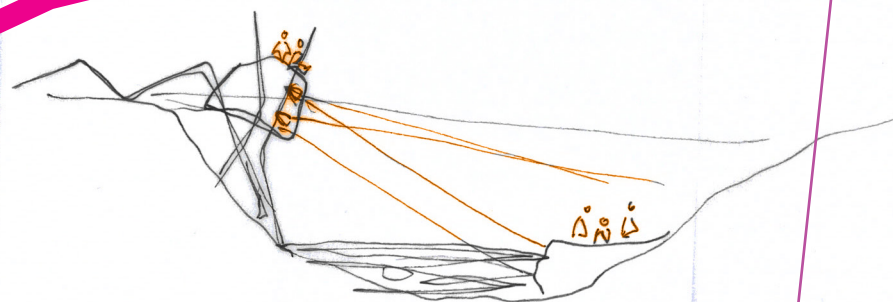
5

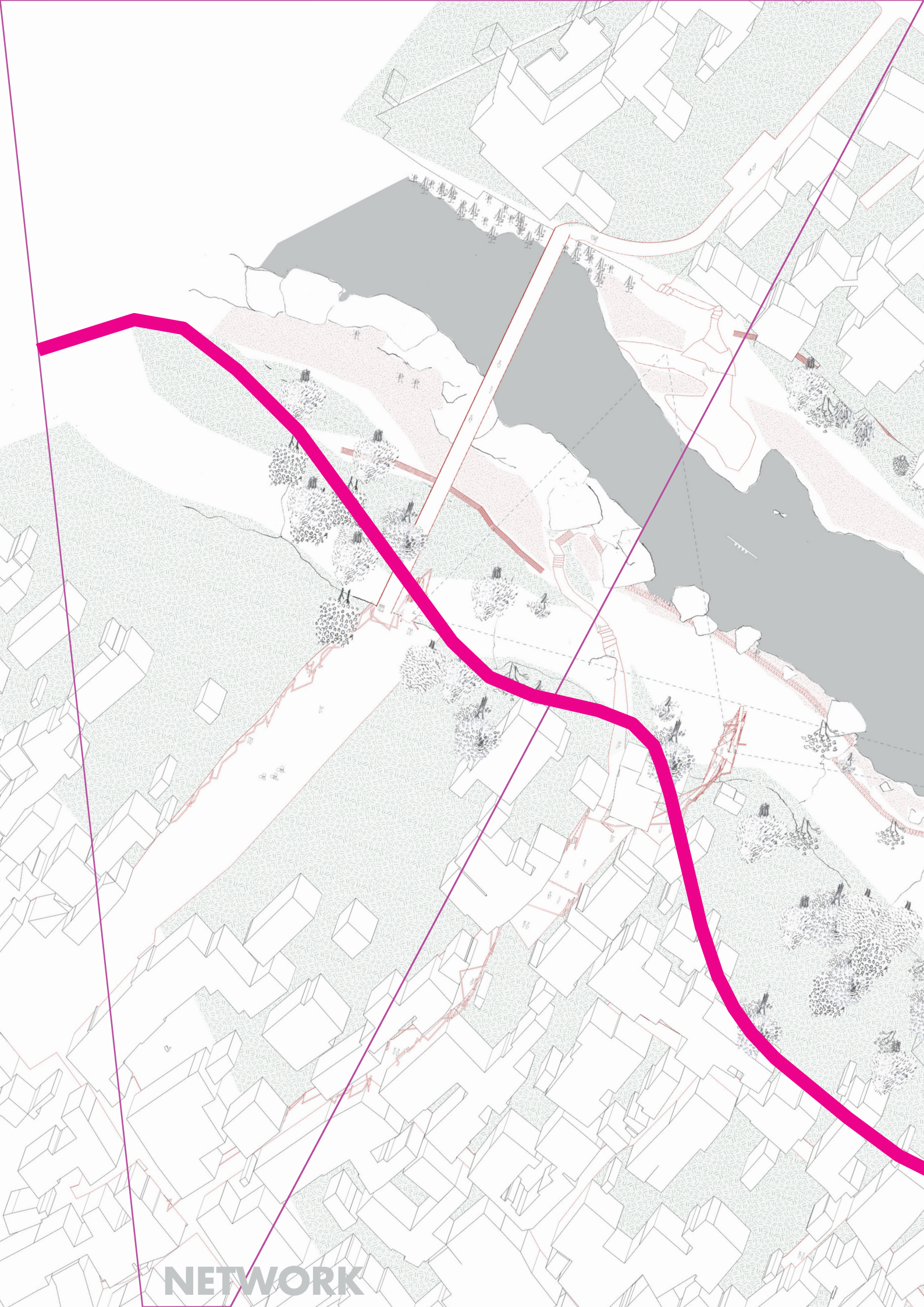
10

20

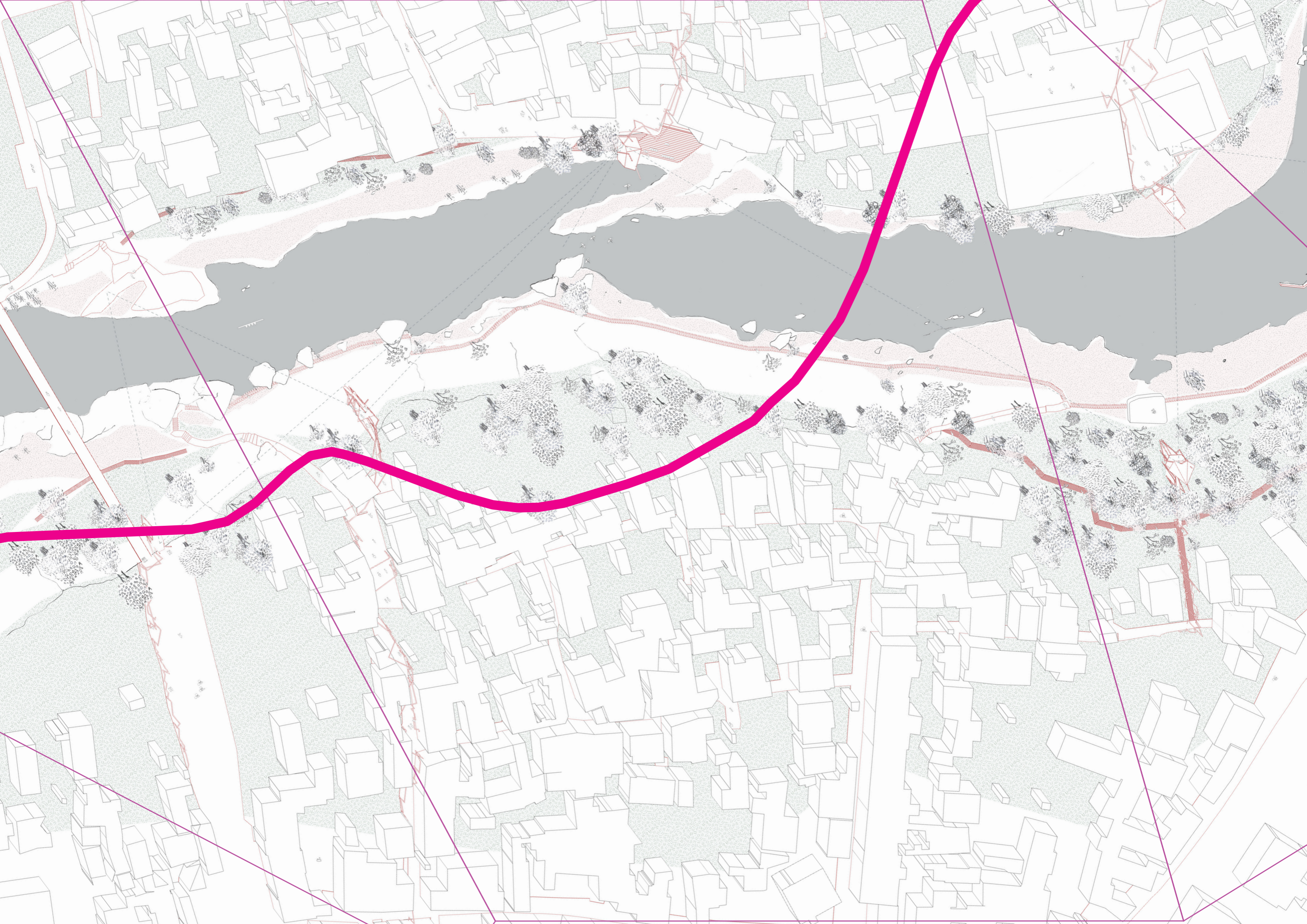


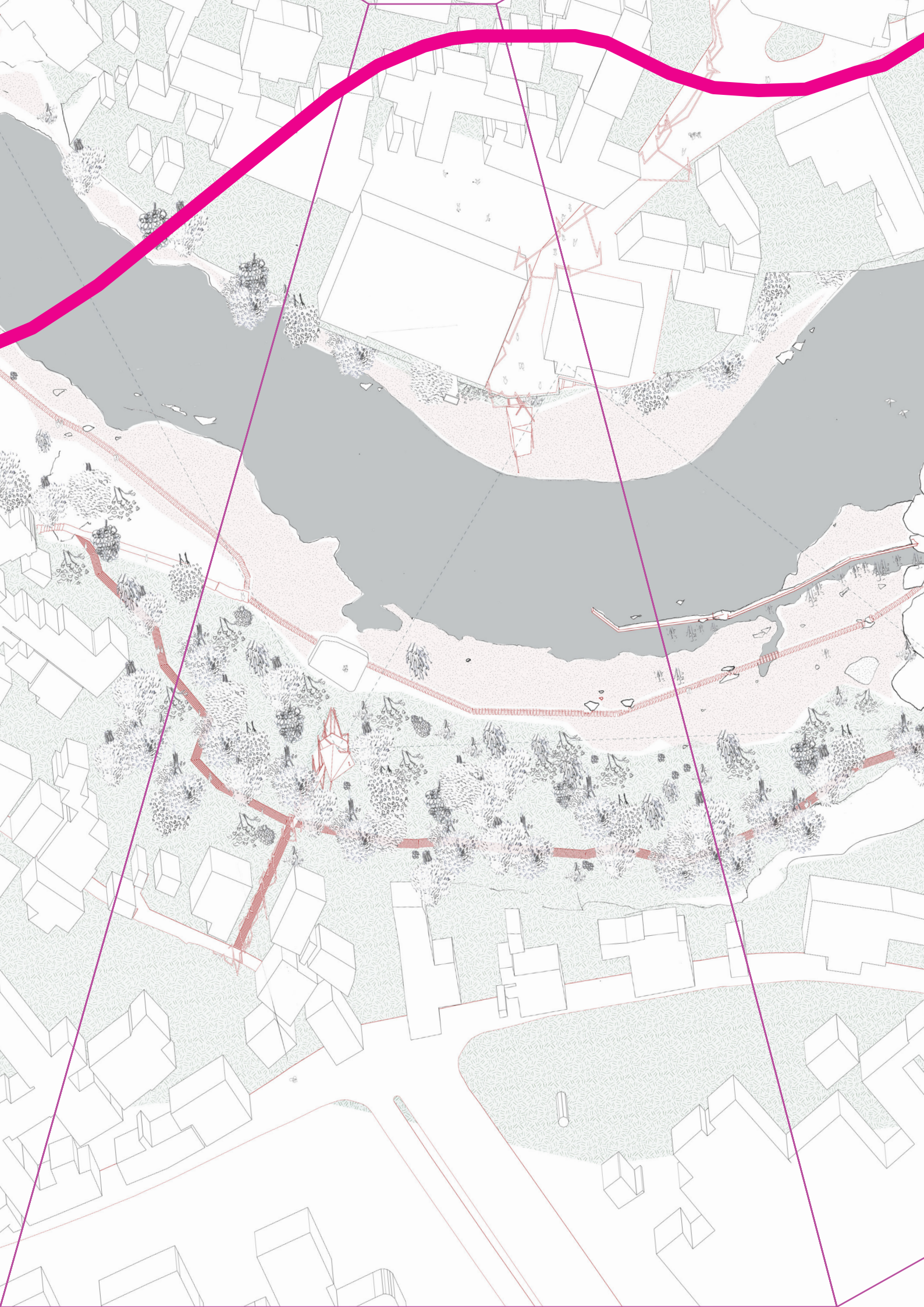
Together these smaller or bigger interventions try to unlock the entirety of the landscape as our common home. A place where we can encounter others in a true public space, in happy and joyful, sometimes serious but always meaningful way. But the other is not just the people of different religions or from different origins, but extends to everything animate and inanimate as that which we are always surrounded by and in touch with. But "If living in history means that we cannot help leaving marks on a fallen world, then the dilemma we face is to decide what kinds of marks we wish to leave."

