



A Vital Vein For Asparuhovo; A Strategy for Everyone  
Varna -Bulgaria  
Master Thesis

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### *Inspiration*

This picture was made by Bulgarian photographer Nikola Mihov, from his photo series 'Forget Your Past'. This series is showing the difficult relation of Bulgaria with its past. Bulgaria has been communistic and lead by dictators from WW II until 1989. This has a huge impact on the cities and the landscape. It is dominated by communist buildings and like this, statues and monuments. The Bulgarians want to forget this past, and move on. But what is a city without a history? This communist past is an important ingredient of the DNA of the cities, but also in the way the people think. You cannot deny your character; you'll have to find ways to cope with it. In spatial terms, it is the question how this past can be processed in the city its development.

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This Master thesis is the result of one year of research and designing into a self chosen topic, corresponding to the graduation studio of Landscape Architecture, called Flowscales. Flowscales refer to landscapes attached to (infra)structures. These structures often facilitate spatial possibilities for recreational purposes, and are not seldom connected to wider structures, as they are suitable for continuously connected green structures.

As a location and theme I chose to situate my project in Varna, Bulgaria. My fascination started here since recent floods have caused the city a lot of misery. In terms of improvement, a lot could be done here. Because of the floods, the water system is in desperate need for a revision. But not only this technical problem is going on in Asparuhovo, the by the floods affected area. Social problems have a huge impact on the society, and Asparuhovo is one of the places where these problems are visible. The Roma society clashes hard with the ethnic Bulgarian society. Although there are lots of social, economical and political problems causing this social tension, there is also a spatial problem: the two groups don't get in touch with each other because of their separate worlds.

I found my interest in this situation, and chose to dive into the topic to make my graduation design. The result is here. The discussed topics and other subjects have been researched to my full ability this year. The language barrier sometimes has been a handicap, with even a different alphabet. However, conclusions based on articles have lead to assumptions and educated guesses that are in line with each other. In this way, a coherent design design has been established.

This year has been divided in five stages. The first two stages were mainly about framing the project, and the last three stages were more about designing the project. Nevertheless these phases have been carried out through one another. When design and analysis go hand in hand, the best results can be expected. The emphasis during the first stage (p1) was defining the project. The second stage was about defining the research question (p2). The third stage was about making a general design (p3). The fourth stage was about making a detailed design (p4). The last stage was about the final design (p5). This booklet is a summary of the whole project.

One design was made that incorporates several problems and opportunities. It is partly a strategy, and partly a spatial design. To be clear in how the design works, a clear structure has been applied in this booklet. The first chapter introduces the backgrounds of the project. Here, the relevant constraints of the project are discussed, even as the occasion, and the forthcoming research question. The second chapter aims to stretch out the different aspects that have influenced or are part of the design. These are in order of importance. The third chapter shows the general design: what are the foundations of the design? The fourth chapter elaborates on four different parts of the design. These parts are the kickstarters for the design, and are the most important nodes in it. A general design for these parts is given. The last chapter is the reflection. In this chapter the design is reflected on different topics.

# Backgrounds

## Bulgaria

Bulgaria is situated in Eastern Europe and is attached to the Black Sea. The country has been part of the EU only since 2007. However, the country is not part of the Eurozone, and therefore still has its old currency, Lev. It is the poorest country in Europe. The most important source of income is agriculture, tobacco is an important product. Also, Bulgaria is slowly starting to be discovered as a tourist destination. Especially the cities along the coast like Varna and Sunny Beach are increasing in popularity as cheap holiday cities. This is a promising source of income. At this moment the spatial consequences of this development are visible along the coastline. Lots of cheap hotels are built for especially the English and Russian tourists.

The country has been suffering from communism for a long time. Although Bulgaria never has been a part of the Soviet-union, it was closely related to it. Lots of monuments throughout the country refer to this Soviet-Bulgarian friendship. The history in political terms is explicitly visible in the Bulgarian landscape. However, it has not only been the communism that placed its mark on the landscape. Bulgaria was captivated by the Ottoman Empire (Turkey) in 1878. This Ottoman domination lasted until 1908. The Turkish influences of this domination are still visible. An important difference with the Soviet-union in terms of spatial layout, is the fact that the architecture in Bulgaria is not seldomly mixed with Turkish/Islamic

influences. In this period there was also a migration of Turkish people, especially the Turkish Romani, that came to Bulgaria. After the declaration of independence of the Ottoman empire, the relation to communism started to develop. During WWI the tendency in Bulgaria was leading towards communism: the crisis after the war changed the prospects in society. Only after WWII Bulgaria became officially taken over by a communist regime. This regime lasted until 1989. The effects of communism on the people are similar to the Soviet Union: the state promised to give everybody jobs with equal payment, no unemployment, everybody got a house etc. Architecturally, the consequence of this was the extreme simplicity. According to Palmboom (1979, p. 41) the buildings had to be functional, easily to be built, and as little as possible in detail. The architect was miles away from the construction workers, so simplicity was a starting point. Today, 26 years later, this is still visible in the cities. Most of the cities existed way before communism, however, within the cities the urban structures from communism are highly visible. There are standard city typologies distributed throughout the entire country, and standard urban imprints are implemented or attached to the cities. These imprints usually exist out of at highest 10 different standard housing modules that are repeated over

and over again. These typologies are seen randomly spread throughout the country and are sometimes highly opposing to the expressive self-built houses of communities like gypsies, or dwellings dating from before communism.

Today, communism is as said visible in the landscape, but also in the way people think. Especially the elder people, who were fully aware during the communism, still relate to this. Younger people have not experienced communism as a regime. But did things get better after 1989? But allegedly there has not changed much since 1989. The people with power during communism still hold the reigns. One of the biggest problems during the communism was the fact that a select group of people got filthy rich of it, and corruption was the way for people to earn a bit more money. These problems are today still at stake, since the mafia in the regime is today still active in the government. Many people state that not much has changed since the communism, in fact, things got worse. There is a lot of unemployment and the country is more and more in debt.



Bulgaria, Varna

## Varna + Asparuhovo

The city of Varna is situated on the Black Sea coastline. It is the largest city and spa on this coastline, and the third city in Bulgaria. Often referred to as the marine (or summer) capital of Bulgaria, Varna is a major tourist destination, a starting point for all the resorts in the northern Bulgarian coast of the Black Sea, business and university center, seaport, and headquarters of the Bulgarian Navy and merchant marine. Also, Varna airport is an important connection point between the Black Coast and Europe. The largest part of the tourist area is in the North-East of the city along the coast. Here, the coast is overloaded with hotels and resorts, mainly for Russian and English tourists. More southwards, heading to the centre, tourism is represented less but still abundantly visible in the streetscape. The largest and iconic building in the center is the hotel-casino Chernomorec, however this type of tourism is different than the resorts along the coast.

The municipality of Varna described several focal points for development in the future in the Vision for Varna in 2022. A lot of these points refer to tourism related developments, since this will be the future of the city. In a large number of cities along the Black Sea coast, tourism is growing rapidly. Varna wants to benefit fully from this growth. Tourism does obviously play a large role in the city it's spatial planning. However, the focal

points are not only tourism related.

1. Varna's inhabitants should benefit fully from it's natural richness.
2. Varna's hotels are fully booked.
3. Active public/private cooperation that keeps innovating public area.
4. Lively water front (playing, jogging, eating, fishing, shopping, boating)
5. Varna's bathing waters are clean
6. Varna should be safe from flooding and much greener.

The reason of being for the city is the harbour; the city is built around this harbour and the increase in welfare and growth of the city was derived from the economical effects of this harbor. The harbor connects the Black Sea with the Lake Varna, situated on the opposite side of the harbor. The harbor existed after lots of changes throughout time. Formerly, the harbour was just a piece of marshland, where water streamed aside in a small river towards Lake Varna. In different amounts of time, the harbour was transformed into its current state, with two canals connecting sea with Lake Varna. This resulted in a spatial separation of Asparuhovo and Varna. Although Asparuhovo has always been its own city, only in the 20th century, Asparuhovo became a part of Varna. A large car bridge connects Varna with Asparuhovo, which became the trademark of the city of Varna.



Carbridge between Varna & Asparuhovo

However, the downside of this large bridge is the loss of connection between Varna and Asparuhovo.

Asparuhovo is a district of the city of Varna. It is a typical Bulgarian neighborhood that has a lot of family houses. Because it is connected to Varna via a large bridge, that is not that accessible, it is fair enough to state that this piece of Varna is not a suburb but a separate city that goes under the same name. Inhabitants take the bus to their jobs in Varna city, and go back to their houses. There is no reason for people who don't live in Asparuhovo to come there. This makes the district quiet and locally oriented. The district has facilities aimed at the inhabitants: foodmarkets, small

shops, schools etc. The amount of people living in Asparuhovo is around 25000. On the 19th of June, after a period of heavy rainfall, the watersystem of Asparuhovo flooded. This was the occasion that lead me to the definition of my graduation project.

## The disaster of the 19th of June 2014

Last summer heavy rainfall caused major floodings in Asparuhovo, a neighborhood of the Bulgarian city Varna. This area is situated on the hilly southside of the coastal city of Varna in Bulgaria. After two days of continuous rainfall, at 19-6-2014 suddenly an enormous mudslide was heading through the neighborhood. The rainwater should be transported from the higher wooded plateau Avren via two existing gullies towards the sea. These gullies were not functioning well on that particular day; on several places along the section there was a set-up of the water. Due to the increased power and speed the streaming water led to a lot of damage. Thirteen people died and the material damage is estimated at 15 million euros. The tragedy was enormous.

It is thought that, amongst others, illegal homebuilding in natural gullies, illegal forest clearing at the higher situated ridge, and bad maintenance of the gullies are the most important causes of the disaster. But most likely, the capacity of the system was just not sufficient for amounts of rain like these. However, the inhabitants put their fingers in several directions, varying from aliens to a military watersystem that collapsed on top of the hill. But with no doubt, the finger is mostly pointed at the gypsies, like usual.

*“When it started it was really scary, the water was rising and I took a ladder and got the wife and kids on the roof. Water’s coming in from everywhere, it’s through the yard, the walls suddenly collapsed, the water’s in the house and it keeps going. It was horrible, absolutely horrible, like a tsunami. The street turned into the sea: people and cars are floating like boats, 20-30 km/h at least. Everything’s rolling and crashing and we’re sitting on the roof and watching. There were horses, pigs and hens floating. There was an old sick man who lived up the street. When the storm came his house collapsed and the flood took him in his bed. They found him dead further down...”*

Nikola Mivov - The Sea Inside





## The structural exclusion of Roma

While those who were the most affected by the floods were the Roma (the most damage was caused in the Rozova Dolina, the gypsy neighborhood), these people were also blamed the most after the floods. Ethnic Bulgarians blame the gypsies for building their houses in or to close to the gully, which allegedly caused congestion of water, with a tidal wave as a result. However, some arguments refute those unambiguous accusations. In the first place, the other of the two gullies flooded as well, without dangerous Roma buildings surrounding it. This indicates that the whole water system was simply insufficient. Secondly, the gully at Rozova Dolina simply did not even have a water system. The water is collected in a reservoir, and continues through the street. Obviously, the water system never has been designed properly. Accusing Roma of a matter that should be a Municipal matter seems unfair. However, this is not a new thing. Since years, Roma are discriminated and neglected by the Bulgarian society, and not without a

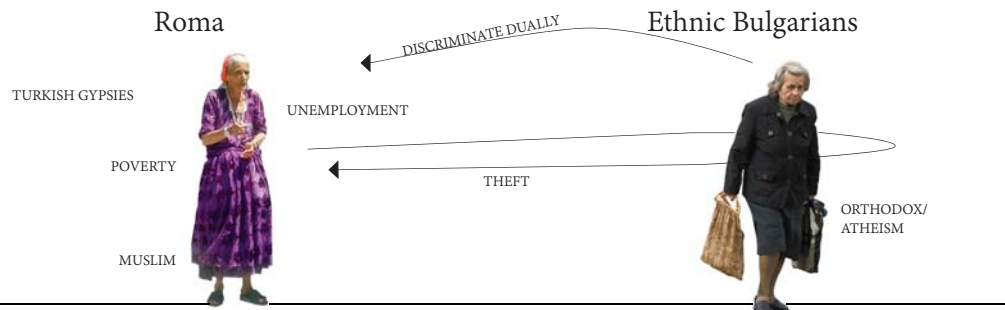
reason. The tensions between the Roma and the Bulgarians has been running high. Bulgarians accuse the Roma of stealing, being lazy, being rude and vandalism. But they also discriminate: their religion (Islam) and their ancestry (Turkish), is reason for bullying. Especially children are the victims; the rate of dropout of Roma children on primary and secondary schools is extremely high. Resulting in employment, resulting in criminality. This vicious circle continues. The exclusion of Roma increases. At this moment, the Roma stay in their 'ghettos' and do not have lots of reasons to come out of it. The problems seems to be very big, and are mainly political, social and economical. However, the ghettos formed attached to the cities, in this case Asparuhovo, is also a spatial problem. This is a topic I investigated in my graduation project, with an outcome that attempts to break through the current absent of contact between the ethnic Bulgarians and the Roma.

## Research Question

How to develop a spatial green-blue system for Asparuhovo, that takes into account the social- economic conditions and the cultural identity, and simultaneously introduces an attractive new urban landscape?

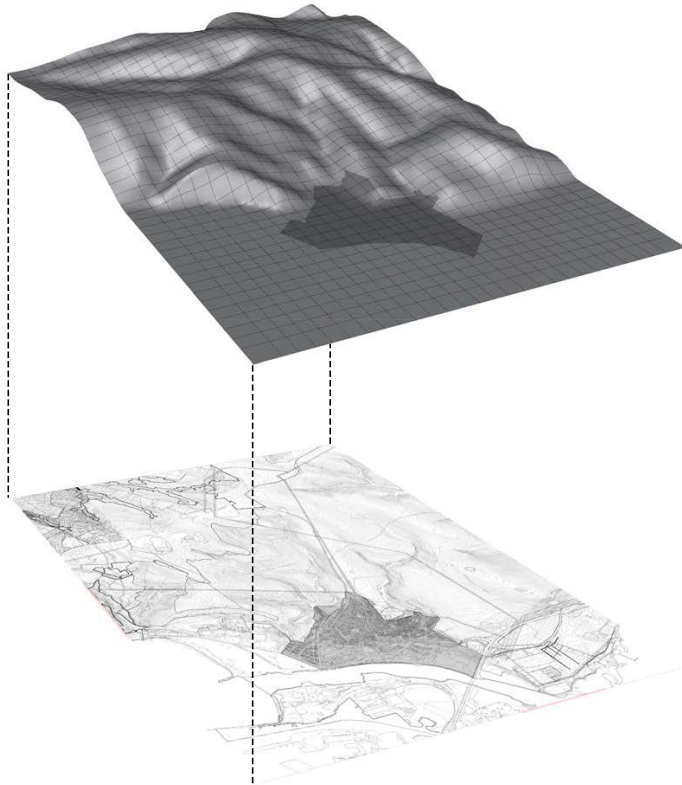
Subquestions:

1. How does the watersystem in Asparuhovo work?
2. What went wrong during the floods?
3. Where are open public spaces in Asparuhovo, what are their functions and their potentials?
4. How do residents in Bulgaria use public space and how specifically in Asparuhovo?
5. How can I use an excess of water as a value in a spatial way?
6. What elements of the cultural identity of Varna/Bulgaria are relevant and how can they be used in the design?
7. How are social relationships defined and how to anticipate on this in the design?
8. How can I apply the found information to create a green-blue system in Asparuhovo that prevents the district from floodings, but also creates better life conditions for the residents?
9. How does the design solve the problems, and what can we learn from this?



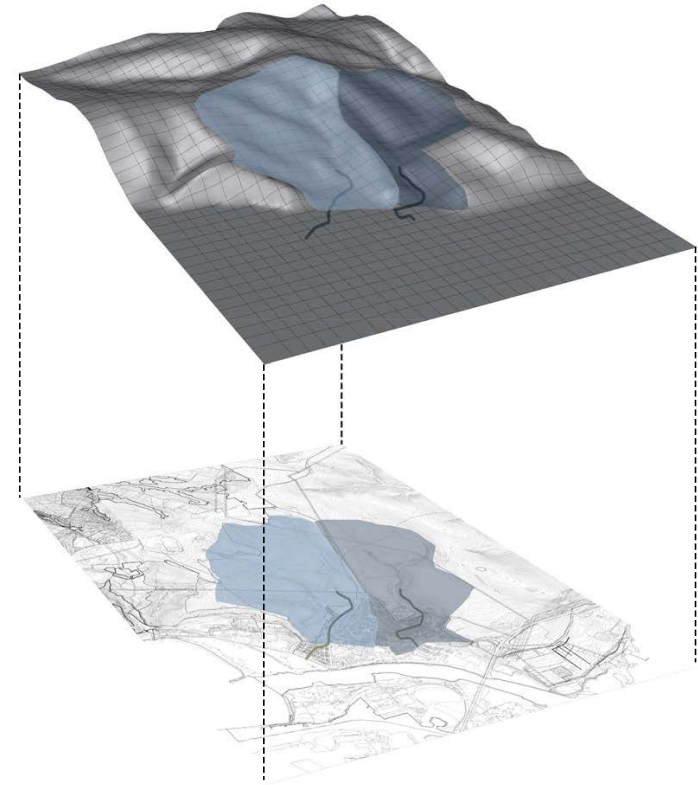
# Diagnosis

## Watersystem



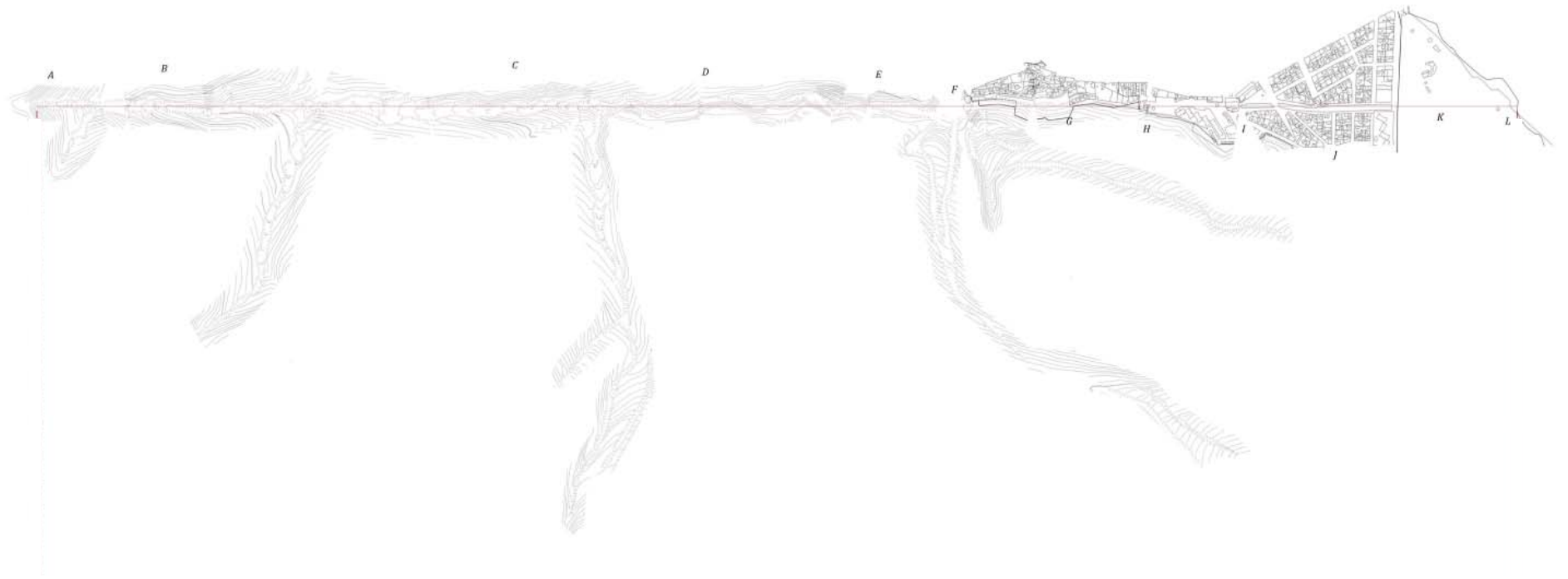
Positioning of Asparuhovo within its topographical environment

The two gullies transport the water coming from the catchment area behind it. The size of this area is about 4 km<sup>2</sup> for both of the gullies. This means that the all of the water has to be transported through the gullies. Obviously, the gullies were not suitable enough to transport these amounts of water on June 19. Asparuhovo is positioned at the bottom of the hill. The fact that, during the heavy rainfall, these enormous amounts of water had to be transported through the gullies, resulted in floods in the city.



