SHELTER LANDSCAPE

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A LANDSCAPE APPROACH TO THE REFUGEE CAMP IN PERI URBAN AREAS ALONG THE AUSTIRAN HUNGARIAN BORDER

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landscape architecture master track graduation project

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To my father's memory, "draw me a sheep", I drew a camp.

I. IMPULSIO

A trigger to design: the landscape architecture as a game changer

PREFACE

When the graduation lab started in September, refugee waves hitting Europe were reaching unprecedented heights that sadly will be out continuously through 2015 autumn and winter.

Taking interest into this humanitarian crisis appeared to be a conjuration of an impotence offense. It seemed obvious to take this morbid obsession and turn it into a continuous motivation. This graduation project is both an ethical issue and an experiment of a design where landscape with its structures and its processes are not only shapers but game changers.

What can we learn from a proposition of a camp designed in and with landscape? The importance of processes over easy fixes, and as always with landscape, time as a shaper, a tool of creation, connection and entropy.

Through the hectic journey of a graduation year, with impromptu stops, blank days and frenetic hours, it became clear that a landscape project whatever scale it has is never completely finished nor fixed and that is what makes it always interesting to look into objects, issues and places -like camps- through the landscape lenses.

With the help of many thorough and interesting researches and studies, from Agier to Grbac, the camp becomes more and more tangible, understandable and yet abstract. The work of Caroline Moser on notions like risk and vulnerability shed new light on the status of the stateless.

This report is a collection that is hoping to be consistent from the landscape framework to the region, from the theory and methodology to the design, from a relentless desire of acting to a first attempt to change.

FLOWSCAPES AND THE GRADUATION PROJECT

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INTRODUCTION

By June 2014, The UN refugee agency reported that the number of refugees, asylum-seekers and internally displaced people worldwide has, for the first time in the post-World War II era, exceeded 50 million people.

Despite these preoccupying numbers, little has be done to normalize the refugee camp. In fact, a camp is a space of paradox, "positioned between formality and informality, mobility and immobility, permanence and impermanence" (Grbac, 2013).

As part of a hybrid discipline both rooted in human and "formal" sciences, landscape architecture not only provides a frame and a process for a multiscalar design but it also has a duty of knowledge, to produce and develop a unique understanding: What can we know? And How? But beyond the philosophy of science, a landscape architect is often confronted to extreme humanitarian situations, and is frequently asked to create structures of prevention or relief, and therefore the ethical question is central: What should we do? Can we go beyond the discomfort of our comfort zones, the flooding areas, the endangered habitats, the green patches, the bituminous cities, the sleepy neighbourhoods, the entertaining parks and the relaxing spots?

A calling for change often comes with a will of acting, what can we hope for?

It is the identification of what makes camps dysfunctional that will bring first an understanding of the hidden mechanism behind their state of exception and second will allow to elaborate new proposals based on the landscape potentials.

On the Austrian Hungarian border, thousands of refugees bumped into the invisible wall of policies. Occupying railways and highways, this unexpected flow of people took a whole region by surprise, a border tangled in decay and shrinkage.

By acknowledging that an area is more than a matrix, new possibilities may emerge from a potential synergy between the region carrying structures and the new flows and components that a camp produces: What if the camp becomes a spotlight to bring attention on a region? What if the camp becomes a plea for major shifts in the border flowscape? What if the camp is generated rather than projected?

Refugees walking in the rural roads of Hungary to escape border controls -Associated Press Photo August 2015-

PROBLEM STATEMENT

Refugees are often seen as disturbance on the flowscape generated by newcomers' waves: If social and economic measures are failing to absorb this disruption, a spatial solution particularly a landscape approach can provide a different perspective and build a mutually beneficial intervention.

RESEARCH OBJECTIVE & QUESTIONS

Thus, the purpose of the project is to apply a landscape based approach to complement the efforts of NGOs, governments and related-design disciplines to solve the refugee camps issues. By using the formative powers of landscape, we intend to transform the refugee camp from a singularity to a continuity, and by doing so insure a regeneration of the urban and peri urban tissue along the Austrian Hungarian border. Ultimately, this will strengthen the role of the landscape architect in filling the gaps of incomplete political, social and sometimes spatial reforms of the refugee issue.

To achieve this goal, some questions have to be raised and ultimately answered:

In situ: what is the specificities of the Austrian Hungarian Border? What are the carrying structures of this landscape, and how can we perceive and use the opportunities they offer?

The camp: What is it? How did it evolve from the roman grid to the UNHCR guidebook? When do the differences between the camp and the city become problematic?
Ab ante: what is the theoretical background that can strengthen and shape our approach to the refugee camp? How does the asset accumulation theory function for the refugees?

Principles: Which steps can lead to an integrated camp? And which phases can guide to a revitalized and functioning region?

Creating from understanding:

How does the landscape shape the camp? And how does the camp reshape the landscape?

Where does the 'revolution' lies? What will make this camp different?

How is the design staged in time?

In fine, physical: what would the border become? People: Is a better camp still a camp?

Policies: And how far can we go? Is it economically viable?

2 main aspects in the refugee camp caught attention:

Their "permanent impermanence" or the disturbing numbers: between 7 and 17 years as an average stay for the refugee in camp made of plastic tents and woven tarps.

Their structure, its uniformity, its unsettling homogeneity, the dehumanizing grid, the standard unit, district, community…

The inadequacy is clear: a rigid yet temporary settlement with a permanent and changing occupation where people are despite all more than numbers, where the soil has a history and a continuity beyond the fences of the camp.

The interior of a standard issue UNHCR tent. Many families live in tents like these for years -Crossroads Foundation Photos, flickr-

From this absurd spatial response to an emergency state, came several initiatives for a new camp, a neo camp where participation, adaptability and resilience are pillars. Landscape architecture is based on these same notions and therefore can provide a new approach where the landscape is a matrix for the camp as well as a shaper.

In addition, when it comes to camps, there is a statement of disconnection that is constant regardless on continents, refugees and situations. A camp is often, if not always disconnected from its surroundings.

In Dadaab camp in Garissa County, Kenya, deforestation expanded kilometres around the camp leading to a major flooding in 2006, this led to an emergency into the emergency and the UNHCR had to merge efforts with the UN to rescue and rebuild the camp.

The chain reaction that a major disturbance in the flowscape may trigger adds even more precariousness to the refugee issue.

The connection to the landscape resources and layers is not only a matter of continuity or disconnection but it is a matter of resilience and survival. A camp that consumes resources and pollutes the environment will run lower and lower until it is not possible anymore to sustain it but people will still have to stay, or go somewhere and this vicious circle will not be broken. What message does it convey about camps? A bulldozer bringing destruction and desolation and incidentally criminality.

This negative perception of the camp not only lead to reject the idea of it and of the refugees but will also lead to place camps in remote places, further and further from the city, and from the people, this double isolation is problematic on both levels: the social aspect with a dual denial of the refugee as enclosed in a camp that is also enclosed in a void, and the spatial aspect: a remote location is a place that is not serviced with necessary networks like electricity water and sewage which means more pollution, more resources to consume, more transportation costs and footprint, etc.