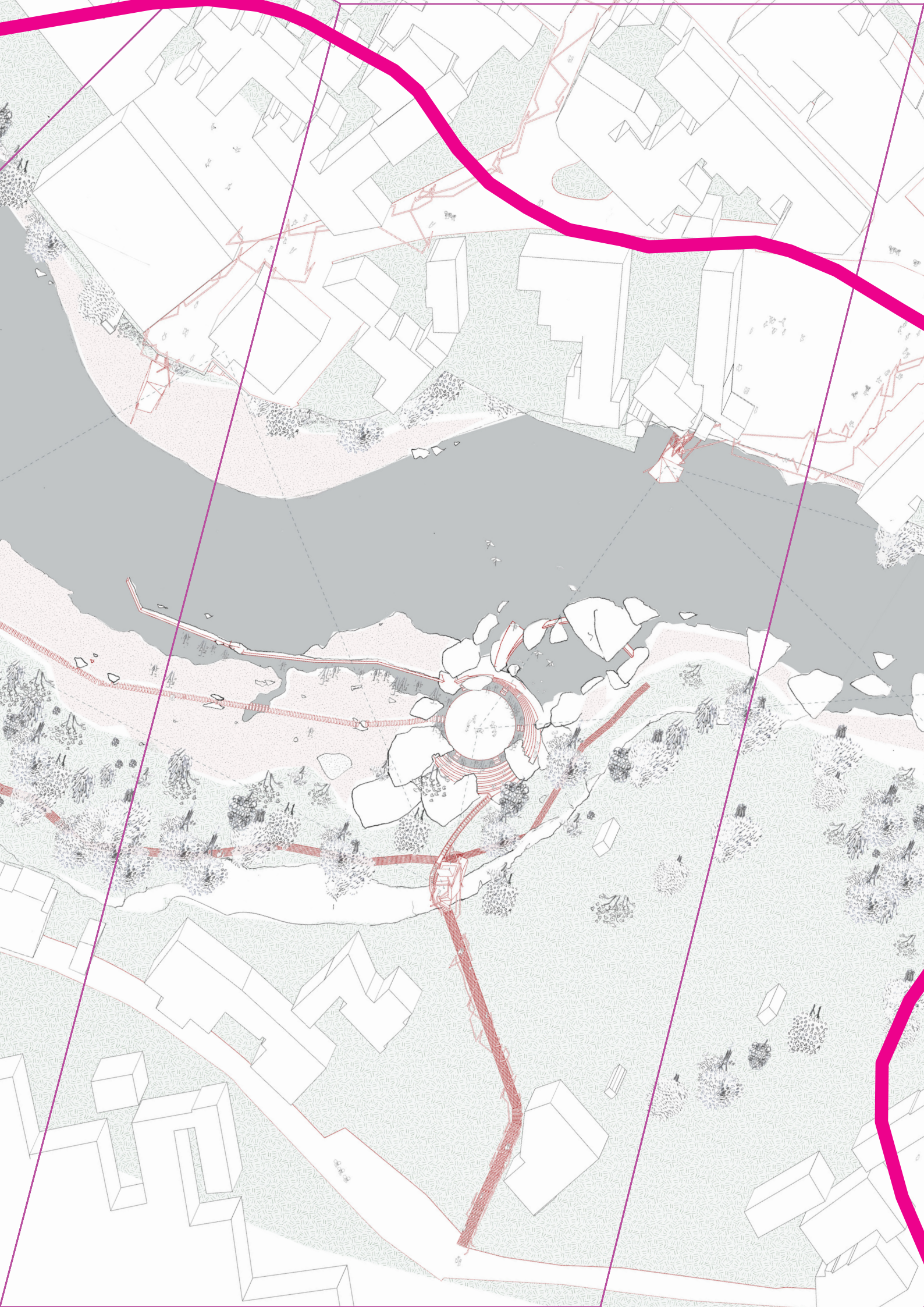




NETWORK











- Appadurai, A. (1986). The social life of things: Commodities in cultural perspective. Retrieved from <https://pdfs.semanticscholar.org/435b/590e7347103b1bd5a755cd-c5df374bd4dfb1.pdf>
- Asboth, von, J. (1888). Bosnien und die Herzegowina. Retrieved from <https://archive.org/details/bosnienund-diehe00asbgoog/page/n7>
- Atkinson, S., Lawson, V., & Wiles, J. (2011). Care of the body: spaces of practice. *Social & Cultural Geography*, 12(6), 563–572. <https://doi.org/10.1080/014649365.2011.601238>
- Balcells, C., & Brú, J. (2002). *Al lado de =: Alongside*. Barcelona: Editorial Gustavo Gili.
- Benöhr, J., & Lynch, P. (n.d.). Should Rivers Have Rights? A Growing Movement Says It's About Time. Retrieved 21 September 2018, from Yale E360 website: <https://e360.yale.edu/features/should-rivers-have-rights-a-growing-movement-says-its-about-time>
- BENTHAM, J. (2018). Introduction to the principles of morals and legislation. printed in the year 1780, and now ... first publish. Place of publication not identified: GALE ECCO, PRINT EDITIONS.
- Bolland, E. (2014, December 18). The Truths Of Fictions: Post-Traumatic Landscapes, Civic Erasure And The Projects Of Artistic Resistance. Retrieved 1 October 2018, from Emma Bolland website: <https://emmabolland.com/2014/12/18/the-truths-of-fictions-post-traumatic-landscapes-civic-erasure-and-the-projects-of-artistic-resistance/>
- Bosnic, D. (n.d.). Mostar, 23 Years Later. Retrieved 2 October 2018, from Denis Bosnic | Photography and Video website: <https://www.denisbosnic.com/essays-articles-in-english/mostar-23-years-later>
- Budruk, M., Thomas, H., & Tyrrell, T. (2009). Urban Green Spaces: A Study of Place Attachment and Environmental Attitudes in India. *Society & Natural Resources*, 22(9), 824–839. <https://doi.org/10.1080/08941920802628515>
- Buj, I., Marčić, Z., Čalota, M., Šanda, R., Geiger, M. F., Freyhof, J., ... Vukić, J. (2017). Ancient connections among the European rivers and watersheds revealed from the evolutionary history of the genus *Telestes* (Actinopterygii; Cypriniformes). *PLOS ONE*, 12(12), e0187366. <https://doi.org/10.1371/journal.pone.0187366>