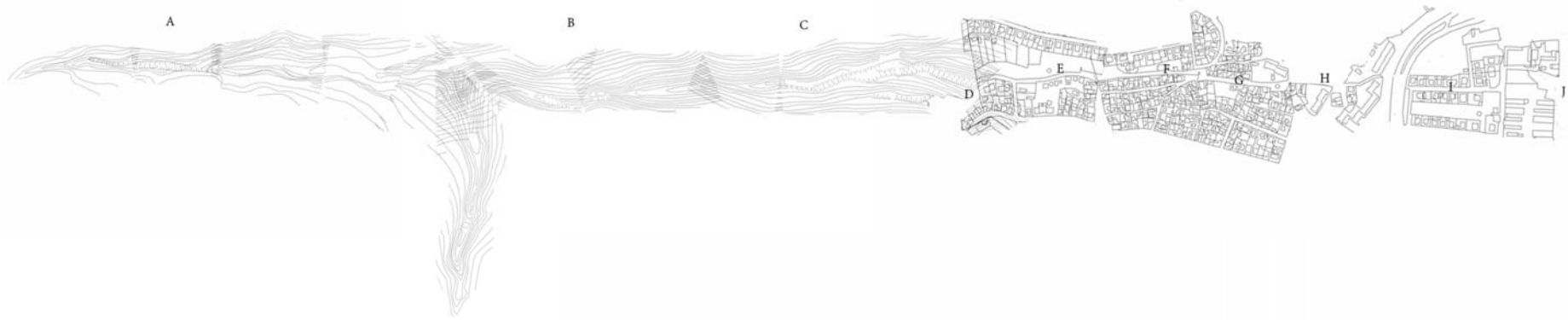
Catchment area of rainwater and positioning of runoff gullies

Generally, several causes of the floods can be named. Firstly, the watersystem was polluted and constipated, resulting in accumulation of the water. Secondly, the depth and width of the canals were not dimensioned well enough. The water overflowed and continued through the streets. In the right gully, the gully did not even have a proper end, and just ran through the streets. The water ends in the canal, near the sea. The left gully was dug towards this canal, the other gully stops halfway.

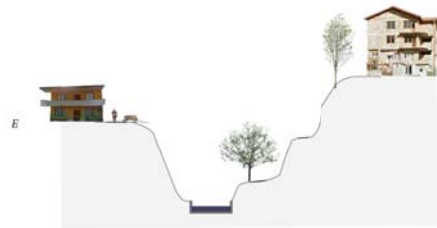


The Eastern gully is more than 4 km long and is a gathering of several smaller gullies that originate in the hills. At point F all the gullies came together. The height difference from the highest point till the lowest point is about 200 m. It starts in the forest and enters Asparuhovo at point F, where is a small gypsy area. It continues through the neighborhood where it passes building blocks and at point I the city center. This is a small center with some shops, restaurants and a market, focused on the neighborhood. The gully continues through a neighborhood with family housing, and ends in the district park 'Asparuhovo park', where it ends in the canal.





The other gully is 3,5 km long and is simpler in structure. It is a gathering of two gullies. At point D it enters Asparuhovo. The height difference is about 125 m. This gully also starts in the forest. At point D it enters, and that is where the valley starts. The valley gets steeper, and remarkably the gully is canalized with a concrete construction. It continues further into the Roma neighborhood Rozova Dolina, which means Rose Valley. The gully is de-canalized and the water flows behind the buildings, and at some points dwellings are built in the gully. At point G, all of the water flows through the residential street, where it is funneled and pushed through two large apartment buildings at point H. It ends in residential street.



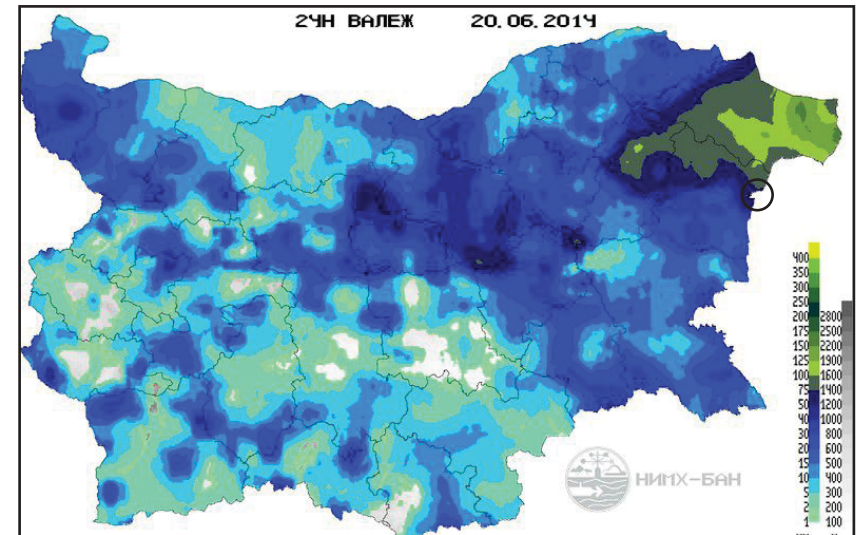
## Climate change

The clear cause of the floods is the excessive amount of rain during a short period. The map of Bulgaria, on the right page, shows the heavy rainfall in the country on 20th of June, the night of the floods. It must be recognized that the city of Varna was not even the place with the largest amount of rain. Up North, the rain was even heavier.

Situations like these are to be expected increasingly in the future. Even though this particular rainfall was exceptional, the expectations of climate change are clear in its consequences. This applies not only to Bulgaria, but for a large number of other countries. Research shows that the climate change can be understood dually. In this, I only talk about the situation in Bulgaria. Firstly, it must be noticed that summers will be up to 30% drier, meaning that there is less rain. Secondly, it must be noticed that the amount of mean heavy rain days increase. This implies that when it rains, the rainfall contains a larger amount of rain in a shorter time.

This results in some problems that Bulgaria is currently dealing with, and more specific Varna and the neighborhood Asparuhovo. Main problems in the fresh water supply sector include internal loss in the distribution networks and a lack of water reservoirs. As Bulgaria already suffers from intense drought periods during the summer and given the fact that these drought periods are predicted to become longer and more intense due to climate change, these leakages could pose a rising problem in the future. The second problem is the insufficiency of the watersystem. A lot of the canals in Bulgaria are not dimensioned for these amounts of rain. In Asparuhovo, the result of this was already visible; the system flooded and the streets became the new route for the water.

These aspects are taken as starting points for the design. The system needs to be adapted anyhow, since the climate change inevitably results in a higher flood risk. Several design choices could be made in order to adapt the system. The combination of the desirability of a reservoir of water, and the need to adapt the gully system, resulted in the choice to design a dam, adapted to the natural topography as a base for the design. This dam holds a reservoir that functions as a buffer, which makes the water situation controllable and simultaneously creates spatial opportunities such as a constant stream of water and a water reservoir/lake as a recreational opportunity. In this way the current problem, the unavailability of a sufficient water system, and future problems, shortage in freshwater, are attacked. The intervention is quite radical, but in this way, a great value for the present and the future is ensured, and serves as a carrier for future development and, most of all, is safe and efficient.





## Social problems

When you want to find out what the core is of the current problems, research to the social backgrounds and relations needs to be conducted. In this chapter I will explore this topic.

### *Lifestyle of Roma*

Firstly, often is spoken about Roma as a closed community where everybody knows each other. According to Budilova (2009, p.9) this is untrue. (Note; this article refers to Roma communities in Czech and Slovak Republic.) She did research in a large Roma settlement. “The unity ascribed to it from others does not bring a unity or a sense of a ‘community’ within the boundaries of the settlement. The settlement was socially fragmented and the boundaries between individual groups ran along the kinship lines. (...) This web formed what can be called a ‘social whole’, for it is within the boundaries of this web where the important social activities took place. Members of this net visited each other frequently, they cooperated in economic spheres, celebrated together every Christmas, birthday, baptism or funeral; male members worked together. In other words: members of this ‘kin web’ socialised within this network more intensively than outside it; they tried to avoid social contact with their non-relatives, whether they lived in the same locality, or in other localities.” (Budilova, 2009, p.9-11) This implies a large misperception of the Roma. The community is

not locally based, but there are several communities which are kinship based, and might even cross the boundaries of the neighborhoods.

Within the gypsy culture, there are more differences. According to Kirilov (2014) there is a threefold in cultural background: Yerlii, Kardashari and mine-workers. The Yerlii is the largest group, with Roma who settled permanently and left their nomadic lifestyle behind. Yerlii could be separated into two subgroups: Turkish and Bulgarian Roma. In Rozova Dolina, the Roma neighborhood in Asparuhovo, the Turkish Roma are the highest in number. A large difference is religion: the Turkish Roma are Muslim, and the mosque plays a large role in their daily lives.

Kirilov explains that the elder Roma, age 45 and older, have memories of socialism and a better image of their relation with the country. Their memories are of the life before 1989, when there was a total employment, regular wages, diplomas, medals, visits in the country etc. This older generation keeps its nostalgic idea of a more tolerant relationship with Bulgaria and socialism and still has high hopes of a comeback of this tolerance. The other way around, young Roma, born and raised in the years of transition, don't have memories of the old order and are more sceptic, sometimes more bitter and aggressive

when their ethnic community is totally rejected by the macro.

Kirilov continues: are Roma being discriminated by the macro and therefore poor, uneducated and influential for crime, or are they themselves guilty for their situation because of their mentality, inability and unwillingness to develop and live like other people? The first explanation is known as structural, the second as cultural. The explanation for the discrimination of Roma has the preference of human rights organizations and the majority of the Roma. Cultural explanations, which a lot of Bulgarians like to believe, are those arguing that every effort in terms of integration won't be successful and pointless, because the mentality of the gypsies typically associated with thievery, fraud, lack of discipline and laziness can't be changed.

Exclusion of Roma can be overcome by long-lasting and systematical efforts, means, coordinated action of the state and municipal institutions. But it seems that Bulgarian society has too many problems to deal with those of the gypsies; we have enough poor Bulgarians to think about poverty in the slums.

Many Bulgarians even think Roma are privileged – “not paying tax, electricity, water, housed wherever they can.” There are even ideas about ethnic Bulgarians being ‘discriminated in their country.’

Integration of Roma is a political disadvantage. Politicians and parties embrace

it as a cause, instead of losing elections. A substantial part of the Bulgarians have a negative attitude towards Roma. As a consequence the true behavior of the integration of Roma will lead to a loss of votes for parties and governments who take action on integration.

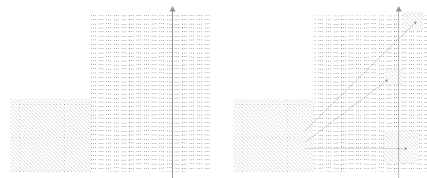
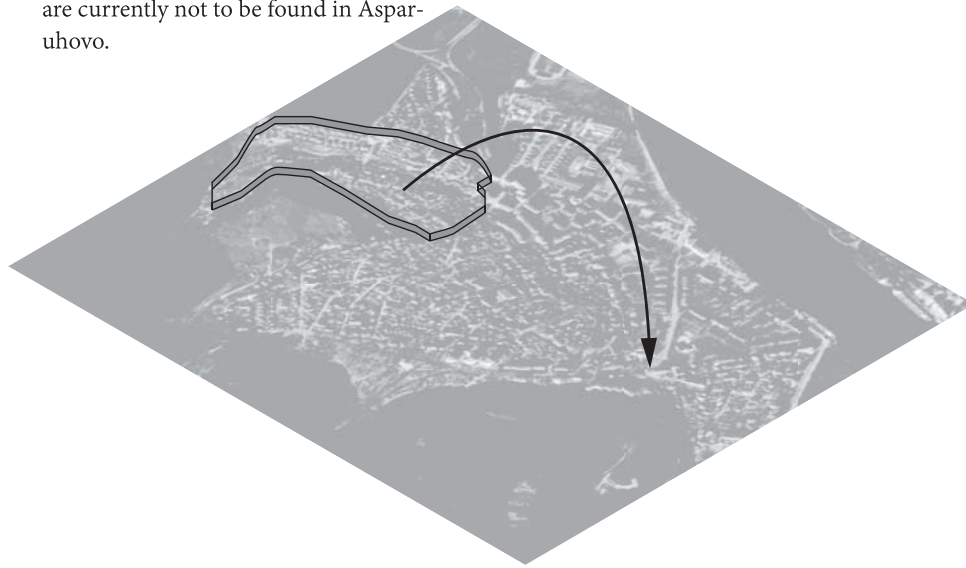
What to do with the Roma? The logical answer is that the Bulgarian society should make real effort in the integration of Roma – more education, employment programs, and decrease poverty. However, this option is not realistic, as mentioned before. The idea of integration is easy in political speech, reporting to Brussels, media-exposure, election programs, but hard to realize in reality. The execution of it demands real steps and efforts that Bulgarian politicians, institutions, and the Bulgarian society as a whole don't desire.

### *The role of design*

Considering previous words, it seems impossible to solve the problems in the current situation. What is particularly clear is that there is a lot of misunderstanding at both ethnic Bulgarian civilians as in the Roma societies. However, this issue can be solved. As both of the subjects are now segregated in different neighborhoods, improvements can be made regarding the literal integration, meaning increasing the amount of contact between the two. What is also stated is that there is especially a lack of confidence within the youth, since they have never experienced other situations than the current one. Design can play a role in this.

In the design of the gullies in Asparuhovo, it is possible to use this information. The green-blue vein between the waterpark and the marina crosses a small gypsy part. This implies that this gypsy part will not be as remote as it is right now. It will be connected stronger to the center of Asparuhovo, and people visiting the waterpark will pass along the gypsies, where they would normally never come. One of the things I want to integrate in the gully system is public space focused on children and youth. This could be a skate park for the youth, and a playground for the children. These facilities are currently not to be found in Asparuhovo.

The benefit of having a playground is that especially with young children, parents will come to the playgrounds as well, with human contact between different ethnic groups as a result. This could mean that the gypsies are coming out of 'their zones'. I think this is a first step in the integration process. The more attractive the facilities are, the more the kids will insist on going there with their parents. For the youth, skating or playing games with their age peers, could mean that there will be social acceleration and they want to live up to their peers.



Top: Roma movement  
 Bottom: Roma settlements scheme  
 Right: Roma village Rozova Dolina



Since the Roma community is really closed, and the ethnic Bulgarians are scared to go inside their territories, I want to create an east-bound movement to get the gypsies out of their zone, Rozova Dolina, and attract them towards the East gully. An important fundamental idea behind this is that the target of my design is not to solve the problems between Roma and Bulgarians, because this is not a spatial issue. But at the moment the Roma and Bulgarians do not get in contact with each other, because they don't have reasons to. But I think this is definitely the first step for solution of the problems.

To make Roma feel safe and to avoid discrimination and exclusion, the strategy

used is based on so-called 'safezones'. Along the gully, at least one, and possibly more in the future, safezones are implemented along the gully. These small settlements are recognisable Roma settlements, with functions like a mosque, school or other related functions. The clustering of functions makes the likelihood of personal discrimination smaller because of the social control and the power of the group. In the design, the Roma settlement is designed as a school and a mosque in a cluster, so Roma-parents are actively concerned with their school-going kids, as they are now far away from sight. This is the reason that there is a lot of drop-out at Roma schools.



At the left gully you can see that there is a much larger Roma community than at the right gully, where there are only a couple of gypsy buildings. This makes the two gullies very different in character. The gypsy neighborhood is a very closed and inaccessible community. Police and ethnic Bulgarians stay away from there if possible. The right gully is very accessible. It is the center for the whole of Asparuhovo, at the dark green point. Because the gully always has been acknowledged, enough space has been reserved for this and it is included in the social tissue.