When we ask ourselves: why camps are what they are? Why do they generate theses effects? We should also wonder: Why not? What would stop a camp from enclosing itself in a shell of insecurities, a wall of exclusion? What is done to stop this from happening? And ultimately what can be done? It is this ETHICE that is the core of the project, a red thread taking us through Austria, Hungary, on the blade of a border, from the decay to the tent, from the abandoned to the crowded, from the Roman reminiscences of camps to the contemporary migratory flows…Along this red line, a constant prevails, camps are

dysfunctional, camps grow like cancer, ignoring the shape, the nature and the function of what is surrounding them, camps consume and yet are always thirsty, camps go beyond their limits, often. Camps do not play by the rules and yet they do not fulfil the basic needs of their occupiers.

That basic observation led to the conviction that to shape a better camp, we should first understand and define where it will thrive, and how do we prepare this environment in order to define the camp as a graft rather than a tumour.

The landscape architect "clairvoyance" to perceive and integrate landscape infrastructures –Magritte, la clairvoyance 1936-

II. RATIO

The methodology: from intrusion to inclusion

Looking closely into the Austrian Hungarian border where refugee flows are being held by the newly constructed fences, we recognize hibernating spatial and social structures, where the dysfunctions are made more visible by the refugee crisis.

1-FLOWSCAPES AND THE CAMP:

The integrative power of landscape is expressed thoroughly with the notion of landscape infrastructures: flowscapes as developed by S. Nijhuis and Jauslin (Nijhuis & Jauslin, 2015). In fact, the dialectic between landscape and infrastructure questions the relation between the space of flows and the space of places (Castell 2000). It therefore expresses the integral nature of landscape as a 'catholic' multi-scalar system.

When we consider landscape structures as operative powers for development whether we are talking about social, ecological or economic development, we can then presume that landscape will be the vector to inclusion and that flowscapes are structures of integration, and it is the actual state of exclusion that less integrative disciplines relatively fail to gap.

Therefore, when we address the camp as more than 'a place', with no social identity stuck in a permanent emergency, when we consider the region, the camp and networks as infrastructures, ongoing processes, shaping, reshaping and dynamic, then the camp becomes more than a graft and the region further than a matrix, but different infrastructures where flows are directed or diverted with inevitable connections.

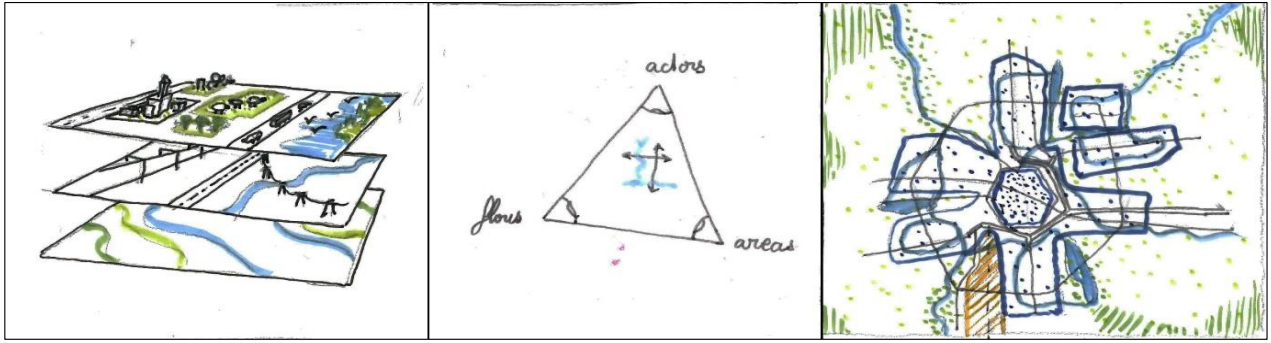
What do landscape 'lenses' reveal on the Austrian Hungarian border?

2-MAGNIFYING LENSES / DENUDING LENSES:

"I'm an eye. A mechanical eye. I, the machine, show you a world the way only I can see it. I free myself for today and forever from human immobility. I'm in constant movement. I approach and pull away from objects, I creep under them. I fall and rise with the falling and rising bodies. This is I, the machine, manoeuvring in the chaotic movements, recording one movement after another in the most complex combinations, Freed from the boundaries of time and space, I co-ordinate any and all points of the universe, wherever I want them to be. My way leads towards the creation of a fresh perception of the world. Thus I explain in a new way the world unknown to you."

Dziga Vertov, 1923 (Soviet film director)

In the two networks theory developed by S.Tjallingii, landscape systems do not take nature and ecology to create limiting but carrying conditions (Tjallingii, 2015).



From left to right: layers in the landscape, based on Ministerie van VROM, 2004, by author, integration perspective and the city model, based on Tjallingii drawings in 1995&1996, by author.

This constructive theory provides both a planning tool and an understanding perspective. By identifying slow and fast lanes structures (Tjallingii, 2015), the two networks strategy combines space, flows and actors and therefore connects the ground layer and the occupation layer through networks.

It is going beyond the layer approach towards a holistic vision of the landscape as more or less dynamic structures, from slow but efficient to fast and productive, the carrying structures are vectors of growth, development and redevelopment.

In this research by design realm, the language pattern of Christopher Alexander can also be of a great help in a design task where ancient, old and new are cohabitating. Through simplifications and dissections, we establish a set of patterns that can be a score alphabet for the design.

We have then 2 sets of lenses. A theory of networks where structures are magnified, amplified and put front, whereas the pattern language is the denuding lens, the separating, simplifying perspective.

These different outlooks will bring to light the social, spatial and ecological structures of the landscape. By triggering different understandings, we can develop a broader set of possibilities for the region and the camp.

3-THE SOCIAL STRUCTURES OF THE BORDER:

What can we see form the mappable reminiscences of social structures the traces of an open border as well as traces from the iron curtain. The landscape of memory survives through an abandoned char, ruins of old checkpoints and domains divided between the 2 countries. The fences of 1989 triggered in their collapse acts of daily defiance. People are today over

crossing the border, over consuming the openness, over using this newly insignificant line. Living in a country, sleeping in another.

We can clearly see a landscape of production in Austria and dorm suburbs in the Hungarian side.

How does this affect networks?

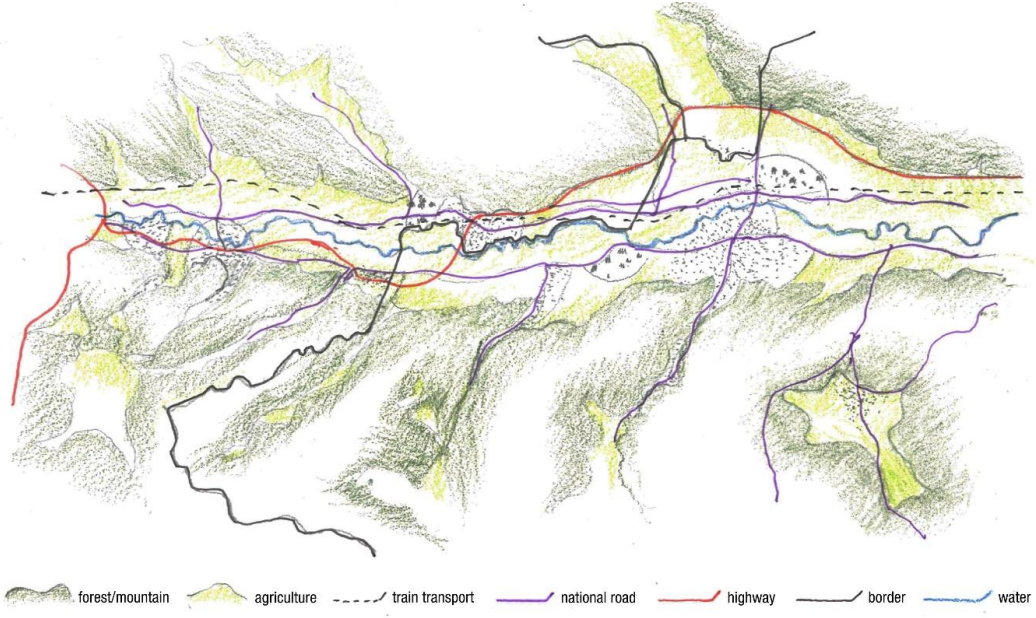
Borders now and then: the old iron curtain, the new fences: from left to right: by author, Katalin Arkell photo, sputnik news photo.