- Clément, G., & Jones, L. (2007). *Gilles Clément une écologie humaniste*. Paris: Aubanel.
- Cronon, W. (Ed.). (1996). *The Trouble with Wilderness; or, Getting back to the Wrong Nature*. In *Uncommon ground: Rethinking the Human Place in Nature*. New York, NY: Norton.
- de la Bellacasa, M. P. (2011). Matters of care in technoscience: Assembling neglected things. *Social Studies of Science*, 41(1), 85–106. <https://doi.org/10.1177/0306312710380301>
- Dinter, I., Jach, A., Majewski, A., Nationalgalerie, & Hamburger Bahnhof - Museum für Gegenwart

wart
- Berlin (Eds.).
(2018). How to talk with birds, trees,
fish, shells, snakes, bulls and lions.
Dortmund: Verlag Kettler.

- DND Landschaftsplanung. (n.d.).
Was ist Landschaft? Retrieved from
http://www.dnd.at/data/media/abau_binary/original/1326295688.pdf

- Fena. (n.d.). U Mostaru eko akcija
čišćenja korita rijeke i obale Neretve

- The eco-cleaning action of the river
and shoreline of Neretva in Mostar.
Retrieved 2 October 2018, from N1 BA
website: <http://ba.n1info.com/a264289/Vijesti/Vijesti/U-Mostaru-eko-akcija-ciscenja-korita-rijeke-i-obale-Neretve.html>

- Fischer, H. (2010). Landscape of the
Mind. In D. Valentien, A. S. MacLean,
Akademie der Künste, & Ausstellung
Wiederkehr der Landschaft (Eds.),
Wiederkehr der Landschaft: [anlässlich
der Ausstellung 'Wiederkehr der Land-
schaft' in der Akademie der Künste,
13. März - 30. Mai 2010] = Return of
landscape. Berlin: Jovis.

- Haraway, D. J. (2016). Staying with
the trouble: making kin in the Chthu-
lucene. Durham: Duke University Press.
Hodder, I. (2016). Studies in Hu-
man-Thing Entanglement. Retrieved
from <http://www.ian-hodder.com/books/studies-human-thing-entanglement>

- Horvat, S. (2015). The radicality of
love. Malden, MA: Polity.

- Horvat, S., & Štikis, I. (Eds.). (2015).
Welcome to the desert of post-social-
ism: radical politics after Yugoslavia.
London: Verso.