- Residential Building
- Legal Family Housing
- Commercial (shops etc.)
- (Illegal) Family Housing (Roma)
- Empty space

--West gully--

- ~ Situated in gypsy neighborhood
- ~ Narrow streets, no space for gully
- ~ Difficult socially isolated community

Gully intervention would mean:

- ~ Too handle the rainwater, an underground rainwater system has to be built

*or*

- ~ A spatial system can be developed but houses have to be demolished

--East gully--

- ~ Situated in a regular neighborhood
- ~ Broad streets, enough space for gully
- ~ Socially diverse
- ~ Center of Asparuhovo

Gully intervention would mean:

- ~ Adapting the watersystem to a sufficient system, but also possibilities for other interventions in combination with the watersystem

*Conclusion*

- ~ The two gullies are two totally different systems with different assignments, spatial layouts and social conditions
- ~ There are no realistic possibilities in creating one united system

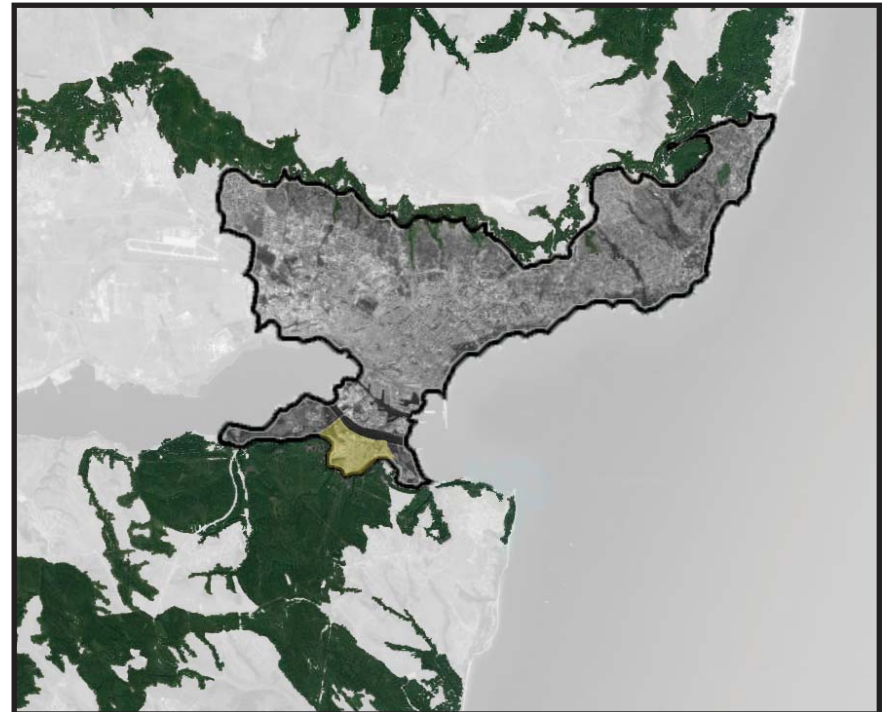
>> I will make a design for the east gully, because of the more interesting possibilities




## Connectivity


In the right-bottom picture it is visible that Varna is surrounded by quite a lot of nature. Asparuhovo, the yellow part, is attached to the largest forest around Varna. In this, I only talk about wild forest; not about city parks. This forest is partly a broad-leaved forest, and partly a pine forest, as visible on the right-top picture. The forest is raw, untouched and not maintained. It has some hidden treasures, like this fortress and the remains of an old monastery.



One of the key issues presented by the municipality of Varna (bottom picture) is to make Varna's inhabitants benefit fully from its natural richness. The fact that Asparuhovo has a very large nature reserve attached to it is an opportunity that could be used strongly. Not only would making this nature area accessible to the Varnese people be a good thing, but for tourism it could also mean a lot. Hiking in this forest is an extra activity that could be added to the brochures. In terms of economical benefit, this is a large plus.



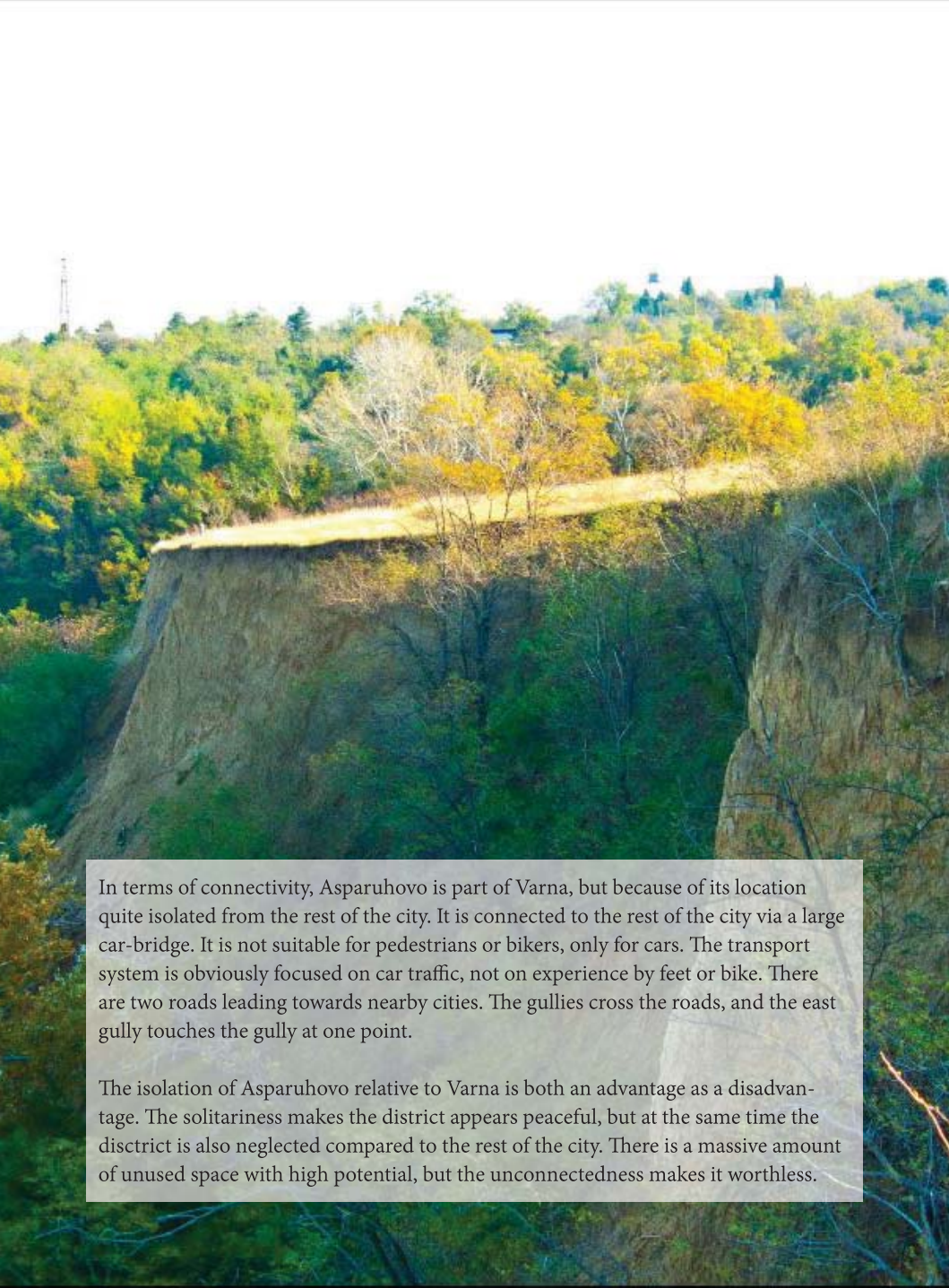
 **Introduction: The vision of Varna in 2022**

- Varna's inhabitants benefit fully from its **natural richness**
- Varna's **hotels are fully booked**
- **Active public / private cooperation** that keeps innovating the public area
- **Lively water front** (playing, jogging, eating, fishing, shopping, boating)
- Varna's **bathing water are clean**
- Varna is **safe from flooding and much greener**



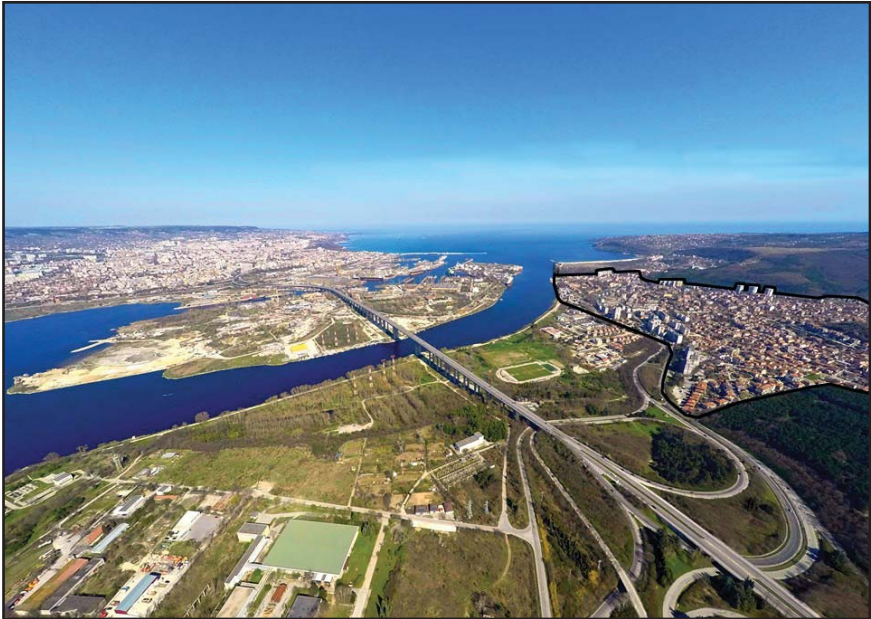
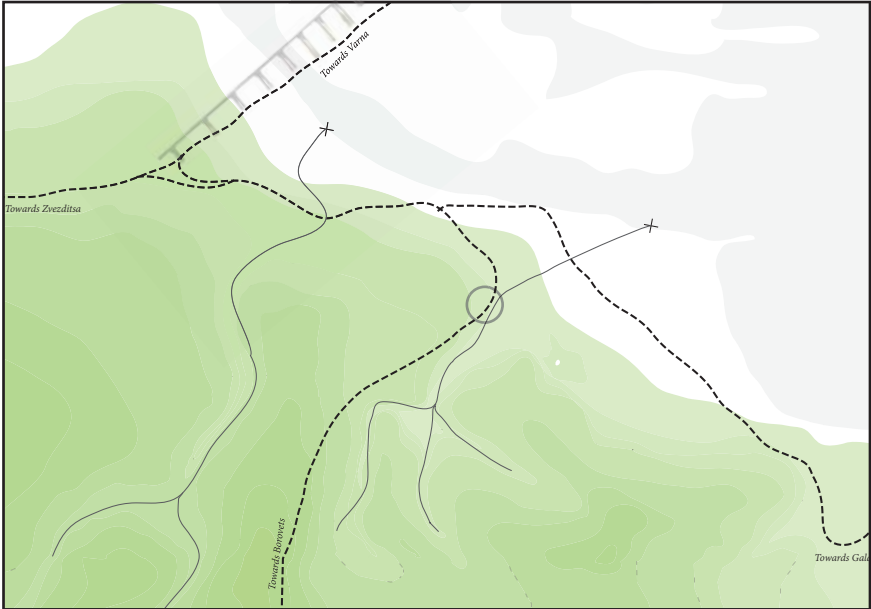
 

Left: Vision of Varna  
(Municipality of Varna)  
Right top: forestry behind  
Asparuhovo  
Right bottom: Positioning  
of Asparuhovo and  
surrounding forestry

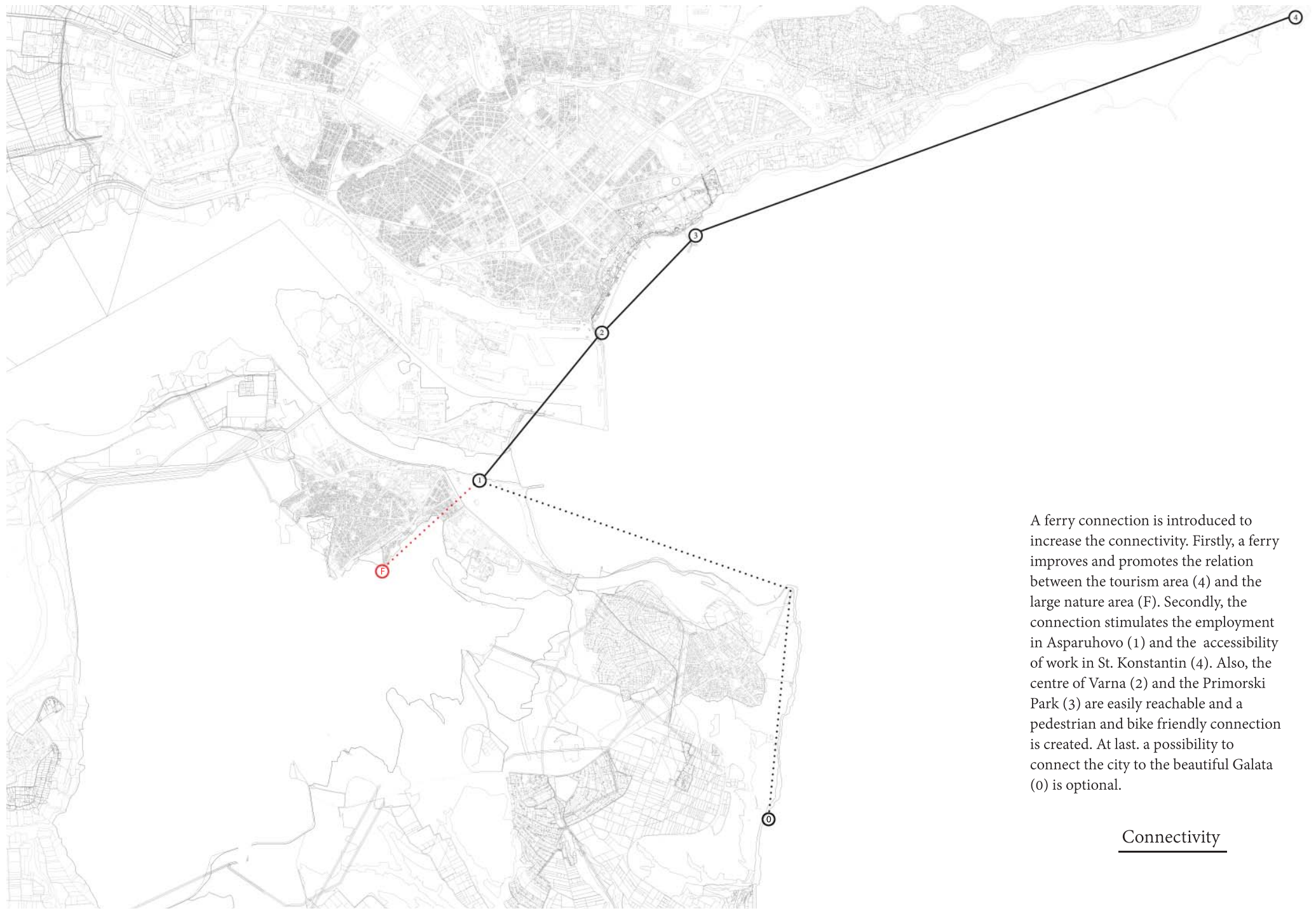


In terms of connectivity, Asparuhovo is part of Varna, but because of its location quite isolated from the rest of the city. It is connected to the rest of the city via a large car-bridge. It is not suitable for pedestrians or bikers, only for cars. The transport system is obviously focused on car traffic, not on experience by feet or bike. There are two roads leading towards nearby cities. The gullies cross the roads, and the east gully touches the gully at one point.

The isolation of Asparuhovo relative to Varna is both an advantage as a disadvantage. The solitariness makes the district appear peaceful, but at the same time the district is also neglected compared to the rest of the city. There is a massive amount of unused space with high potential, but the unconnectedness makes it worthless.

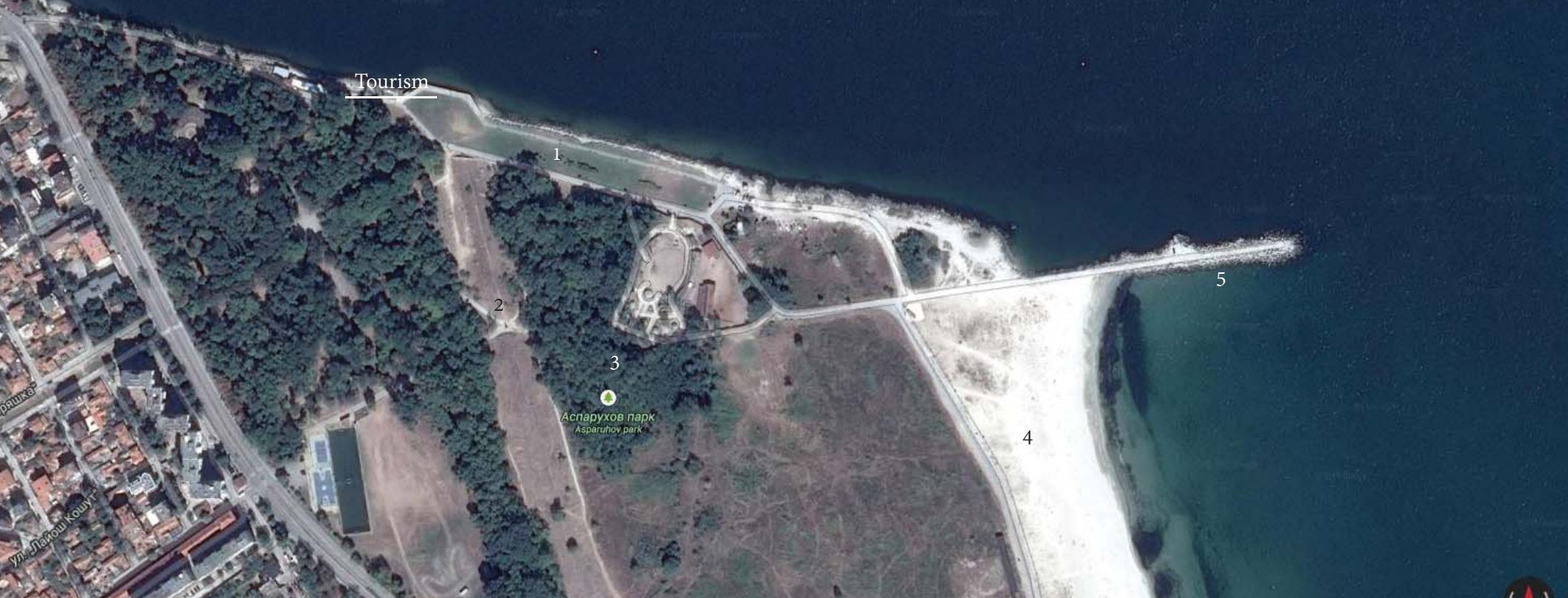


Left: Nature reserve behind Asparuhovo. Right top: Connectivity map. Right bottom: car bridge towards Varna.