The development of high speed traffic networks is a cause and a consequence from the unbalanced production patterns from the 2 sides of the borders.

This social pattern of the disconnection between places of work and places of life has visible effect on space, connected countries, over-crossed borders but disconnected suburbs, disconnected neighbouring cities.

While the genesis of the border cities shows a model of horizontal development along the water lines -and they are several in the area-, the traffic lines have evolved differently, the old parallel road is ditched with phantom houses and abandoned shops, while the fast lane network is starting right on the suburb, turning its back to the city. These forsaken nuclei create a strange pattern of disconnection in flows between an urban centre and its outskirts.

But this social pattern of daily commute is strongly interlaced with the spatial structures of the landscape.



Development of the fast lane network parallel to the old Roman roads along the river, by author

4-THE SPATIAL STRUCTURES OF THE BORDER:

As stated earlier, the developed fast lane network with high speed highways and extensive agriculture has taken over the fine grained landscape of the Hungarian region.

This profit-oriented landscape has lost competitiveness by losing efficiency.

In the example of the Randstad where the urge of the development of the fast lane network has threatened the existence of smaller farms, and biodiverse landscape, measures have been taken to reconnect with the looser patterns of slower networks. This has not be done in the Hungarian region.

Although the extensive agriculture is connected to the traffic network, the region is not thriving to its full potential, many problems are caused by this structure like the upstream pollution of the blue network, knowing that Austria and Hungary are on the upper part of the Danube Basin and this pollution might have dramatic effects on the 19 riparian countries.

Austria: from left to right: recreational area, converted quarry, Nieusedler see, by author

This absence of waste management and recycling strategy, combined with structural production problems are giving a weak basis to this exclusive fast lane development.

The Austrian border in the other side has a larger spectrum of possibilities, in the wealthier and more maintained cities where the balance between production and consumption is maintained we see more heritage and recreation (reconverted quarry sites), more biodiversity maintained with eco-tourism and hiking paths and more local food production (through small vineyards and organic farms).

5-THE ECOLOGY OF THE BORDER / THE ECOLOGY IN THE BORDER:

Among the 24 water incomings to Hungary, 6 are on the Austrian Hungarian border and among them the Danube, there is no outflowing water course in the Region as all the Danubian Basin is flowing eastward.

This makes the region vulnerable to flooding, the permeability of the agricultural land has a great advantage in preventing disasters but every 6 to 7 years minor and major floods occur in the region.

The presence of the Nieusedler See not only provides a big water surface for water storage but it is also one of the most bio diverse spots of Eastern Europe. Most of the shores are natural reserves and while they are exploited as such in the Austrian side, the Hungarian side lacks infrastructure to take advantage fully of the sights and the promenades.

This blue reminiscence of the Pannonian see has also meteorological effects on the area, it acts like a proper see and softens the continental climate by providing niches of viticulture and more Mediterranean agriculture.

Besides, the intricate water network combined with the preserved nature of the lake region makes it an important resting place for migratory birds.

The entropy in the villages and city centres has given room for nature to claim its rights, while the agricultural landscape is tamed for centuries, wilderness is thriving from abandonment, in the very centre of the old decaying agglomerations.

Through landscape lenses, analysing ground and occupation layers, we were able to understand and detect the failing gears of the region.

However, the landscape perspective cannot be reduced to a diagnosis of pathologies, it also informs on the potential of the region.

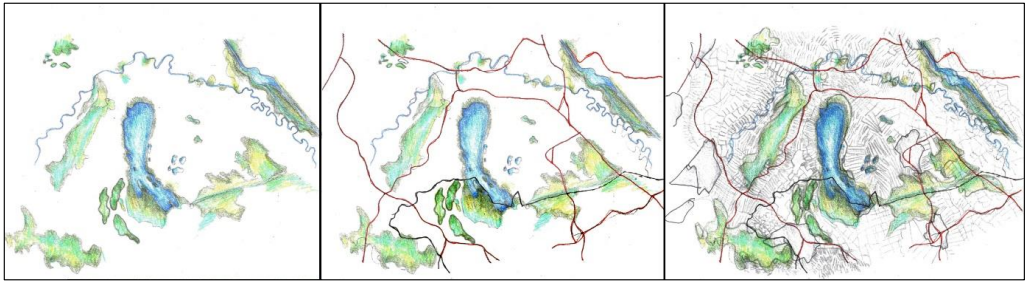
Nieusedler See: from left to right: viticulture, by author, plan view of the lake: from google maps, manipulated

REFINING THE UNDERSTANDING, CONVERTING STRUCTURES INTO ASSETS:

Converting structures into assets provides a different approach, a more constructive approach to the spatial issues of the area of intervention.

In general, we saw potential in the regional plan itself: This close presence of a model that relatively 'works' (the Austrian model), based on the same physical and geographic aspects is already giving clues on what could function on the Hungarian side.

As for the infrastructure as a physical asset, the well-maintained high speed roads and their efficiency is a valid basis to build and develop a slower traffic. The rich suburbs are well maintained with good housing quality and a good connection to green and blue networks: houses on the water side, close forests, interesting slopes and a good situation regarding water flows (not on flood valleys or gullies).



Blue network, traffic network, productive landscape, agricultural patterns, by author

These natural assets are similarly present in the nuanced climate, the rich possibilities of agriculture, the intricate water courses and in the thermal ground water that is underdeveloped in the region but can be a great asset for future development.

From an urban landscape perspective, the green wedges of the well-established suburbs are also locally successful as they are fulfilling exactly the needs of their inhabitants -even though we aim to change their needs-, this does not alter the fact that the outskirts have a good implantation within the blue network. The presence of local shopping centres on the entrances of these agglomerations, the adapted implementation within the relief and the floodplains are all favourable to their future improvement.

6-THE DUTY OF INVENTION:

"You become responsible, forever, for what you have tamed."

Antoine de Saint-Exupery

The layer approach and the 2 network strategy have not only helped us understand the landscape but they will also provide a framework for invention.

But inventing what specifically?

It is first a reinventing of the region in its productive layer, in its mobility patterns and its ecological fabric.

But it is also an invention of the camp, the integrated camp where these layers, patterns and fabrics are operative tools and formative powers, slaloming around the limiting regulation of enclosure, separation and singularity.