- Iconoclastas. (n.d.). Manual of Col-
lective Mapping: Critical Cartographic
Resources for Territorial Processes of
Collaborative Creation. Retrieved from
https://www.academia.edu/28625755/Manual_of_Collective_Mapping._Critical_cartographic_resources_for_territorial_processes_of_collaborative_creation_2016_

- Ingold, T. (1993). The Temporality
of the Landscape. World Archaeology,
Vol.25, No. 2, Conceptions of Time
and Ancient Society, 25(2), 152–174.

- Kerkstra, K. (Ed.). (2003). The
landscape of symbols =: Landschap
van symbolen. Wageningen: Uitgeverij
Blauwdruk.

- Kiser, T. (2012, December 13). In
Small Things Forgotten. Retrieved 19
November 2018, from Opinionator
website: <https://opinionator.blogs.nytimes.com/2012/12/13/in-small-things-forgotten/>

- Latour, B. (n.d.). Visual Cognition:
Drawing Things Together. Knowledge
and Society Studies in The Sociology of
Culture Past and Present, Vol. 6, 1–40.

- list, D. (n.d.). SMRT VREBA S
MOSTARSKJE DEPONIJJE UBORAK?
Mještani tvrde da zbog smeća umiru
od raka a djeca oboljevaju od leuke-
mije! - DEATH WATER FROM THE
MOSTAR DEPONIU STAGE?
The locals claim that they are dying
of cancer because of the garbage and
the children are suffering from leuke-
mia! Retrieved 12 December 2018,
from <https://dnevni-list.ba/smrt-vreba-s-mostarske-deponije-uborak-mjestani-tvrde-da-zbog-smeca-umiru-od-raka-a-djeca-oboljevaju-od-leukemije/>
Lucas, R. (2016). Research Methods for
Architecture. London: Laurence King
Publishing.

- Mačkić, A. (2016). Mortal cities -
forgotten monuments. Zurich: Park
Books.

- Mahic, M., Šoše, M., & Klarić, H.
(2007). Neretva i njene obale u Mostaru
(1. izd). Mostar: Solvej.

- Michel, R., Wiener, W., Čolaković, I.,
Šehić, Z., & Mušić, A. (2006). Mostar.
Sarajevo: Dobra knjiga.

- Miller, D. (1987). Material culture
and mass consumption. Oxford, OX,

UK ; New York, NY, USA: B. Black-
well.

- Miller, D. (n.d.). Materiality: An In-
troduction | UCL Anthropology - UCL
- London's Global University. Retrieved
29 November 2018, from UCL An-
thropology website: <https://www.ucl.ac.uk/anthropology/people/academic-and-teaching-staff/daniel-miller/materiality-introduction>

- Perce, G., & Sturrock, J. (1997).
Species of spaces and other pieces. Lon-
don, England ; New York, N.Y., USA:
Penguin Books.

- Potteiger, M., & Purinton, J. (1998).
Landscape narratives: design practices
for telling stories. New York: J. Wiley.

- RiffReporter. (n.d.). Ein gezähm-
ter Fluss wird wieder wild. Retrieved
4 January 2019, from RiffReporter
website: https://www.riffreporter.de/flussreporter/tiroler-lech-wieder-wild/?fbclid=IwAR15iw_qgSpXsg2YiY-Inz0WQdU88K76zzWUPusifz4TX-eRyNtZj_4ndJwTE

- Sack, R. (2009). The Inadequacy of
Human-Nature Theory and the View
of Mass Consumption. In The Earth as
Transformed by Human Action: Global
and Regional Changes in the Biosphere
over the Past 300 Years (p. 732). Cam-
bridge University press.

- SPARE Project. (n.d.). SPARE
PROJECT | Alpine rivers as society's
lifelines. Retrieved from <https://www.youtube.com/watch?v=JlJCjos2lDo&feature=youtu.be>

- Valentien, D. (2010). Return of Land-
scape. In A. S. MacLean, Akademie
der Künste, & Ausstellung Wiederkehr
der Landschaft (Eds.), Wiederkehr der
Landschaft: [anlässlich der Ausstellung
'Wiederkehr der Landschaft' in der
Akademie der Künste, 13. März - 30.

Mai 2010] = Return of landscape. Ber-
lin: Jovis.

- Walker, B. H., & Salt, D. (2006).
Resilience thinking: sustaining ecosys-
tems and people in a changing world.
Washington, DC: Island Press.