A ferry connection is introduced to increase the connectivity. Firstly, a ferry improves and promotes the relation between the tourism area (4) and the large nature area (F). Secondly, the connection stimulates the employment in Asparuhovo (1) and the accessibility of work in St. Konstantin (4). Also, the centre of Varna (2) and the Primorski Park (3) are easily reachable and a pedestrian and bike friendly connection is created. At last, a possibility to connect the city to the beautiful Galata (0) is optional.

### Connectivity



Spatial qualities in Asparuhovo North-East



1



2



3



4



5



6 (not on map)

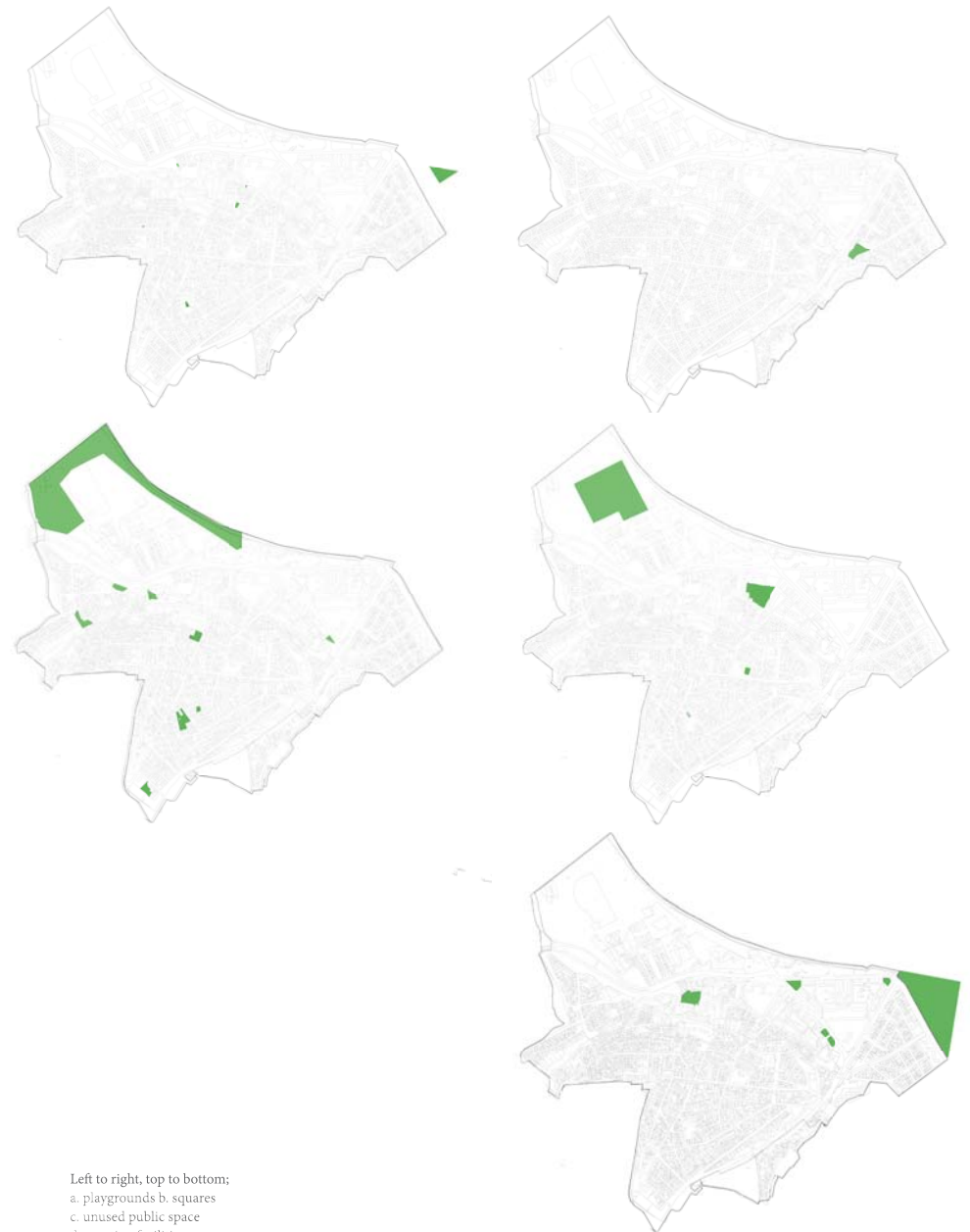
The high potential area, just mentioned, is especially focused just behind the beach. This is a beautiful place, with a lot of possibilities to make this place work perfectly. There is a beautiful boulevard (1) along the canal (which ends in the sea), that is unmaintained but beautiful in essence. There is a statue of warrior Asparuhovo (2) literally hidden in between to bushy areas. There is a beautiful reed landscape (3) with terrific nature. There is a beautiful white beach (4). The breakwater is used for fishing (5). However, nothing happens here because of the bad connection. With the introduction of a ferry connection, this will be the place of arrival from the ferry. This opens up for opportunities for tourism. With yachting and the luxury tourism, this place full of potential could be a counterpart of the current tourist areas as St. Konstantin that offers crash-tourism that is not sustainable and short-term moneymaking. The Bulgarians want to attract West-European tourists. However, the current state of mind in tourism is to drop large building blocks. This also starts happening in Asparuhovo; in picture 6 a newly built complex is visible. With access to these nice natural resources, you expect a different tourist with higher standards in luxury. This is why it is needed to capture conditions to make sure this area won't also suffer from Crash-tourism.



## Public space

Because of the warm climate in Bulgaria, it appears that people live more outdoors. People meet each other on the streets. This was clearly visible when I visited the city, in late October, the Primorski Park in Varna was still very crowded on normal weekdays. Along the beach there are several places to be seen like the photo underneath. Geothermal baths release the hot thermal water on the beach, where people created their own free spots of interaction. Places like this are seen quite a lot in Varna. In Asparuhovo, however, are not so many public spaces for people to meet each other. The available public spaces are too far removed from the houses, and are too large in scale for the amount of people in Asparuhovo. This results in a lot of unused large public space, but no useful public space for people to meet.

In Asparuhovo, the public park is barely used. That makes sense, because the design is extremely monotonous and the badly maintained. The design is geometrical, and centered towards the middle square. This makes the park very boring and unattractive, and not a nice place to stay. The park is dating from 1929, and breathes the lost glory.





## Gray architecture

As a foreign designer, I was astonished by the architectural crisis in the country. Bulgaria has been under the influence of dictatorship until 1989, which has a huge impact on the outlook of the urban landscapes. It must be acknowledged that a lot of these buildings are spatially unattractive or dysfunctional. But after a 70 years of building according to this ideology, it became the identity of Bulgaria. Now, 25 years after the fall of communism, you see everywhere throughout the country attempts to get rid of this identity, with a lot of capitalistic references. I got interested in this, because I had the feeling that there is beauty hidden in these communist structures, but it seems invisible. To understand this, I had to dive into the ideas where the Soviet architecture was based on.

The beginning of this history dates in 1917, when the Russian Revolution started. The revolutionaries strived for a total restructuring of society and economy, with the intention of starting a world revolution. This resulted in a union where employment and equality were important factors. The official form of art during the Russian Revolution was Constructivism. This form of art was a direct reflection of the prevailing ideals in society.

On basis of quasi-mathematical principles, the constructivist brought geometric forms into compositions and consciously left out any subjective expression. It was the awe of machines, the architect and applied constructions that led the constructivists: in this, they saw a guidance for their strive towards clarity, exactness and against subjective individualism.

4 Years after the Russian Revolution the artform was prohibited by the social realism: the form of art was too far removed from the people, according to the Soviets. However, the idea of the simplicity of geometry and lack of expression lived forth in architecture. But instead of the attention the artists paid on the composition, the young architects based their buildings on efficiency and on daily processes. Nowadays, 25 years after communism, the question is how to deal with this past? Is there a modern translation of the constructivistic ideology?

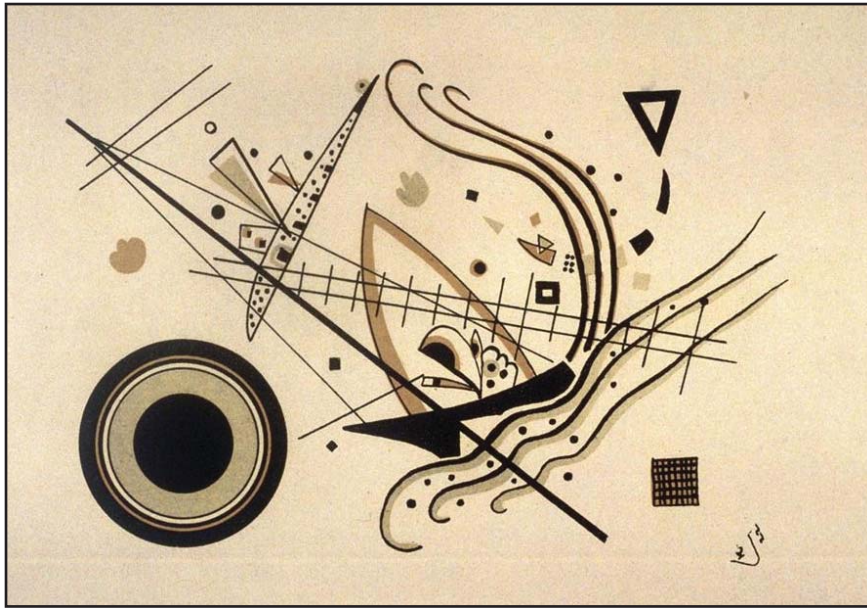
This is how I was inspired to base the vein on the constructivism art: geometric clarity, well thought-out proportions, and, according to the later Soviet-thought, the social processes going on in the neighborhood.

General

design

A Vital Vein for

Asparuhovo

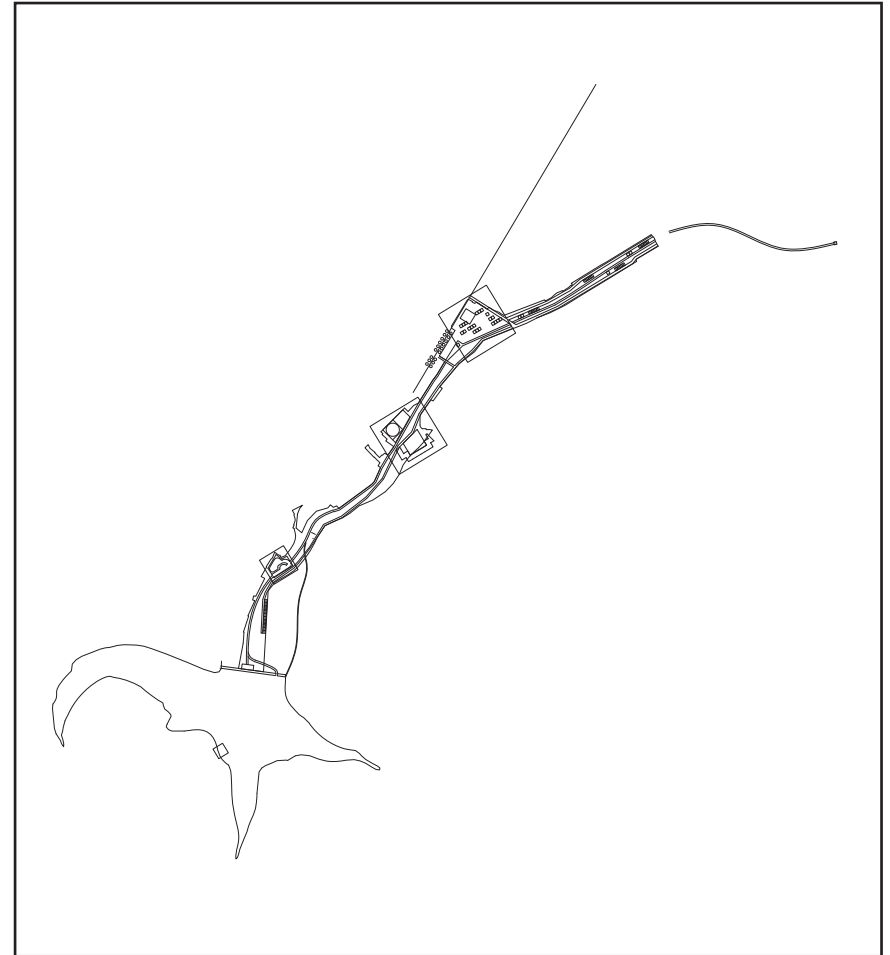


As mentioned before, the layout of many Bulgarian cities was highly influenced by the Soviet period. The idea that underlies, and the idea where the Soviet era started with, is the idea of constructivism. The picture above shows a painting of Wassily Kandinsky. Intuitively, this form of art relates strongly to the fundament of the Soviet cities, including Varna. However, this form of art never flourished due to other circumstances. Still, the idea behind constructivism in an artistic way seems very suitable in the composition of the cities. This is how I came to the idea to base the vein on the constructivism art: geometric clarity, well thought-out proportions, and, according to the later Soviet-thought, the social processes going on in the neighborhood. The geometrical means I use for this are squares: these shapes, both connected to Islam and Constructivist ideology, seem the perfect means to structure the vein and to make it recognizable.

The buildings, landscape or other interventions along the gully are all based on the squares. For all the components of the gully, 3 rules should be applied: it is based on the square, it is designed in geometric clarity and well thought out proportions, and it should relate to the gully. Although these geometric design ideas are originated from the constructivism, difference in layout will happen. I will design some of the squares with functions that have desired processes as a result. It should get the gully started.

Left: Wassily Kandinsky - Composition. Right: Composition of gully

The gully will be a notion in the neighborhood for all of the daily necessities, but also for the people to express themselves. After a long period of monotonous communism, it is time for the people to get to know each other and the differences. Diversity is an important aspect of the vein.



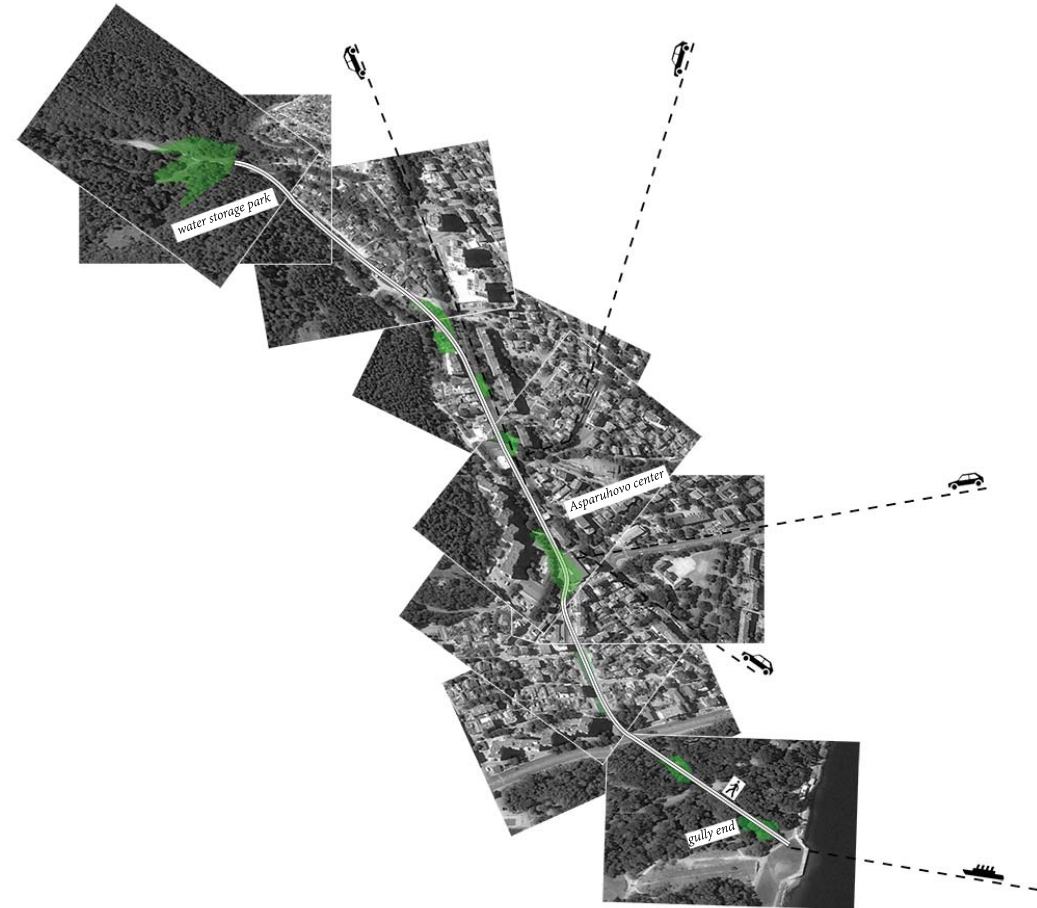
## A Vital Vein for Asparuhovo

The general idea for the design could be summarized with the title, A Vital Vein for Asparuhovo. The existing stormwater gully will be used for several purposes, but a dual distinction is to be found in the spatial relationship with the gully .

Firstly, in parallel direction with the gully, it functions as a connection between the large nature reserve and recreational water park, and the city of Varna, as it is connected by the ferry that arrives in the newly built harbor. This enables citizen of the city of Varna and tourists at the St. Konstantin tourist area to visit the beautiful, rough and untouched nature as Asparuhovo is attached to. This corresponds with the ideas of the municipality of Varna.