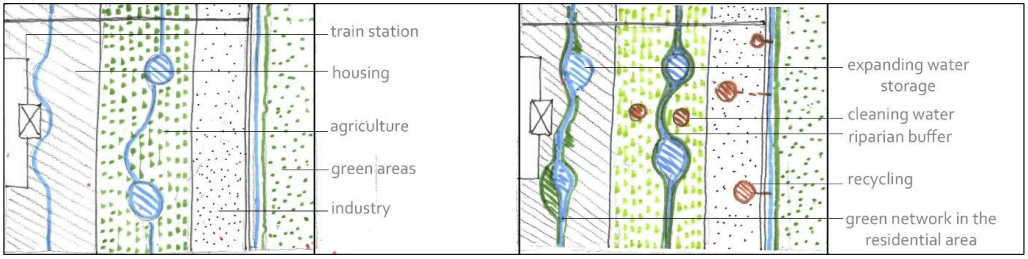
THE REGION REINVENTION

A contextual planning derives from a regional strategy that links planning to local interventions.

What the previous analysis has showed is the imbalance between slow lane and fast lane development.

It also informed about the dysfunctions in the fast lane production and the disconnection of the slow traffic of the suburbs within the continuity of the blue network.

The landscape structures are then more than a passive result of a perception, they are operative and transformative. Understanding the potentials and issues is detecting the pathologies and the performance of the region flows, it ecological value, its economic state, its social production in a dynamic that integrates the crossing border condition of our area. It is through these flows that change may occur and new conditions can be created.



Improving the fast lane network: adding more water storage, less waste, cleaner water and better connectivity, by author

Thus, the present structures can be optimized. Looking into the productive network, including waste management and recycling structures will help improve the productive network and reduce the upstream pollution of soils and water.

Along this border, landscape and ecology have a tangible value to attract capitals, some of the villages that are surprisingly well-maintained have beneficiated from European funding due to their beautiful landscape and interesting bio diversity.

This valuation can be turned into a stakeholder strategy for the future development of the region.

Expanding water bodies' surfaces can space out flood occurrences. This can be also be achieved by creating new water bodies in the cities for example to fill in the decay. This regeneration of the urban fabric with water and green is both a connection to the green wedges and an added quality compensating the decreasing quantity of people, buildings and activities.

Converting the valleys, floodplains, forests and water courses into patterns of growth or decay can give tools of interpretation and design. Combined with the city model developed by Tjallingii in Ecópolis (Tjallingii, 1995), local and less local interventions can emerge in a consistent framework.

THE CAMP: A NEW PATTERN IN THE LANDSCAPE

"By believing passionately in something that still does not exist, we create it. The non-existent is whatever we have not sufficiently desired".

Franz Kafka

What do landscape networks and pattern communicate about the camp?

The formal grid of the camp, the fenced camp, the homogenous camp with no fast or slow lanes, no blue networks, no hierarchy, asphalt and tarp, isotropic at its worst.

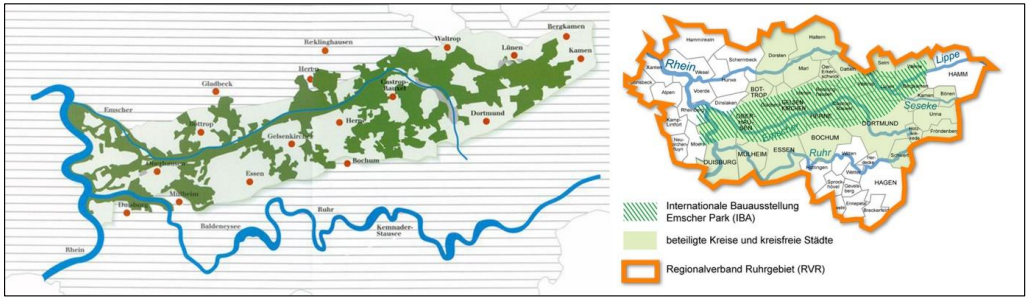
By applying a strategy of continuity we consistently defy the fence, impose breaches through water and connectivity.

When we allocate a strategic place to the camp as a bridge between cities and their suburbs, agricultural and urban, peri-urban and cultivated, we break with the interstitial camp, relegated to leftover spaces. We go from on an approach of a place to flows.

The camp can be a lobe in the city model, a corridor between 2 urbanities or a ring on a city edge.

Therefore, a camp cannot be bigger than the city. Dividing flows of newcomers along the borders on both sides with local injections of new spaces, new patterns and a regenerative tissue translates a strategy of the reciprocity in benefits into local extensions.

The camp as a pattern becomes a core of change internally by transforming its singularity into an edge, a ring or an extension and externally by becoming an added value to the region.



Emscher park, regeneration through blue and green structures, from the local to the regional design, from left to right, Planungsraum for IBA: IBA Kurzinfo, 1999, ILS drawing in for the Internationale Bauausstellung (IBA)

Concretely, a camp can be the missing slow lane to the city. By becoming an efficiency oriented production, it can scratch the layers of amnesia to revive the heritage landscape of the iron curtain, it can promote self-sufficiency, a greener agriculture production. In addition, it can improve the incomplete loop of the competitive production by implementing a recycling zero waste landscape.

When the camp is perceived as an adaptive and robust system, open to change (Nuijhuis and Jauslin 2015), it becomes an initiator of an efficiency oriented settlement and production.

When we look closely into the example of the Emscher region, we see how blue and green structure strategy has led to the economic revival of the area. This can be achieved through the regional plan translated into regenerating city centres with green areas and water lines and reconnecting the urban fabric through shelter corridors.

7-CONCLUSIONS:

"A design never appears from nowhere, it always connects at different levels with something pre-existing (spatial, experiential, social, technical or related to particular people) and transforms these in a broad sense that allows room for future possibilities and potentials, into something new – regardless of whether fundamentally new or (just) new in that context."

(Von Seggern and Werner, 2008)

In fine, it is the perspective that the landscape architecture provides on the region and the camp that can bring game-changing results. By their ability to adapt within boundaries, the landscape infrastructures can facilitate the optimization of the grey, blue and green networks. The camp is designed to be a manifestation of optimization, however in its actual state, it fails to acknowledge the potential of the surroundings networks as vectors for improvement. By creating new multifunctional landscapes whether for the camp or for the region, a landscape-approach design transforms the efficiency in the camp from its short term life-span, to a long-term strategy.

III. IN SITU

An immersion into the site: its infrastructures and its genesis

1-THE INTANGIBLE BORDER:

THE HISTORY

Coat of arms of the Austro Hungarian empire –Mittel 1867

The first inhabitants of this area known to history were the Pannonians, a group of Indo-european tribes. Through centuries, it was invaded by Celtics, avars and Illyrians. It is only after 35BC that Pannonia was annexed as a Roman Province and extended north and east to the Danube.

Austria-Hungary was a multinational state and one of the world's great powers at the time. Austria-Hungary was geographically the second-largest country in Europe after the Russian Empire, at 621,538 km2 (239,977 sq mi), and the third-most populous (after Russia and the German Empire). The Empire built up the fourth-largest machine building industry of the world, after the United States, Germany, and the United Kingdom of Great Britain and Ireland.

In 1989, the situation in Central Europe was tense. Despite dictatorial governments, its peoples demanded democratic elections, freedom of speech and the withdrawal of Soviet troops. The physical elements of the Iron Curtain were a dominant factor in the movement to unite Europe. Although some countries had a severe Communist power structure others, (such as Hungary),

Hungarians crossing the border to Austria -Zoltan Hoplaja 1989-

took a reform-oriented approach. Supported by Mikhail Gorbachev's new policies, the communist leadership accepted the necessity for change. Non-governmental organizations and new political parties played a sizable role in the movement towards a democratic, multiparty system. That year, round-table discussions were held in several Central European countries to develop a consensus on changing the political system. In February formal discussions began in Warsaw and on 4 April the Polish Round Table Agreement was signed, legalising Solidarity and scheduling parliamentary elections for 4 June.

Solidarity's victory surpassed all expectations.

In 1989, the Pan European picnic took place on the border, from the Austrian side, people fled the country pretexting a picnic, while they were granted a status of refugees by the Austrians.

Barbed wires were cut, the police acted blind in Hegyeshalom crossing, some people got killed trying to escape, but the breach was open, the first ever breach in the iron curtain, months before the fall of the Berlin wall.

THE EUROPEAN PARADOX

Countries who signed the Schengen agreement in yellow -Wikimedia-

The Schengen Agreement was signed on 14 June 1985 by five of the ten EEC member states in the town of Schengen, Luxembourg. The Schengen Area was established separately from the then European Economic Community, when consensus could not be reached among all EC member states on the abolition of border controls.

In 1990 the Agreement was supplemented by the Schengen Convention, which proposed the abolition of internal border controls and a common visa policy. The Agreements and the rules adopted under them were entirely separate from the EC structures, and led to the creation of the Schengen Area on 26 March 1995.

Since 20 years, European borders have become dual, both open and close, open for people and good in a free circulation and market agreements but also close because of the sovereignty of each country over the European rule, some of the European states have different immigration policies and some of them didn't sign the SHENGEN agreement. This double standard make the limits disappear and reappear depending on situations. As a European resident or citizen, the borders completely vanish and only blue signs and a bitumen change give hints of a crossing. As a refugee, the borders get back to what they are: limits, barriers, fences, every country crossed is a milestone in the way for another border, a potential Nirvana. This paradox got even more exacerbated by the refugee crisis where the different country policies on asylum and immigrations were confronted to the SHENGEN

agreement. Border control was reintroduced in Austria, Belgium, Denmark, France, Germany, Norway, and Sweden on some or all of their borders with other Schengen states.

In our case, the Austrian Hungarian border is now controlled, and in some places fenced, the barbed barriers of 1989 are now back, different situation, different refugees and yet the same landscape of segregation.

THE ECONOMIC DISPARITY

Less maintained infrastructure, more decay on the Hungarian side –photos by author, field trip-

Austria is one of the 14 richest countries in the world in terms of GDP (Gross domestic product) per capita, has a well-developed social market economy, and a high standard of living.

Austrian farms, like those of other west European mountainous countries, are small and fragmented, and production is relatively expensive. Since Austria's becoming a member of the EU in 1995, the Austrian agricultural sector has been undergoing substantial reform under the EU's Common Agricultural Policy (CAP). Although Austrian farmers provide about 80% of domestic food requirements, the agricultural contribution to gross domestic product (GDP) has declined since 1950 to less than 3%.

Hungary is a high-income mixed economy with very high human development index and skilled labour force with the 16th lowest income inequality in the world, furthermore it is the 15th most complex economy according to the Economic Complexity Index.

The Fertile Hungarian land, agricultural fields –stock footage-

The two flat plains that take up three quarters of Hungary's area are the Great Hungarian Plain and the Little Hungarian Plain. Hungary's most significant natural resource is arable land. About 83% of the country's total territory is suitable for cultivation; of this portion, 75% (around 50% of the country's area) is covered by arable land, which is an outstanding ratio compared to other EU countries. Hungary lacks extensive domestic sources of energy and raw materials needed for further industrial development.

2 different economies, one leading the first ranks, the other has more to accomplish, one where agriculture represents less than 3% while the other relies mainly on it for export.

2-The carrying structures of the region

THE FAST LANE MOBILITY

The importance of the crossing border condition of the region makes it a strategic roundabout for road European transport, a3 crossing point is on the left limit of the border shared with Slovakia, along the Danube, the Danubian transport, continues through the developed highway network.

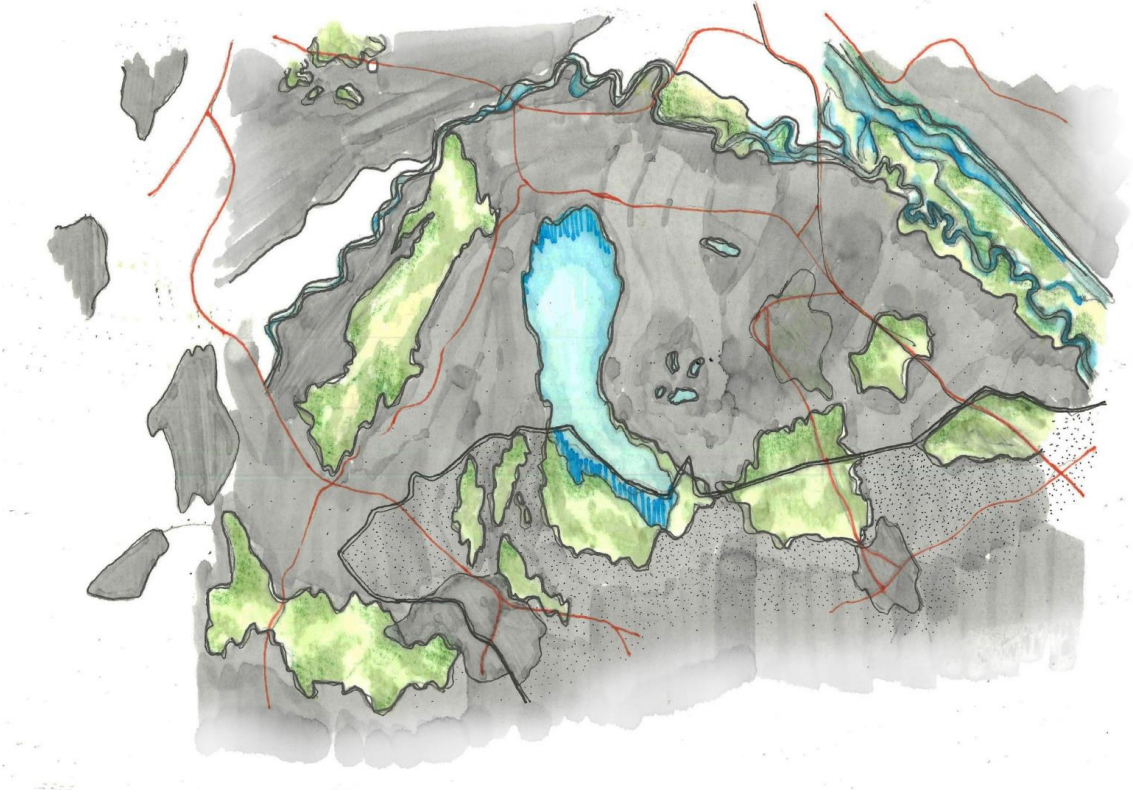
This fast lane network has facilitated the transport of people and goods, and therefore created an unbalanced scheme exacerbating the disparities of the border. People can work in the developed country and live in the cheaper one, paid in euros from one side of the border and getting to spend florins on the other side.