Secondly, in perpendicular direction with the gully, the gully functions as a thread that strings together several functions that mean something to the Asparuhovians or that could lead to development of the neighborhood. The 2 km long gully could in this sense lead to a new linear center of the neighborhood. The current center is dealing with spatial weaknesses and was for a large part demolished by the floods of June 19. The reconstruction of the center will be spread out along the gully. This solves one important part of the spatial problems at the square, namely the fact that the density is too high. Also, this allows expansion and growth of the center, needed when the tourism and the ferry connection at the bottom of the gully succeed. Other smaller functions like playgrounds and meeting places could also be attached to the Vein.

The diversity of functions existing from different inputs along the gully creates a lively and interesting corridor towards the nature reserve and is a great addition to the viability of the district.





Masterplan 1:2000  
N

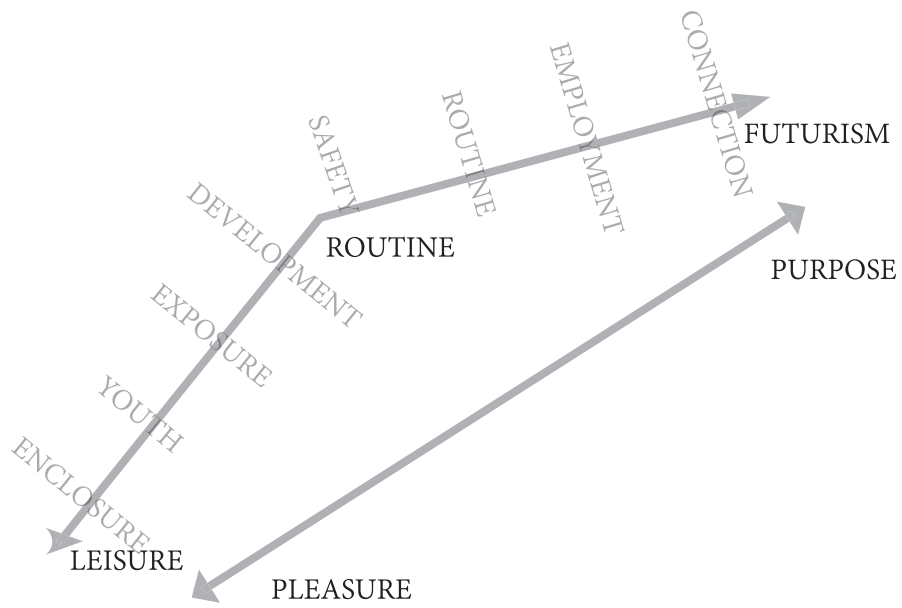
Gentalsquare

Roma safezone

Youth territory

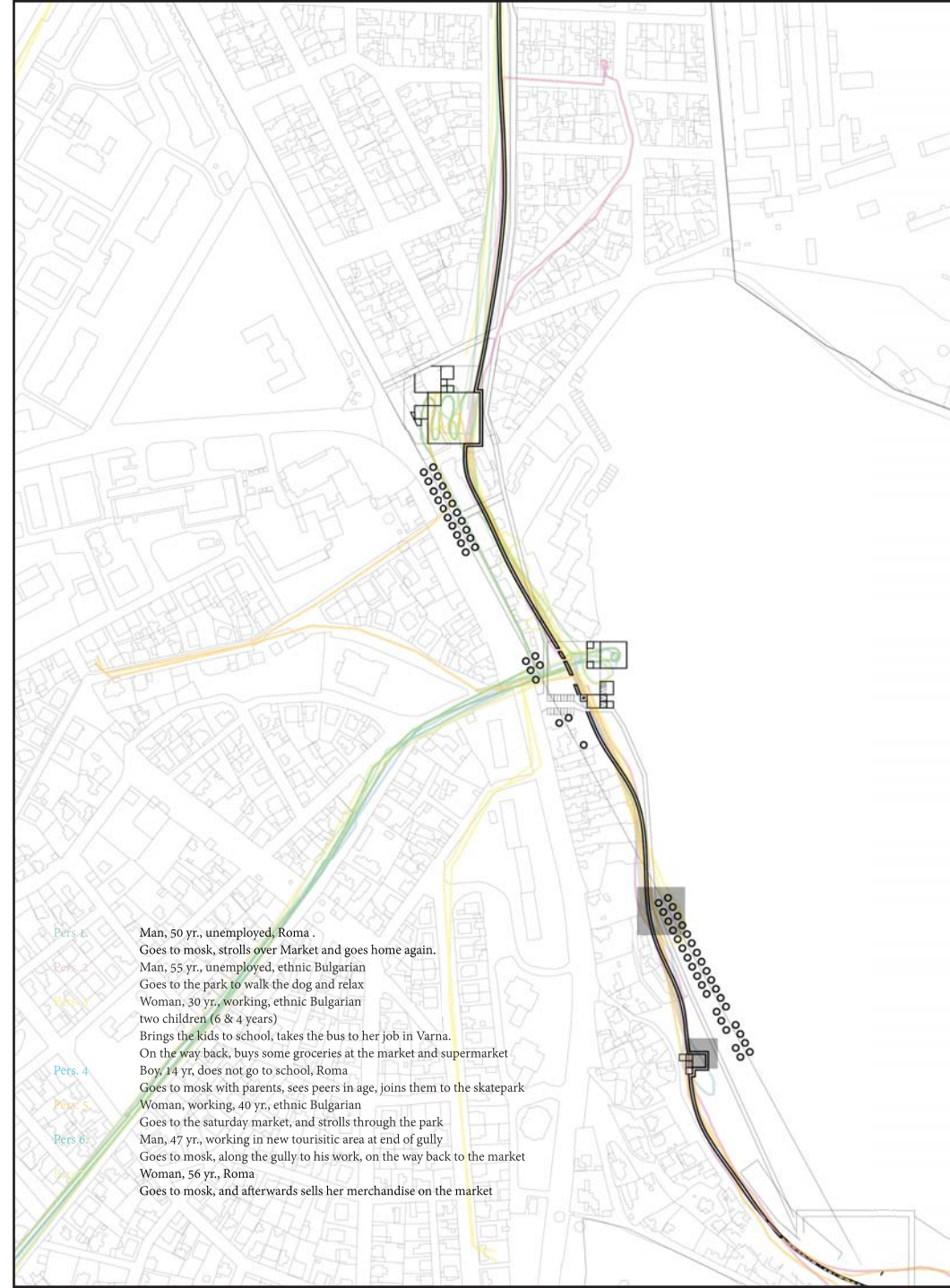
Asparuhovo dam

Asparuhovo statue



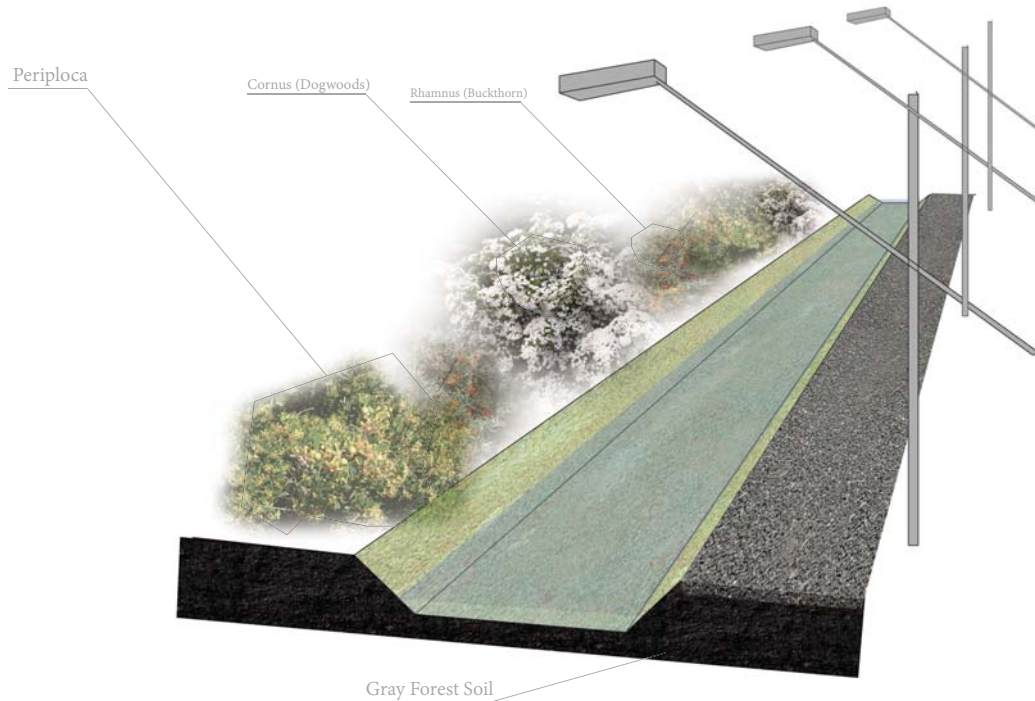
It is roughly based on three different abstract focal points: leisure, routine and futurism. These zones indicate the most important theme around the places. Within this classification functions can be placed in the proper area. Pleasure and purpose refers to the constructivist ideology.

The design is based on the processes related to the 3 most important ingredients of the gully: the park, the market and the mosque. I imagined the daily life of 7 different persons. How do they move through the neighborhood? It became apparent that the Roma will arrive via one particular street, which is the shortest to go to the East-gully. This is the reason I situated the mosque in this place. This could be the 'home base' for the Roma. On the left side, the school will be situated. This is a quiet place, and the Roma can bring their kids to the school when they go to the mosque. The fact that the school is next to the mosque, could possibly lead to less dropout of Roma kids, as parents are more closely related to the school (in spatial terms). The left side, where the center used to be, will be the market, and at the top the reservoir with the park.



## The connector

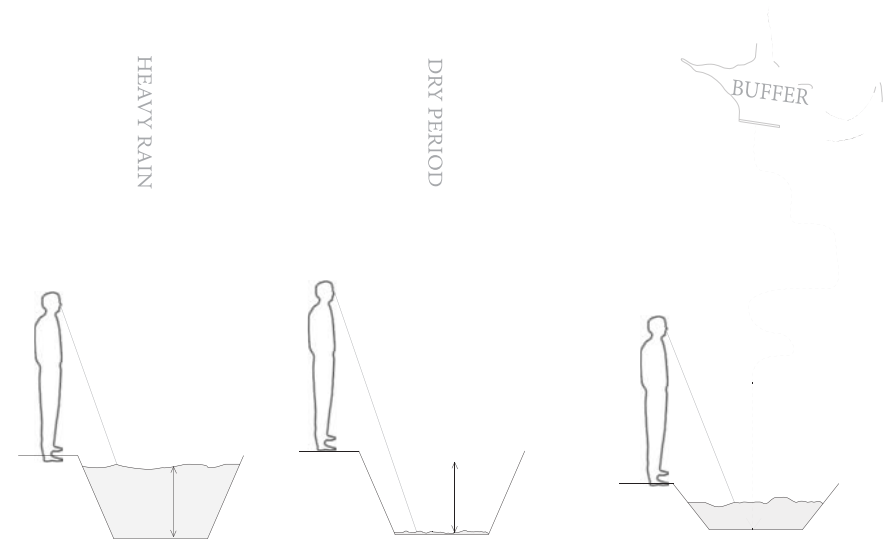
The gully is the leading element in connecting all the functions. The elements that differ in positioning, but are constant throughout the gully, are the local planting species that are concentrated along the gully. These planting species should all be colorful and rich in texture, like the species in the picture below. When blossoming, the flowers stand out against the moderately gray environment. For autumn and winter, when there is no blossoming of flowers, some evergreens or shrubs rich in texture, form or color should be implemented as well. This ensures quality (variable throughout the year) year-round. Another element in the gully as a connector are the lanterns. The lanterns make a small reference to the Constructivism, which was the beginning of the Communist era of Bulgaria (see page 55). Inspired by the Kandinsky paintings, these lanterns represent the fascination of this era with technology and art. The technological detail characterizing the paintings has never been used in the end, and the lantern will be subtly referring to the ideology that the Communism is based on. The path leading along the gully is the third element which runs from top to bottom. According to the positioning, it can



Left: Gully elements. Right: Gully transformation.

CURRENT SITUATION

FUTURE SITUATION



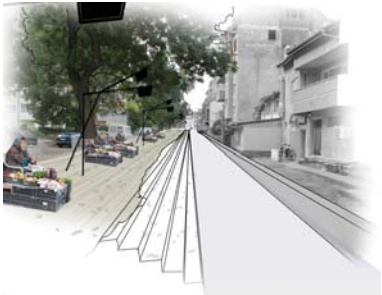
run in different situations in the gully: along it, over it or taking a detour around it. Mostly the path is leading along the gully like the picture on the left. In this situation, the relation with the water is the strongest. An important improvement of the gully in the new situation is that the water will stream constantly through it, like illustrated above. In the old situation the gully was completely filled when it rained (and of course sometimes it even flooded), and sometimes it was completely dry. It means that there was no value in this gully, because it only streams when people are indoors (when it rains) and when it does not rain, the gully is dry. It meant that people threw trash in the gully because of the absent relationship with it. In the new situation there will be a constant flow of water, meaning that it can be used in making the gully a dynamic and lively axis through the district, with the sounds and reflection of the water. In this new situation the gully also can be less deep, so a more direct relation with the water exists. This decreased fluctuation also results in a more stable planting at the riparian zone of the gully. The next page shows the previously mentioned elements along the gully. According to the positioning along the gully it depends whether the elements are used. Generally, a distinction is made between built and un-built zones.





Roughly, a division in archetypes in the gully can be made. The unbuilt type is the major type. It is the basis of the gully, described in the previous section. The colorful planting is the basis for a lively axis through the neighborhood, and is the starting point for future development. The other type, the built type, runs through important gathering places, and attempts to bring people together. In these parts, the gully functions as an important tool in bringing people together, while the unbuilt type is mainly focused on the parallel movement. For example on the square, the gully is designed cascading, so people have a place where social interaction is related to the water. The lighting poles, as an important characteristic and recognizable element, appear at several places in the gully and especially in the parts where it is needed the most, they really emphasize at the gully as an important axis through the neighborhood.

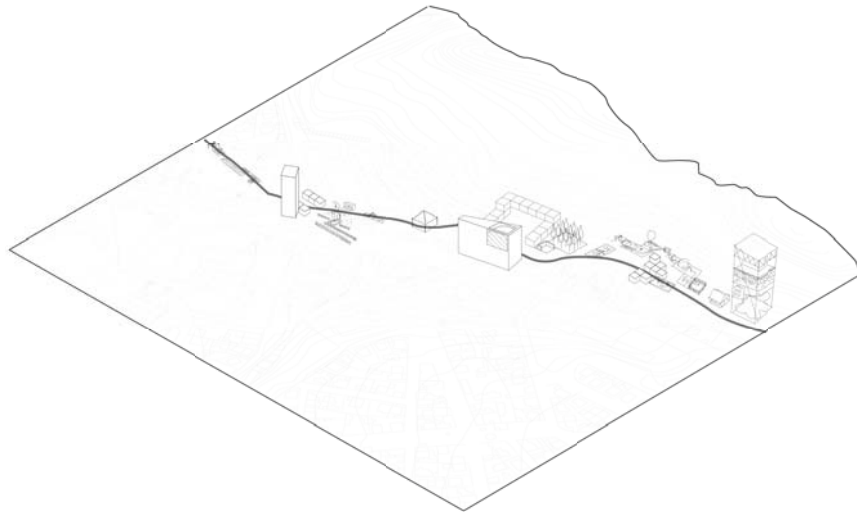
Left: build-up of gully. Right: two gully types.



built gully



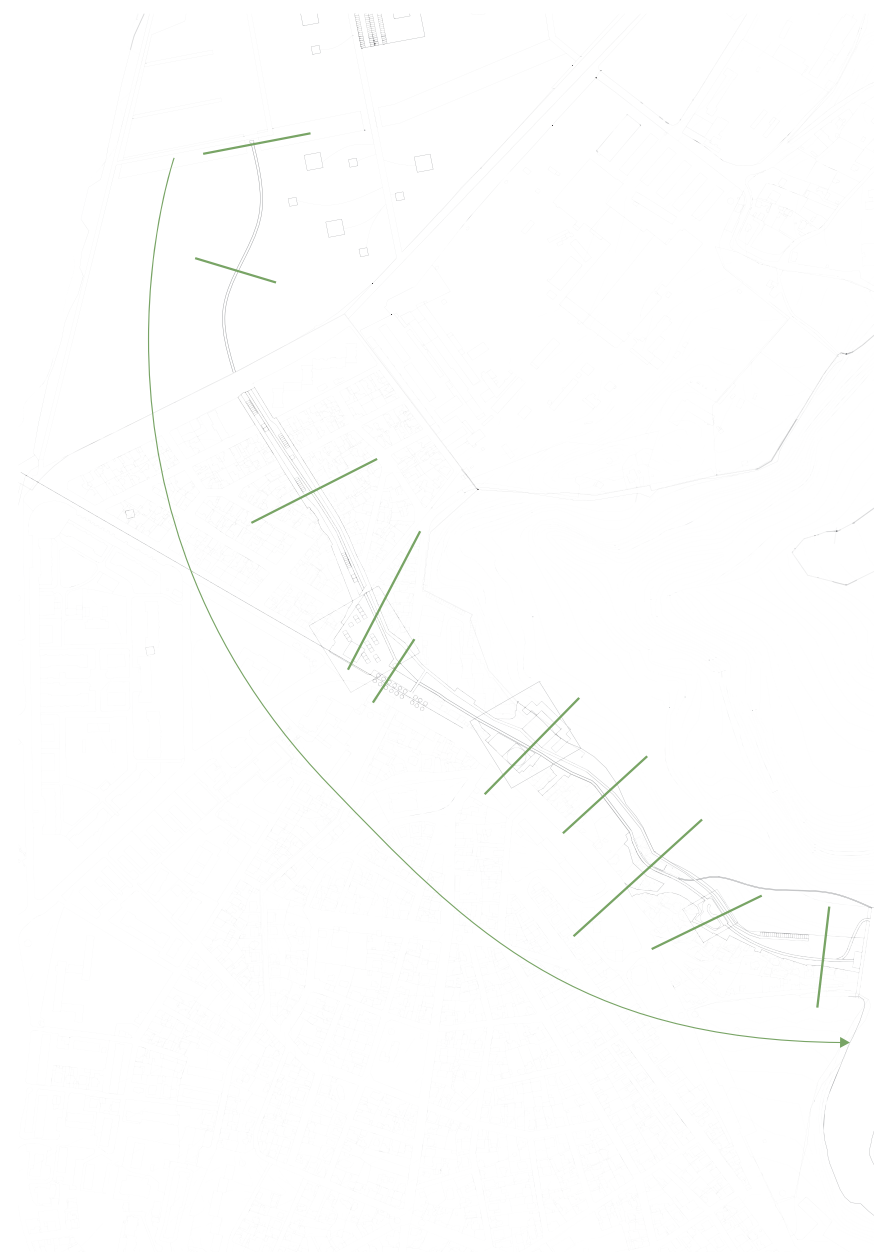
unbuilt gully



### Gully as a medium for spatial development

The pathway along the gully is focused on the parallel movement: the direction, up towards the dam, is emphasized to express the oblong character. The simplicity of the design attempts to achieve some goals. In the first place, the colorful planting and the dynamic path, are simple and attractive new elements in the area, that stand out above all the grayish architecture and dead public space. This should attract people, resulting in life on the street. Secondly, these people are invited to create spaces along the gully themselves: how would they like their gully to be? Since Bulgaria has been communistic for such a long time, expression of creativity is one of the things lacking in the streets. This gully, as a new linear center, should provoke people to express themselves and create, so the gully become a linear line of diversity. Starting points are the safezone (with the Roma art), the square (open market and people) and the youth territory (expression of energy). People are seduced to make the gully theirs: expose sculptures, start little shops or cafetaria with home made products, start small communal gardens, whatever may be of importance for the Asparuhovians. Visitors, arriving by ferry, experience a diversity of Bulgarian and Asparuhovion culture walking through the gully, and the residents find their new comfortable place in the district.

Left top: Current state of gully. Left bottom: future expansion of gully. Right: Gully after intervention.



Left: Sections along gully. Right: Positioning of sections along gully, top to bottom.

## Coherent and recognizable architecture

To make sure that the new buildings attached to the gully, that are part of the whole strategy, are recognizable as being parts of the strategy, it should be clear that these buildings are related. To achieve this, research has been done to the materialization of the elements, to find out what is important for all the different parts, but also for the gully in general. The bottom picture shows the research for the mosque.

What appeared to be important in the research, was that all the parts, Roma safezone, square, dam and tourism zone, all have a particular relation towards their positioning in the landscape or in the society; they are all about being seen or to vanish:

Roma safezone: as in the name, this zone should be safe. The consideration in appearance of this zone, is the fact that currently, Roma are stigmatized and discriminated (see page 32). If the safezone would look like a Roma flagship, it will probably provoke a lot of resistance. Ethnic Bulgarians will argue that this does not belong here, and vandalism will play a part.

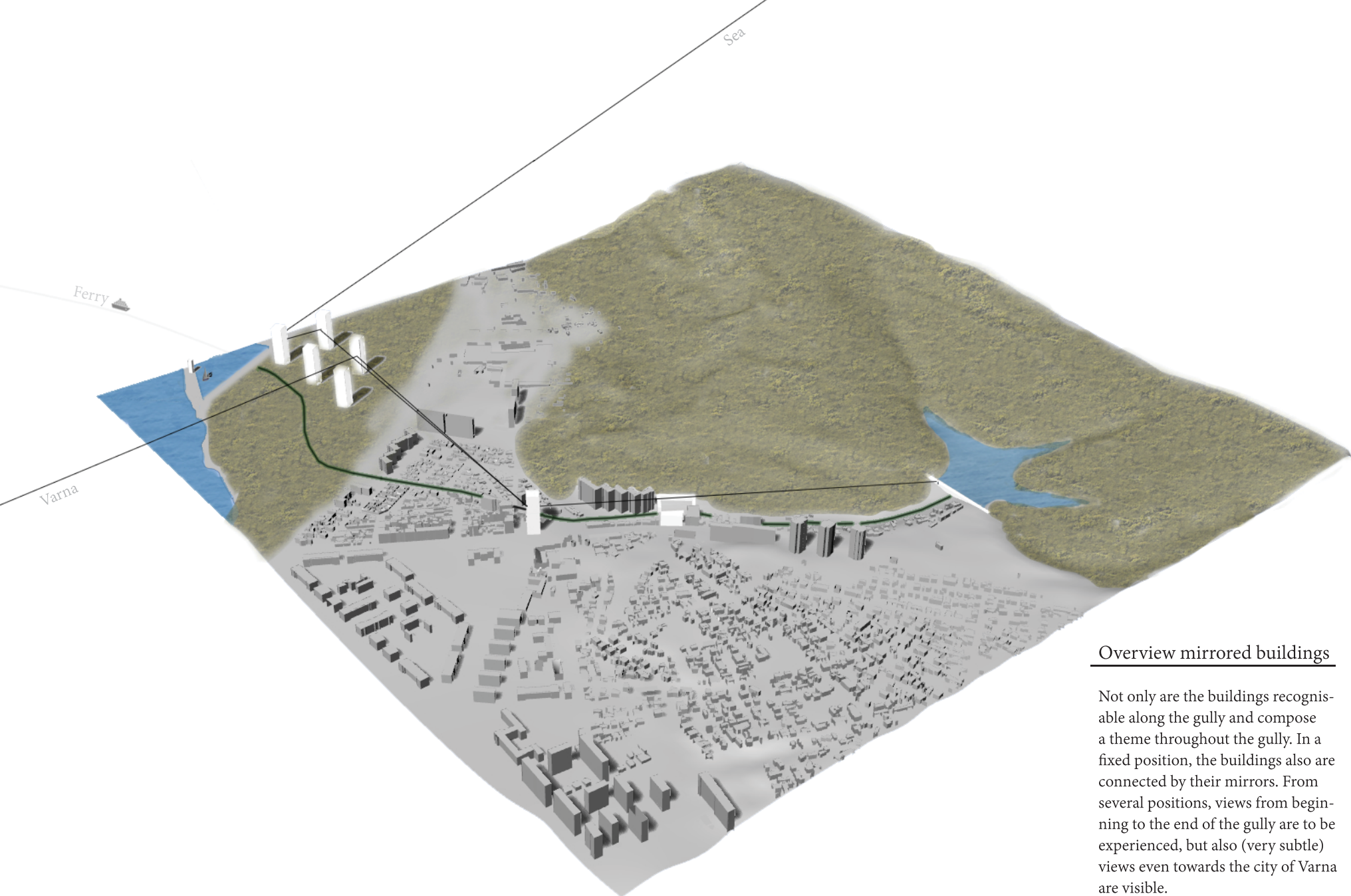
The tourism zone is about sustainable tourism. Since the tourism in St. Konstantin has a big impact on the landscape, the approach for tourism in the new Asparuhovo part will be different. A different tourist will be addressed: a tourist that is also interested in nature. Core in the new architecture in this zone is prevention of damaging the landscape.

The dam marks the end of the gully. This is what will be on the postcards. This should be a special feature, and should interact with people.

An intervention that applies to all these different ways of dealing with outward influences, is the use of mirrors or mirrored materials. The mirror blends in its environment, and at the same time interacts and changes constantly. It is a subtle way of respecting the landscape, in the tourism zone. In the safezone, it is also about blending in its environment, but also about the discrimination: looking in the mirror you see yourself, but behind the mirror are the ones you discriminate, the Roma. Are they really that different? When approaching the dam, you see yourself approaching in a giant mirror. This super large mirror has a lot of potentials, like shows and photo opportunities. But most of all, it blends in the landscape beautifully.



Right above: Mirror Houses, Bolzano, Italia, Peter Pichler Architecture. Right below: Treehotel, Harads, Sweden, Tham & Videgård Arkitekter.



### Overview mirrored buildings

Not only are the buildings recognisable along the gully and compose a theme throughout the gully. In a fixed position, the buildings also are connected by their mirrors. From several positions, views from beginning to the end of the gully are to be experienced, but also (very subtle) views even towards the city of Varna are visible.

# Detailed design: elements

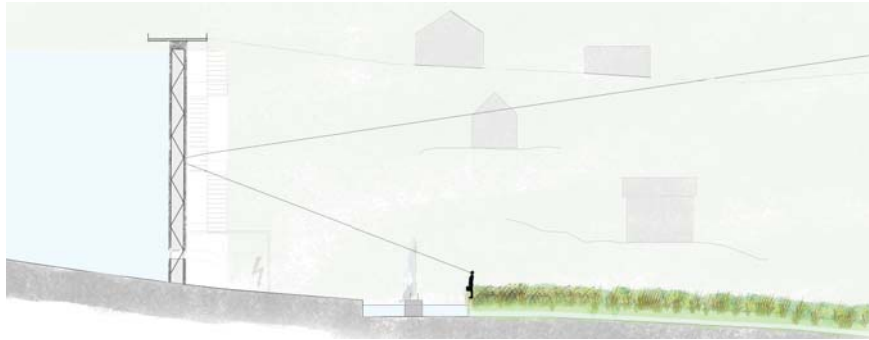
Dam

Safezone

Square

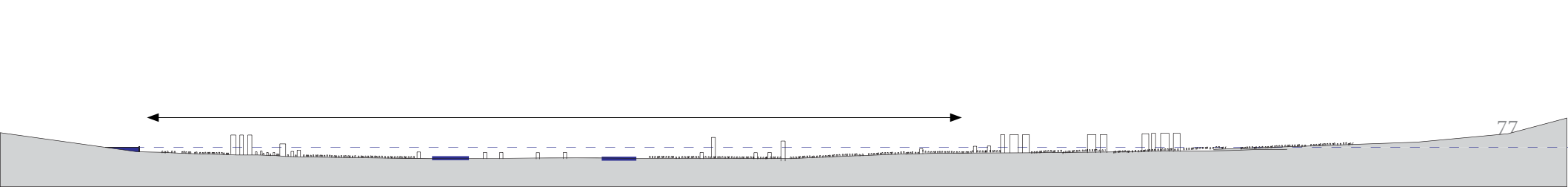
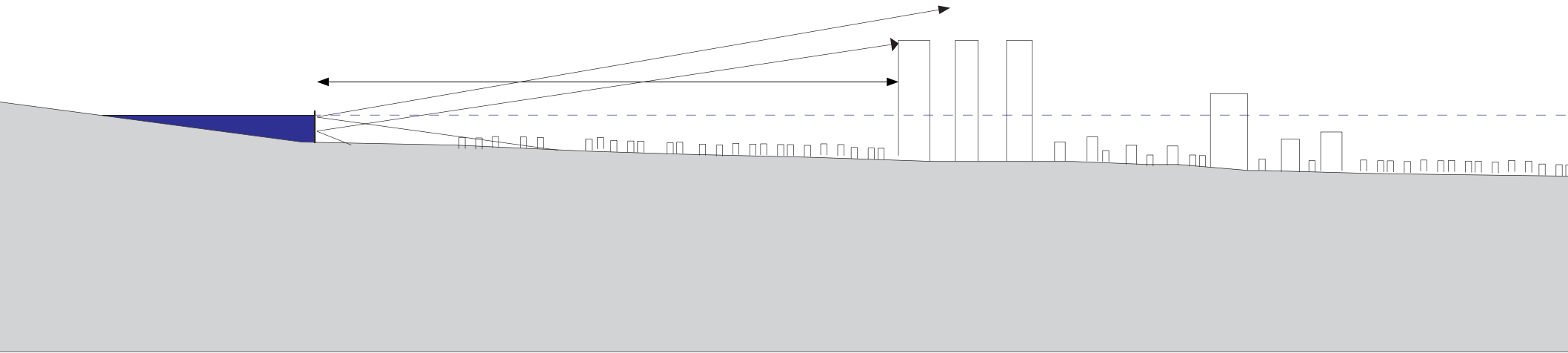
Tourist zone/harbour

Top: close section of dam and direct environment. Middle: dam on scale of Asparuhovo. Bottom: dam on scale of Varna



## The Dam of Asparuhovo

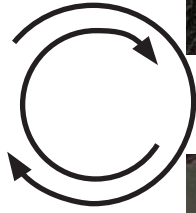
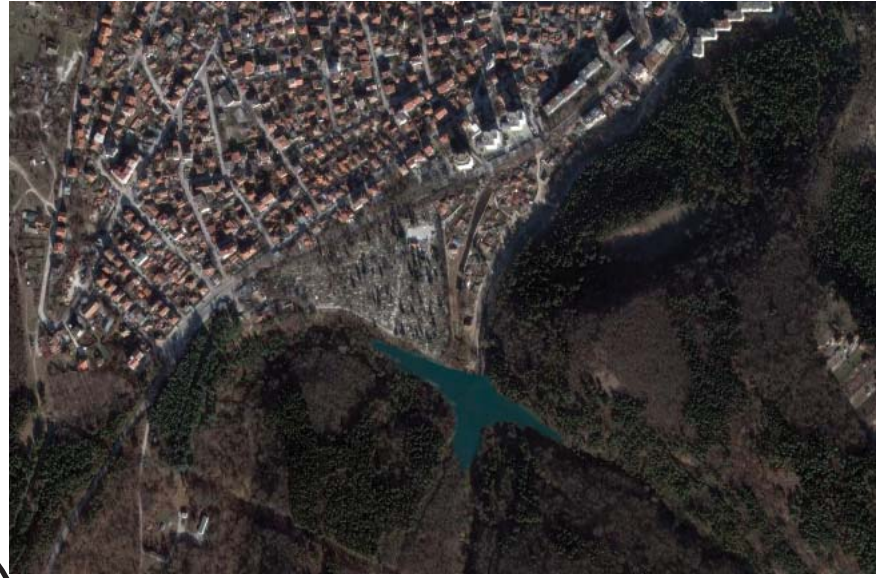
The dam marks the end of the gully. Firstly, the dam is a functional object. It retains a water mass. Secondly, it has some interesting spatial qualities which can be used for the district. The first important spatial property is the strong separation between (water)park and urban tissue. While at this moment there is a weak transition between nature reserve and the urban tissue (towards the nature reserve there are gradually less buildings), with the dam a rigid and very strong separation between city and nature exists. This will contribute to an introvert park situation that offers a feeling of distance of the city, even though geographically it is situated at the same position. Another important spatial property is the presence of a large wall blocking the road suddenly. By materializing this enormous wall with a mirroring surface, it becomes a special feature that could characterize the city. Depending on the position and angle before the mirror, it reflects the city. In this way, a relation with the rest of the city is established. The colorful gully is extended visually in the large mirror. The mirror could play an interactive role in manifestations like dance groups, 'selfie' projects, and emphasizes the visual boundary between the city and the recreational backland.





The dam is a rigid and grand block at the end of the line. This is also the quality: it separates Asparuhovo from the reservoir and the nature reserve. This image shows the mass at the end of the line.





Phases of expansion and contraction of the lake

## Facts & stats about reservoir

1959272 m<sup>2</sup> catchment area

2 l/day average rainfall in Bulgaria

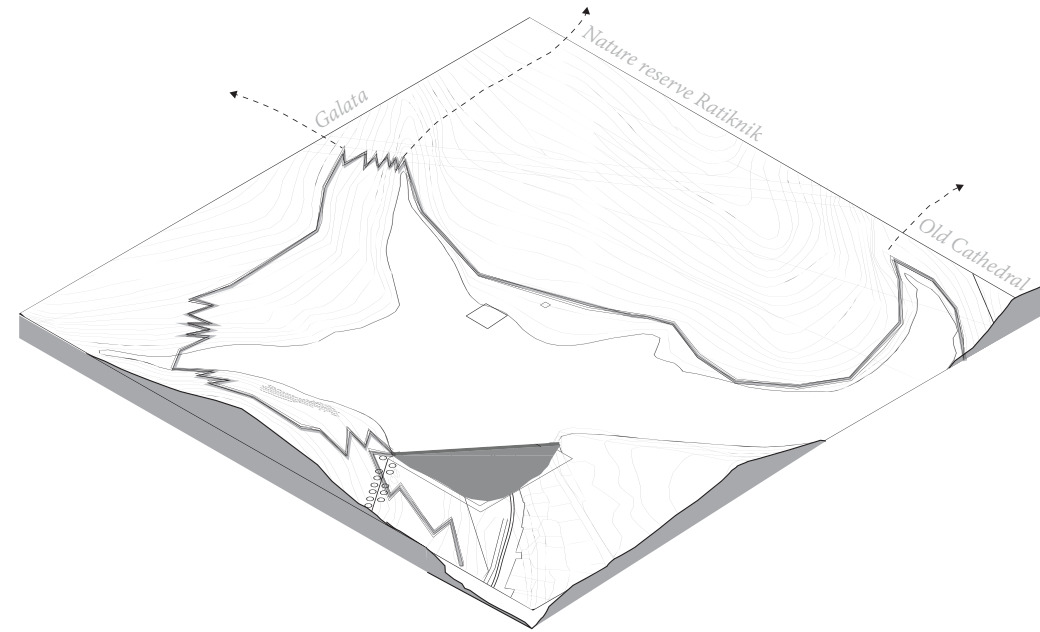
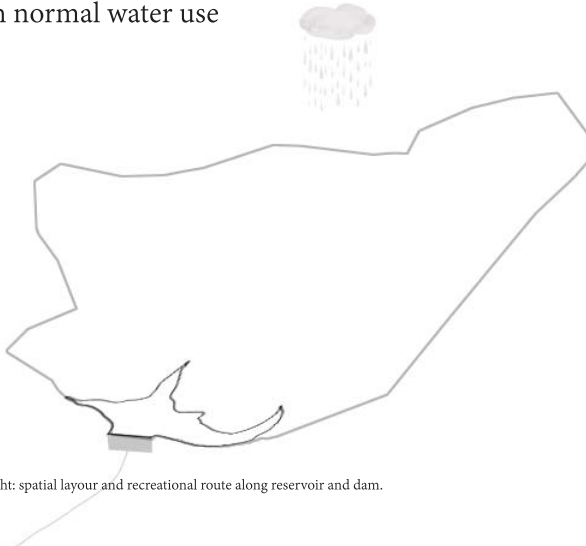
reservoir contains 120.415.000 l

it takes 30 days to fill the reservoir with the average amount of rain  
(when dam is closed)

24.483 residents in Asparuhovo  
average daily use of water in Bulgaria is 341 l per day

40 l/s in gully could stream through gully all year round  
or, when needed, and another system is implemented,

the reservoir contains for 14,4 days of water for the whole  
of Asparuhovo with normal water use



The reservoir is based on the natural topography. The three branches earlier showed are all combined at the same point into one gully. A bit further from this point I will place a dam. This dam is situated between two hills and makes a large buffer for the rainwater. The lake is filled with the rainwater and can increase and decrease constantly. The rainwater can in the future be used as an alternative source of water for purposes like flushing toilets or watering the plants in the garden, or after purification as drinking water. The buffer creates a possibility to slowly release the water. This guarantees a nice flow of water through the gully year-round, instead of sometimes enormous amounts of water, and sometimes nothing. It is also possible to save the water in summer if that is more urgent. After calculations it appears that if the reservoir is filled, there will be enough drinking water for the whole of Asparuhovo for two weeks. The reservoir also functions as a recreational park. The distance from the city because of the high dam makes it feel separate and solitary. A walking route is constructed through the park, along the edges and between the trees. This means a difference in spatial experience. A stage is situated at the border of the water. At the other side of the water a hill is situated where people can sit to watch a show. The waterlevel makes that different times of the year the scenery is different.