This means mainly car transport which somehow overwhelmed the slow traffic transport that is only present as hiking paths, while even small roads connecting villages are still used by cars for small distances.

The open gutter running along the road from both sides makes the pedestrian lane narrow and uncomfortable.

THE GREEN AND BLUE NETWORK

When we look into the green and blue network we see the ecological potential of the area, the region has more than 22 water incomings, the Danube, and the Nieusedler sea are an ecological reservoir for a great diversity of flora and fauna and in



In red the highway network, green fragmentation –by author-

between the hornbeam and oak forests are also rich in endemic species. But apart from the biodiversity value, the green and blue are also practical structures marking lines of transport through the Danube and the highways.

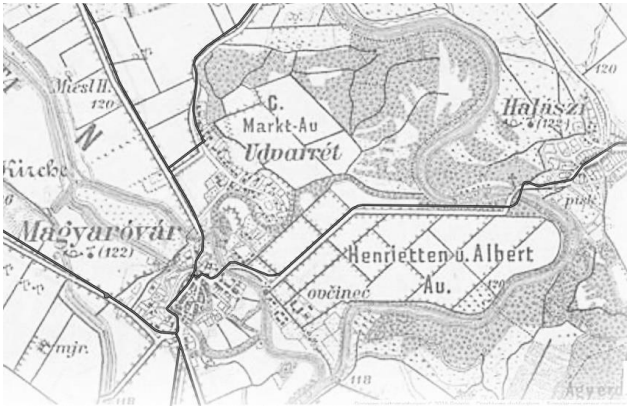
In some areas a bundle of networks go together, grey, blue and green networks run along the major lines of flowscapes.

However, the fragmentation of green patches is a major disturbance to the biodiversity and the coherence of the landscape. Different factors led to this dislocation but mainly agriculture is the main cause behind it. The expansion of an extensive kind of agriculture changed the patterns of the landscape, causing sometimes a disconnection from the landscape logic of water flows and topography.

This fragmentation is visible in 2 levels: first with a dismantlement of the green continuity, shattered forest areas and broken riparian buffers along the Danube and the Nieusedler Sea shores. And second, with the dimmed water lines that were buried for the agricultural expansion sake.

THE URBAN MESH

The urban expansion was mainly witnessed in the last century, where scales of growth changed the balance in between some cities. In Moson region for example, Halaszi used to be the biggest village, reminiscences of the roman camp, then the roman city. In the medieval times, Mosonmagyarovar was established a fishing village, although the fishing activity withdrew little by little through the centuries, Mosonmagyarovar grew bigger while Halaszi was frozen in a state of village, it is the industrial revolution that shifted the attraction. Mosonmagyarovar became a city with an industrial zone and a train station and Halaszi became a suburb, a satellite, this pattern is witnessed along what used to be major fishing villages or cities, along the Danube and in some areas next to the Nieusedler Sea.

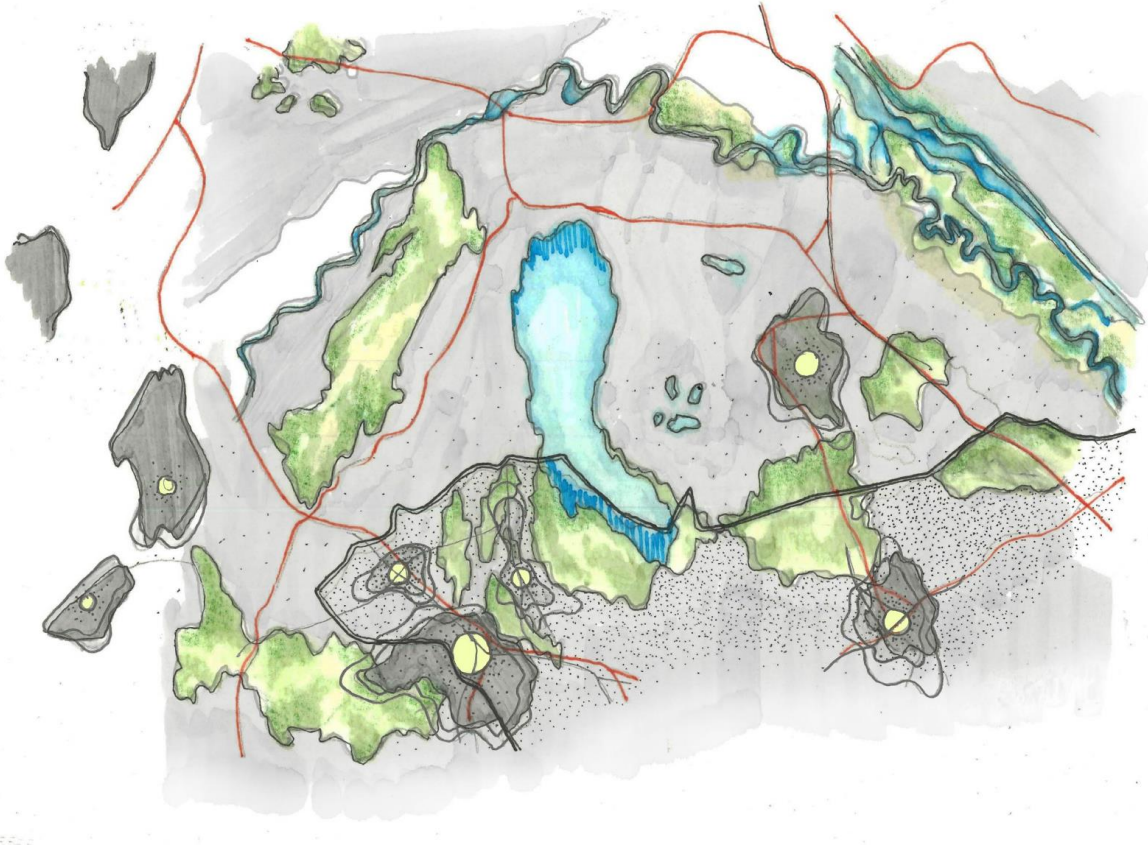


Roads now and then -by author-

What surprises most is to see how little things evolved since the last century in terms of urban extension. After years of expansion, and the reach of an optimal size that differs depending on cities, the side of the border and the activities, the urban mesh stabilized in unmoving barriers. The suburbs however grew bigger and bigger until 2008 crisis. What we witness is a very low rise expansion around shrinking city cores that are becoming more of a tourist attraction (in the case of Moson or Sopron) or mainly social housing (like in Szombathely).

However things are slightly different on the Austrian side, although the shrinking process is real and ongoing, the attractiveness for economic activities changes the city layout and the urban settlement. Although the working force is mainly coming from the other side of the border, this human flow maintains a level of liveability in the city centre and allows for better maintenance.

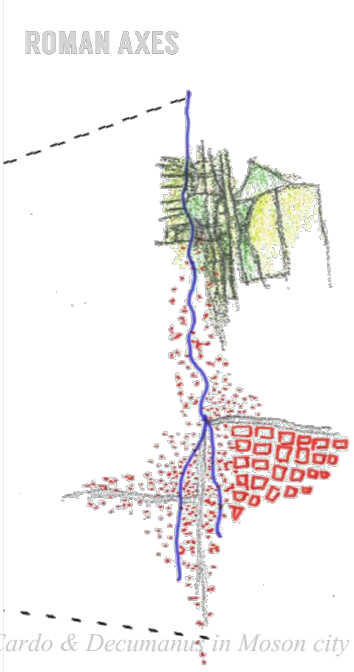
The decay on the Hungarian side is what threatens most cities and villages, the abandonment is only countered with European funding to some ecologically or historically valuable villages or cities.