In these pictures above, different situations of the lake are visible. In the first picture, the highest waterlevel is shown. With a maximum depth of 16 meter, and a perimeter of 1,5 km, the lake is quite intimate but still suitable for swimming, or other water activities. Since it is a collection of rainwater, it is not drinkable yet, Though, the water is clean to swim in or sail on. The water could be made cleaner if the supply channels of the rainwater are planted with water-purifying plants. To make the water clean enough as drinking water, it should be processed in a water treatment plant, after being pumped out of the dam. The bottom picture shows the lake with a low water-level. The spatial experience becomes totally different: the lake becomes very small and a large

Left top: Reservoir at highest level. Bottom: reservoir at low level. Right: Section of riparian zone.

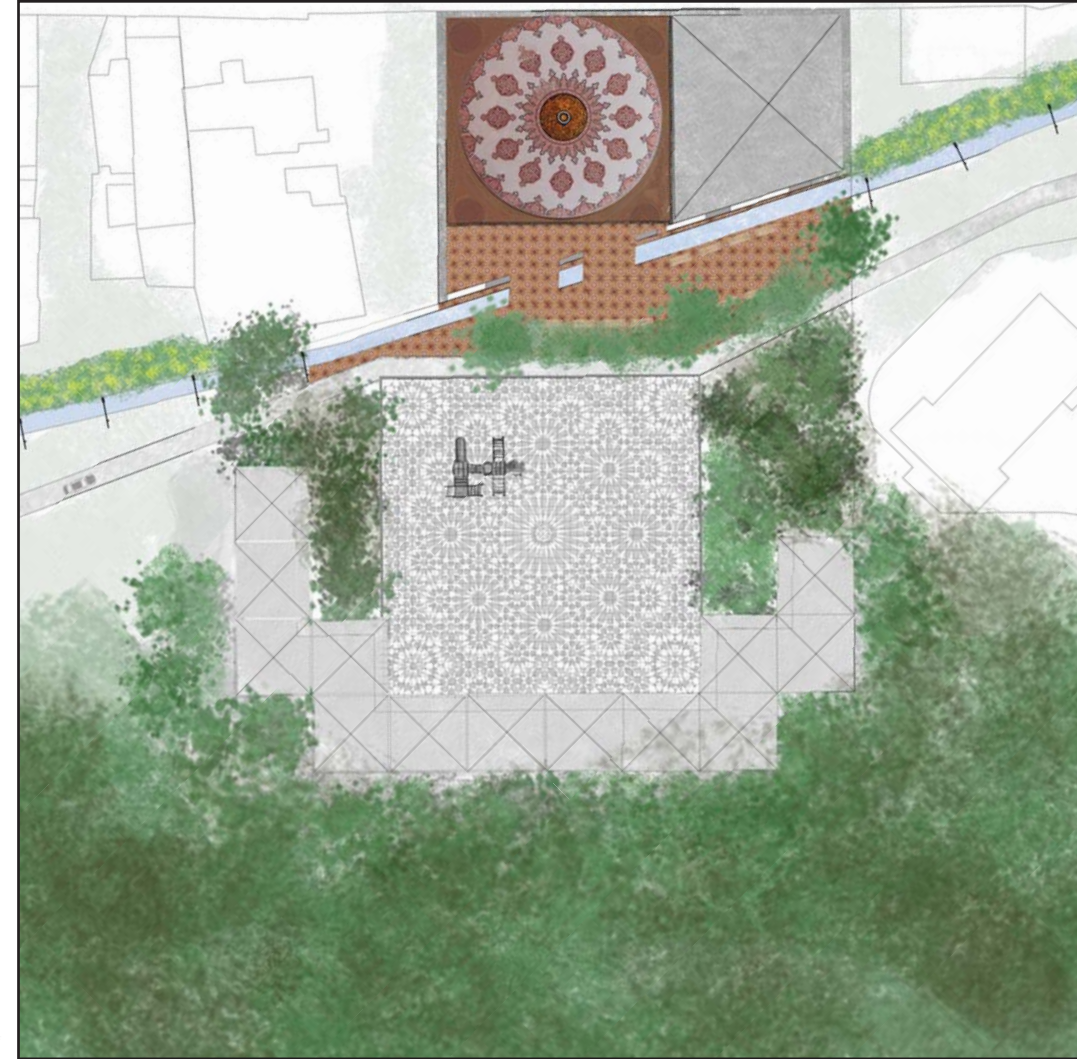
brownfield exists. The fact that this lake is in motion, and is different every time, results in a changed spatial situation regularly. With a low water level, people are able to walk on what was the lakes bottom a few weeks before. Being concerned with the water also creates awareness of the water situation in the neighborhood. The changing water levels result in an unstable situation for plants. To ensure an attractive riparian zone for recreational purposes, a bufferzone is created with several small longitudinal ponds on the perimeter of the lake. Here, the water remains stored, and creates circumstances for the aquatic plans, mainly reed, to grow (top picture). The different experience through lake, riparian zone, forest zones etc create a varied route for people to walk.

## Roma Safezone

The Roma Safezone is based on the principles described on p. 35. The Safezone is an enclave: a distinctly bounded area enclosed within a larger unit (thefreedictionary.com). As the current Roma territory is *attached* to Asparuhovo, this enclave is *enclosed* by Asparuhovo. This enclave is designed to be a safe place for Roma to stay. This safety is necessary for the Roma to come out of their territory. This is why an enclave was chosen above mixing Roma functions between existing ethnic Bulgarian functions. An enclave differs in sense of possession: this area clearly belongs to a different group. In this case, the Roma own this small enclosed community, and everybody else here is a guest. To enhance this, it was decided that the Safezone should start with two important functions: a mosque and a primary school. This Roma community, as described before, is Islamic. Placing the

mosque, which is visited several times a day, outside of the Roma territory, stimulates the desired East-bound movement. This walk towards the mosque forces the first contact between the Bulgarians and the Roma. The situation of the primary school in the Safezone with the mosque achieves the social control: the parents of the Roma kids check if the kids are not bullied or discriminated. This prevents kids from dropping out of school, since the current problem is that the Roma kids are discriminated at the merely ethnic Bulgarian schools.

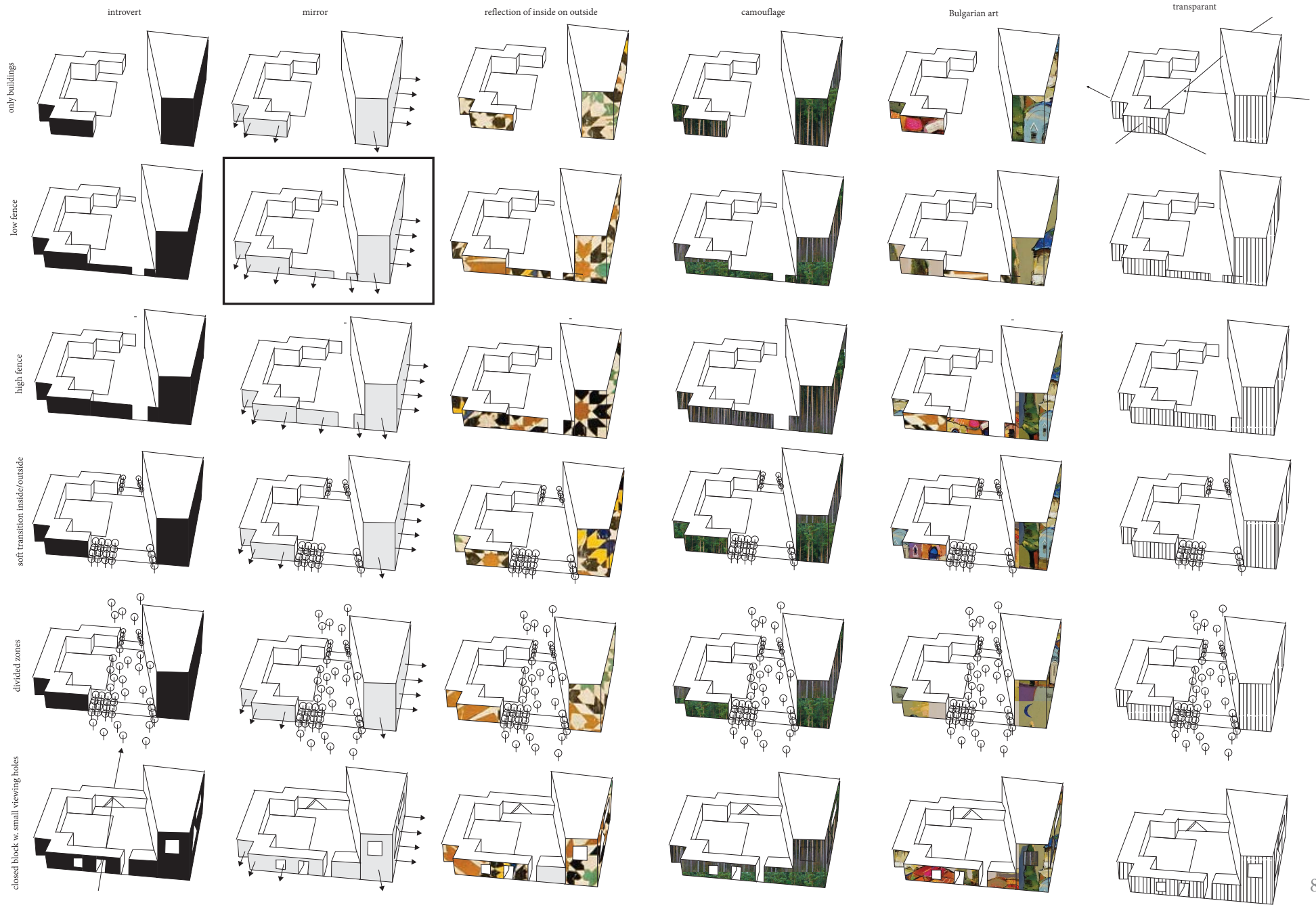
The Safezone is designed in such a way that there is a high level of interaction between the mosque and the school. The school with its square is visible clearly when standing inside the mosque. In this way, the social control is established. Visitors are directed through the Safezone.



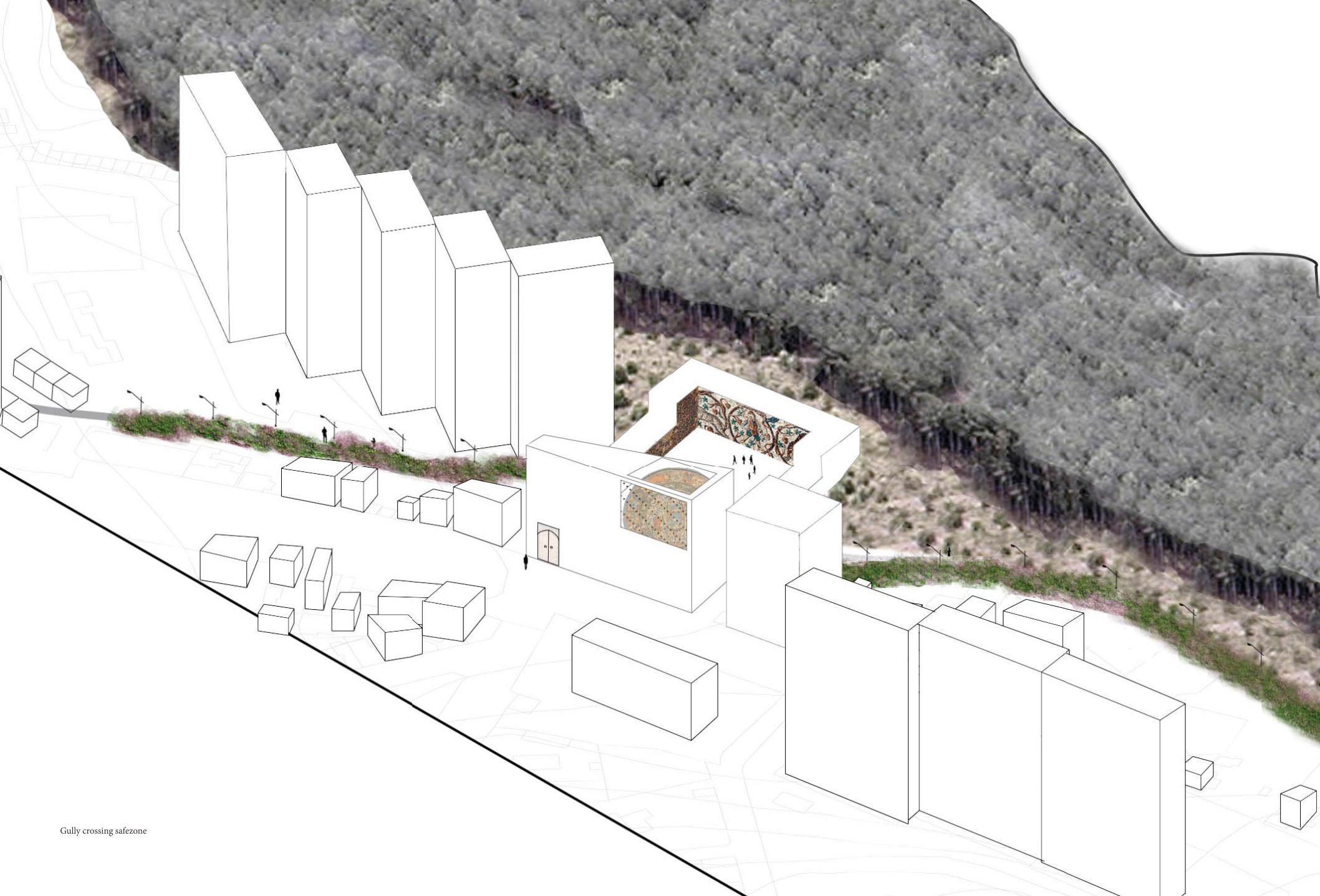
Both ethnic Bulgarians and tourists are welcome to the Safezone. The path also communicates this. It is directed through the Safezone. The pathway with the lanterns continues through the zone, but the closed (mirrored) ring fence tells visitors that they are entering a different area.

The tourists play a role in the social processes. As neutral outsiders, they are not prejudiced about the Roma, and will probably treat the Roma equally as the Bulgarians. This will help in humanizing the Roma: Bulgarians will notice that Roma might actually be able to help the society if they are embraced.

Left: section of safezone, with illustration of social control. Right: plan of safezone.



Process of finding positioning of safezone in landscape. Matrix shows different possibilities in facades & spatial transitions.

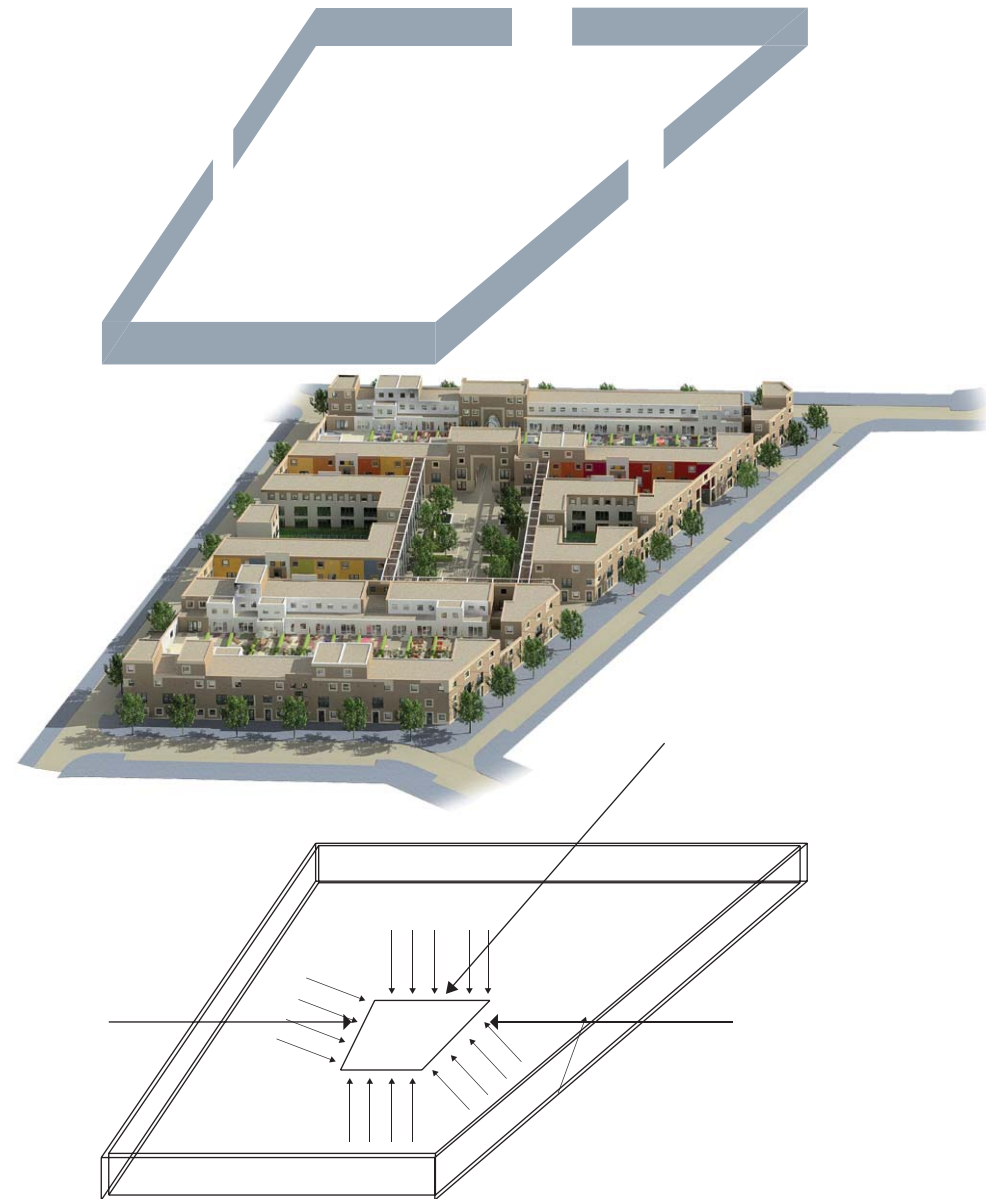


Gully crossing safezone

## Case study safezone

As a reference for the Roma safezone, I studied the project Le Medi in Rotterdam, by Geurts & Schulze architecten. This project is comparable in some aspects. First I will explain something about the project. The project was initiated after a request of the government, addressing 'building multicultural'. In the problem area Bospolder-Tussendijken in Rotterdam, Le Medi was designed with an eye for cultural expression of ancestry of minority groups in the neighborhood. Le Medi is a mix of Moroccan, Spanish and Italian influences. Style elements of these countries are strongly visible; arches, colour and framings are abundantly present. The project is situated in neighborhood of typical Dutch dwellings of the 60s. The outer rows of dwellings of Le Medi include the new neighborhood

by forming a thick secretion. This refers to old city walls surrounding a city, the typical Medina. Le Medi can be entered through three entrances that are gated: the seclusion, and the orientation of all the dwellings on the central square, strongly give the feeling of being a guest in a community. The fact that the municipality leaves the maintenance to the residents confirms this. The semi-public space is owned by the residents, and this creates a high level of safety, and the feeling of being a guest when the area is entered. This is what is interesting for the Roma safezone. By surrounding this enclave, and clearly let it be owned by the Roma, every other visitor entering the enclave will feel a guest. Safety by social control, with the means of centralization and protection with walls, are the