Shrinkage in the city centres, disconnected suburbs -by author -

3-GENESIS

How the cities, the agricultural fields and networks were formed in this region?



Cardo & Decumanus in Moson city

-By author -

ROADS GENESIS

Several layers in time has led to the actual setting, but looking closely into historic maps, we can see mainly an unaltered consistency in the main networks. The major roads overlap with the historic ones. The European highways are however new and only connect to the old ones.

AGRICULTURE GENESIS

The agricultural fields follow the topography near the mountainous area in Sopron, fields are first small and irregular, and they grew bigger and more regular the more we go to the plain.

The change in agricultural production that happened first during the soviet era led to a big grouping of agricultural lands in the cooperation system, this was later broken and the capitalistic system led to another kind of grouping for extensive agriculture. On the Austrian side and due to the lack of agricultural land, the patterns are different and quality is privileged over quantity, many farms have a medium size, some of them are organic.

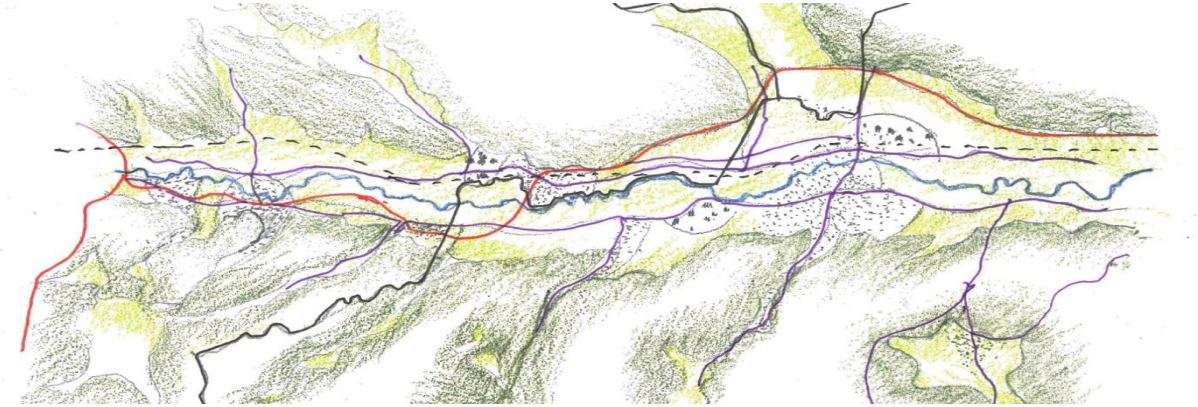
URBAN GENESIS

Different processes led to different urban patterns. Some cities still follow the cardo and decumanus of the roman cities that were once under their foundations like Moson, Some cities kept their medieval core as centrifugal centres of growth like

MOSONMAGYAROVAR

Water lines are often generators of urban settlements, along the Danube and Leitha, some villages with more or less the same size grew along the river. First. a slow traffic lane connected the riparian cities, this line led to the national road tracing, later, in many similar layout, the highway run parallel to this line, further from the water.

This interlaced genesis of different patterns or networks shape a consistent and comprehensive timeline, however, the unbalanced growth of agriculture, the over-connection with the road building and the disruption of the blue network lead here and there to disturbances that can be translated first in perception with fragmentation of the green areas and disappearance of the meanderings and second in use, with an unbalanced growth between the 2 sides of the border and the unilateral flow of people: towards Austria for work and back to Hungary at the end of the day.



Along the Leitha River -By author -

4-DOTS ON THE NECKLACE

ROOM FOR THE PEOPLE

Some valuable conclusions can be drawn from the guidebook critic that the UNHCR issues now and then, and writings of humanitarian analysists and writers such as Agier. The main issue with camps are not their layout or the origins of their people, the main problem is their size.

In the last century and since the creation of the UNHCR, millions of refugees lived in the stamped plastic tents in overcrowded camps that were first assigned for dozens of thousands of people and then grew more and more out of control.

The hostility towards refugee camps is understandable when they become bigger than the city, consuming surrounding resources, polluting and generating social and environmental problems.

The camps grow to become cities like in Dabaab or in Palestinian camps and this growth is too fast and too unpredictable to be contained or managed.

The optimal size for a camp according to MSF and correlated with UNHCR studies are 50000 refugees per camp. But this number doesn't take into account the contextuality of what is aournd the camp, how many people live in the site already? What are the resources? What is the cost of network connection? What kind of soil and what are the available amenities around?

It is true that in our case, a European country whatever it is ranked on top or in the bottom by the OECD ranking system is still very well serviced and makes the task easier. The availability of water, the tempered weather and the security are criteria that are often missed in other regions.

But how do we control a size of a camp when we can't stop from coming, either by law or by ethics?

The first solution is to resettle in a new location every time a camp reaches its optimum. But this optimum has to be defined very closely depending on the surroundings.

The points of settlement have to be chosen carefully depending on their resources and their needs. Shrinking cities present a great advantage, since they have an underused infrastructure and room for growth.

The second solution is to prepare these potential locations for the future people flow, to predict the future overuse of some networks, electricity, sewage and transport.

This leads to a network of camps, a shelter necklace that not only meets the required need for giving room for the people but also reactivates the region, one city at a time, reconnects the shattered and maintain a balanced quota between the camps and their surroundings

MISSING CONNECTIONS

When we look closely in our region, we could isolate potential points on the necklace:

Szombathely:

10th largest city in Hungary, one of the oldest cities in Hungary although the soviet era dimmed much of the old reminiscences of the Roman Savaria.

The road on the Valley of Sopron towards the fields -by author, field trip-

Apart from the good connection to the transport network, Szombathely offers 2 advantages: the economic potential with the presence of 2 activities very demanding in workforce, viticulture and automobile industry, and the aging of the population.

Lutzmannsburg:

It is a village in the district of Oberpullendorf in the Austria, crossed by the Rabnitz River. First Roman then Goth, the Old Lusman has witnessed an early shrinkage since 1900. With the decline of agricultural activity. Although it is an aging village, it is witnessing again a rise in tourism and a renewed interest in viticulture.

Sopron:

It is a border Hungarian city, could be retraced back to the Roman settlement of Pannonia, the Old Scarbantia still lives in its forum that became the market hall of the medieval city and is till now its urban centre. Today, Sopron's economy immensely benefits from the European Union. This European funding is a major asset for this location. The social diversity of the city makes it a favourable ground for further mixture. Indeed, Sopron's German-speaking culture and heritage are now recognized again as an advantage for economic attractiveness.

Morbisch am See, Nieusedler lake -by author, field trip-

Sopron is a significant wine producing region and a medical tourism destination. The expensive cost of health services in Austria compared to Hungary has led to a development of the medical infrastructure in the Hungarian side, in Sopron in particular. This largely available offer in medical infrastructure is beneficial for a potential camp, in addition to the demand in the agricultural working force.