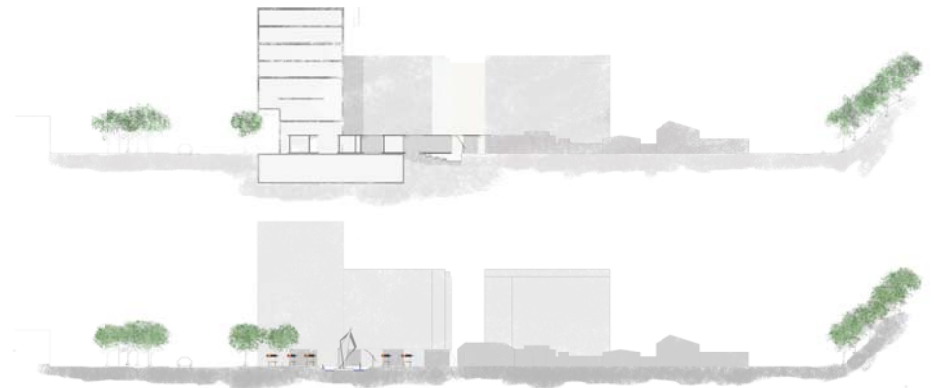
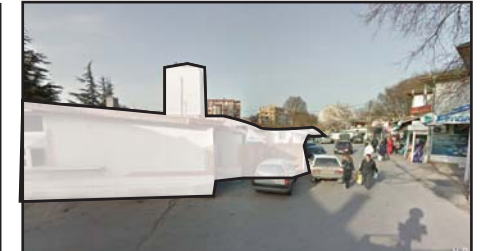


Top right: Wall around Le Medi. Right Middle: Le Medi, Rotterdam, Geurst & Schulze Architecten Right Bottom: entrances & social control

## Central Square analysis

The square is the heart of the vein. The former structure already offered a clear center, that geographically looks like it grew in time. The street pattern indicates that the original urban tissue was focused around the gully. The city must have expanded over the edge of the hill. The heart of the city is not recognizable on eye level, because of the density in the heart. A large plinth blocks the heart of the city. There are a lot of stalls and small shops tangled up, and giving a very messy impression. The square is quite large in size but this is not clear. During the floods of June 19, the underground water transport channel exploded because of the high water pressure. This resulted in especially a lot of damage, here at the square. A lot of shops are demolished because of this damage. With the design of a new square, the flaws of the old spatial situation need to be taken into account.

Since the central square is an important place for Asparuhovo, and also is an important turning point in the gully, this needs to be taken into design. At first, a division has been made between shops and stalls: the shops has been positioned at the North-East side of the square. The southside is reserved for temporary stalls, events, and offers some spaciousness in a densely built city. With the supermarket put underground, the largest volume is still at the same place but doesn't block the entire square. The building block is replaced for another building that is similar to the ones in the tourism zone. With this intervention, coherence in the gully sequence is visible. The transition between gully and square is rigid: the square functions as an entity.

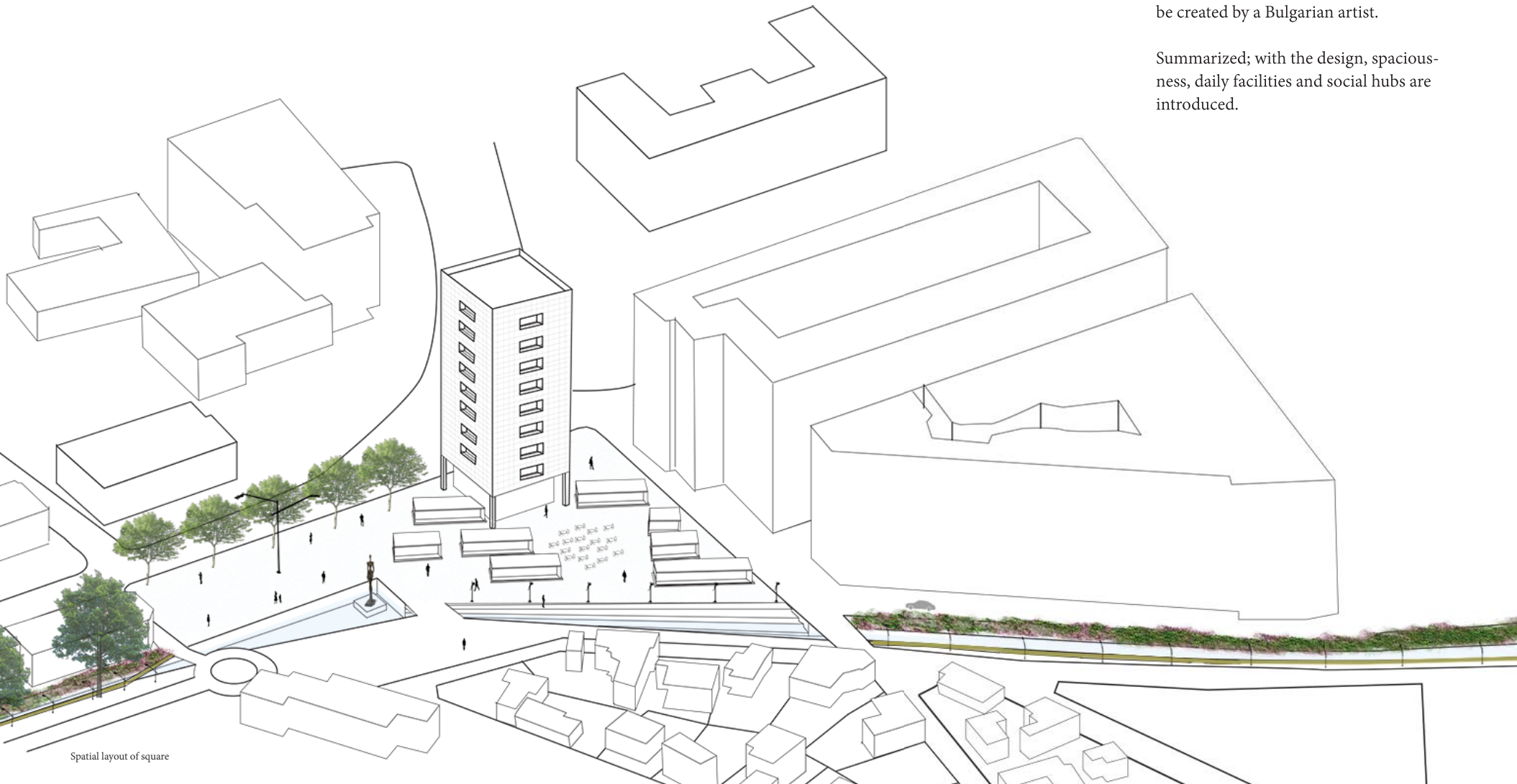


Left: sections new square. Right top: Spatial analysis volumes at square. Right Bottom: structural analysis urban tissue.



The shops have room for terraces, so the square becomes a social hub. The relation with the gully is established by a slow transition by making trap wise terraces where people can come together and have a seat. A monument referring to June 19 is established within the gully, so the victims are honored. This memorial will be created by a Bulgarian artist.

Summarized; with the design, spaciousness, daily facilities and social hubs are introduced.



Spatial layout of square

## Tourism Area & Marina

The marina is situated at the corner between the sea and the canal. This makes the location very suitable for this function. At the moment, this location is already discussed as a location for a marina. I enhance this decision, since this makes Asparuhovo connected better to Varna city, with the possibility for a ferry (see page 45). This also attracts yachters to spend time in Varna. These people usually have higher incomes, and generally more into nature than the tourists that go to the Varna tourist area, St. Konstantin. At this moment, the area is still completely unused, but tourism

is upcoming. Therefore, to maintain the quality of the place, and to develop tourism without affecting the landscape, preconditions have to be set to ensure the quality of the area. These will be explained on the next page. The marina is designed in between the line of the breakwater, and the remains of an old wall. The boulevard continues to the existing new traffic control tower. The tower still has overview in all directions. At the top, a place with a magnificent view could accommodate a restaurant. At the South side of the marina, the tourism could be facilitated. Sleek, tall, straight buildings rise up from the reed fields.





The buildings rise up above the reed field. The function of the mirrored facade is here to blend in the landscape. Depending on the position and the angle, the volumes reflect the beauty of the surrounding landscape, and leave the value intact, in contrast with the St. Konstantin tourism.

# Reflection

## Research approach

Between P1 and P2 the basis for the design research was elaborated and set. This resulted in a research question with ten sub questions. The research question was pointed at the outcome (“How to develop a green-blue system for Asparuhovo, that takes into account \*aspect 1\*, \*aspect 2\*, \*aspect3\* etc.”) The sub questions were more specific for the research, like ‘how does the watersystem work’ and ‘how do Bulgarians use public space’. In the methodology paper these questions were set to value and two of them, the social and the water aspects were elaborated on.

## Shift in focus

During the design process and its accompanying research, there has been a shift in focus. While intentionally the main problems were the water and the social aspects, after P2 other research was regarded as more important. The most important research for the water aspects was already conducted in P2. The other aspect, the social aspects, thus became more important. In P2, the design solution presented was too general and I was looking for complexity and elaboration in the design and research. I already had a lead in this since P1. The historical aspects (effects of communism in the landscape) became an inspiration and design lead for me to find complexity and elaboration. I have been working on this for several weeks. At the same time I was also elaborating on the social aspects (what are the cultural aspects of the Roma society). Because I was working on both research topics at the same time, I started to see similarities which I tried to combine in a design. These aspects were both principles derived from art in constructivism and Islam. I tried to find a communal ground in this and found it: the square. I hoped that these art principles would deliver me elaboration and complexity for the design. However, I did not realize two things well enough. Firstly, the principles of art had their own context. The Islamic art works beautiful in situations that are completely built up out of the same ideas, like Islamic cities. For the constructivist art goes the same: those are artworks made on a blank sheet that tell a story without a context. Secondly, later I realized that Islam does not mean that much to Roma, as well as Constructivism does not mean anything to Bulgarians. This part of the research appeared time consuming, ineffective and unusable. Some small principles of the Roma research are still visible in the final design, but in general I did not use much of the research.

Clearly, this research was not done structured. If this would have happened, maybe I realized earlier that I should focus on something else or I would have made a clear renewed research question. In the end, I think this part of the research could have been more useful if I had clearer in mind what I was about to do beforehand. However, I also learned several things from this ‘mistake’. I realize now that trying to find out ‘who people are’, ‘what they like’, and ‘what they need’, is something you cannot define without actually talking to those people involved. If I really wanted to find this specifically, I should have researched more elaborately on site. However, there are a lot of constraints

that don’t make this that easy, and maybe not even feasible. What I also learned after these ‘flaws’, is that you can respond to existing problems by making them more abstract and general. Because, the problems between the Roma and the ethnic Bulgarians might be specific, at the same time you can derive general conclusions from this, that you can use in the design. For example, I don’t have to know everything about the culture of the gypsies, to design a place where they can feel safe. Safety becomes a universal notion in this that could be a solution for the problem without making false arguments about the concerned stakeholders.

## Effect on design outcome

At P2 the design assignment and direction seemed really clear. However, the complexity in it missed. Like I just mentioned, a lot of time was spent on research to find this complexity. But despite the fact that I did not end in my research where I hoped to end with, this research had its function anyhow. I found out that the elaboration can be found in abstract notions, with a suggestion for integration of culture and lifestyle. Although I also started with this notion, I lost myself in details about the user groups. In the end I rediscovered and ‘understood’ this conclusion. I implemented it somewhat, especially on the subject of safety, but if I had to do the research again, or if I had more time, I would elaborate on the general themes such as contemplation, music, expression etc. However, in some extent I already did this, but not in the elaboration of a research.

## Does the design respond to the research question?

I think the design indeed is “a spatial green-blue system for Asparuhovo, that takes into account the social- economic conditions and the cultural identity, and simultaneously introduces an attractive new urban landscape”. However, the process became focused more on the social conditions than expected. The research question, and especially the sub-questions were focused on the water system, while more time was spent on the social problems. The research question still stands, but the emphasis shifted.

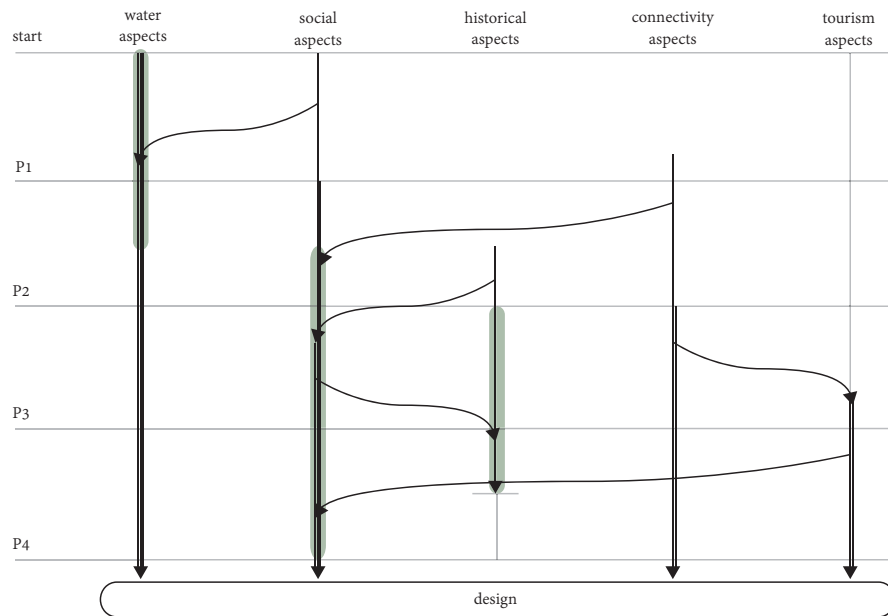
## Academic relevance

The developed solution is site-specific for Asparuhovo. However, in academic sense, the design could have a more generic value. Firstly, there are comparable situations in Bulgaria. Here we’re talking about watersystems that have been developed under the same (economic and cultural) conditions as they were in Asparuhovo. The climate in Bulgaria is in general terms the same; future drought and heavier precipitation is happening everywhere in the country. On micro scale, differences could be found in the positioning with respect to the sea; Varna is situated attached to the sea, and therefor has to deal with different conditions. But in general, there are several situations throughout the country that have to deal with the problems of insufficient watersystems in relation to

climate change.

“Bulgaria’s Environment Ministry said on June 20 that the risk of flash floods in the country remained high. The highest danger was in the Danube River and the Black Sea basins, the ministry said. ‘As a result of the forecast for intensive rainfall, we expect a sudden and significant increase in the river levels of Yantra, Russenski Lom, Kamchiya rivers and the rivers on the southern Black Sea coast (Rezovska, Veleka and Ropotamo),” the ministry said in a statement on its website.” (Sofia Globe, 2014)

Secondly, the current situation is probable to be similar in terms of lacking public space in other cities in Bulgaria. There are several slums throughout Bulgaria that are comparable in size, layout and positioning in relation with the concerning cities. The design I want to develop could be in principle applied to these cities: using the water system to chain the missing public functions of the cities.



Arrows: influence of aspectual research on the end result and influence on other aspectual research

The amount of stripes indicates the importance of an aspect for the end result

The green stripes indicate which aspects took a lot of time

### Meaning for Landscape Architecture

In southern Europe, the climate is getting more extreme than the North of Europe. This means that at this moment, there are already a lot of problems regarding flooding of rivers and drought. My project is an example of an approach that deals with this topic. In Bulgaria, there are in other cities similar situations regarding the water system. This system has been underdeveloped and not taken care of for years. With the climate change this will definitely become of higher importance. Also, the Roma settlements throughout the cities are usually situated near (or even in) the gullies for water transport. Making these gullies of higher importance in terms of safety, but also use them to address social problems like integration, could be of benefit for the whole Bulgarian society. If my design works, could only be told after it was implemented and used for years. But if it works, it could set an example for other cities how could be dealt with water system in relation to social problems.

Another aspect of transformation of the gullies from neglected items towards social attraction places is that the availability of natural resources in cities becomes stronger. Not seldom the ends of gully systems are situated in cities, but the origin is mostly in woody places. Treating the gully as a ‘green carpet’ towards this nature reserves will make the accessibility of these forests stronger and clearer.

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