Morbisch am See:

It is a town in the district of Eisenstadt-Umgebung in the Austria, located on the western shore of the Nieusedler Sea. It is a lake resort city with a different agriculture due to the lake microclimate and the soil quality.

The biodiversity of this village from one side and the threat facing it due to fragmentation makes this location a potential point of growth (with incoming new people) and new green connections.

Abandoned border control in Hegyeshalon -by R. Illes-

Hegyeshalom:

It is a village of approximately 3600 inhabitants in the Győr-Moson-Sopron county of Hungary. Despite the small size of this agglomeration, it presents the highest level of social diversity in a country famous for its racial homogeneity. The iron curtain left indelible traces of segregation and socially, a more welcoming reaction towards refugees as statistics of the region showed. The proximity to Gyor and Mosonmagyarovar (less than 20 km) makes it possible to benefit from their activities and resources.

Mosonmagyarovar:

It is a town in Győr-Moson-Sopron county in north-western Hungary. Originally 2 towns, the county capital moved in the medieval ages from Moson, previously known as Ad Flexum in the Roman era to Magyarovar.

Apart from the historical value of the city, its architecture and museums, the health infrastructure makes it the main medical tourism attraction on the border.

In the outskirts of the city, the floodplain of the Danube extends along the river and other water courses and is threatened by the agricultural expansion and pollution. The camp with its new production patterns and settlement can provide the missing connection and balance the existing water and soil pollution, and at the same time beneficiate from the infrastructure and the developed industry of the Moson County.

5-ZOOM IN SOPRON

Sopron and its radial plan: city, suburbs, fields –Google maps-

A border of 366 km is a long stretch, with the complex crossing border condition and different historic and social processes, analysing this region as a whole might reveal some aspects and drown others in the macro scale.

By choosing Sopron as an analysis example, we take into account a main feature in the border cities, the economic context, the shrinking process, the thriving suburbs and the extensive agriculture. We also zoom in a city that has many historic layers visible in its centre and hidden under strata of eras in its outskirts.

Networks

When we look into the grey and blue networks, we see a correlation that remained unchanged through time, especially in the centre layout and organisation, the water defines the main ring, and then runs from the core to the suburbs, the medieval roads with their tortuous lines define the old city centres, while we find remnants of the cardo and decumanus beyond the limits of the city.

In the suburbs the road mesh becomes looser, while patches get bigger.

Around Sopron, the peri-urban areas have different arrangements and formation processes.

We isolated some of the suburban patterns and looked closely to 2 of them.

The more urbanized suburb:

It has many facilities, a sport center, a shopping mall even though it lacks a visual and functional connection to the city.

The topography defines one border of the suburb while the water line defines the other limit. In between, different terraces go down from the hill to the water with pavilions and villas arranged along secondary roads parallel to the terraces.

Sopron blue and grey networks, zoom in on some suburbs: the more or less urban, the more or less rural –by author-

The surrounding agricultural landscape is disconnected from the residents, by the function and the perception, houses are fenced and oriented towards the center and not the farms.

The more rural suburb:

A radiating model is defined by a core that has the main facilities, some shops and a gas station, a school and a college, a small industrial area with 2 medium sized factories defines one limit, beyond the main core, farms with small houses grow bigger and bigger as they go further from the center. The water runs along the main transportation road. The inhabitants connect to the agricultural land surrounding them, as many of them are owners or renting the land.

6-CONCLUSIONS:

The crossing border condition of the region defines an economic and social framework of mobility and imbalance.

But this border has 2 points of perception, the tangible aspects with the remnants of the Iron curtain, the physical barriers and the natural distinctions like the soil pollution that is more severe on the Hungarian side, and the intangible aspects such as the urban formations, the social disparity, language and culture.

The peri-urban areas may have similar density but they have different processes and functions.

The border as a whole may be defined by its history, its economy or its social diversity but it is too complex to be reduced to a general identity, every city, every area has its challenges, its past and ongoing processes, and therefore, should be analysed piece by piece, in a gestalt understanding where the sum of these understandings is different from the general conclusions on the border.

IV. AB ANTE

Introducing a theory background, working with assets, differentiating the polis from the urbs

A new dialectic between 2 spaces - the city as the norm and the camp as an exception- has to be defined in order to soften the edges of this dislocation, in space and in time.

To change the relation between the camp and the landscape, we look first into the concept of a camp, its disarticulation from what surrounds it and its urban nature.

In order to do so, the theory background supports a new approach to the relief system: the asset approach.

The therapy to the disconnection is to consider another form of metabolism between the camp and the landscape, breaking the scheme of a dichotomy between 2 different spaces and places and establishing an interplay, an interaction through the continuum of the landscape and through time.

1-THE EPISTEMOLOGY APPROACH:

WHAT MAKES A CAMP A CAMP?

What is it about a camp that generated the exception, the freezing, the anonymous space and the alienating fences? And to what extent a camp is 'exceptional'?

To understand the exception, one needs to define the norm, as Malkki and Lefebvre Stated, the city is taken as a model of normality as it has 3 expressions, the physical expression: Urbs, the social expression defined by the sum of citizen actions Civitas and the political expression Polis (Grbac, 2013)

For Malkki, the camp's inability to promote the same expectations of citizenship as the city proves problematic (Malkki 2002).

Zaatâri camp, the quintessence of the transfixed camp -aerial photo taken in July 18. 2013, CNN-

Expressed differently, a camp is an Urbs with no Civitas. And it is the spatiality as a formative power that can build the social body of the camp. The dehumanization of individuals in the camps, the loss of citizenship rights, all contribute to the absence of the social construction of a city in the camp. Only the nativity is maintained while all skills, experiences and identity acquired later are erased. This quest of efficiency and ergonomics transform the Civitas into an automated name register where people are numbers and homes are coordinates. In that case, one can wonder how spatiality can be a formative and transformative power to the Civitas?

THE SPATIAL EXPANDING OF THE CAMP'S CIVITAS

What kind of spatial expression can address a social issue?

It is the limitation of movement and actions that limits the camp landscape to its frozen yet unstable state.

By giving a right to action, a right to change the camp and the landscape, we build a different relation between the refugee and his vital space and we loosen the grip of the temporary.

Empowering the refugees and recognizing their skills not only figuratively but literally, can be included in the process of contextualizing and developing the camp.

A set of assumptions have to be established first in order to define the appropriate reflection framework.

First, the state of vulnerability of the refugees related to an incapacity to absorb the unexpected and especially their fragile civil status and exposure to risks.

Second, the conventional dichotomy between the camp and its surroundings whether it is a city or the countryside: The camp is usually in a consuming stage while the city is producing, this vertical hierarchy prevents a paired growing of the hosting landscape and the camp, the community and the refugees.

Last, the importance of a design research approach to understand the limitations of camps as we know them in order to perform a research by design for the camp as we want it.

While political and civil changes are more difficult to implement especially in a consensual union as in Europe where different countries and cultures define one set of rules, spatial strategies can be more accepted and compromising.

If we focus on the site of intervention, the European CENTROPE plan that reunites the 2 sides of the Austro-Hungarian borders, the Serbian and the Slovenian neighbouring provinces provide an interesting framework to build upon.

Indeed, it gives a glimpse of what is envisioned for the region and we can fit the camp implementation into the future development of CENTROPE.

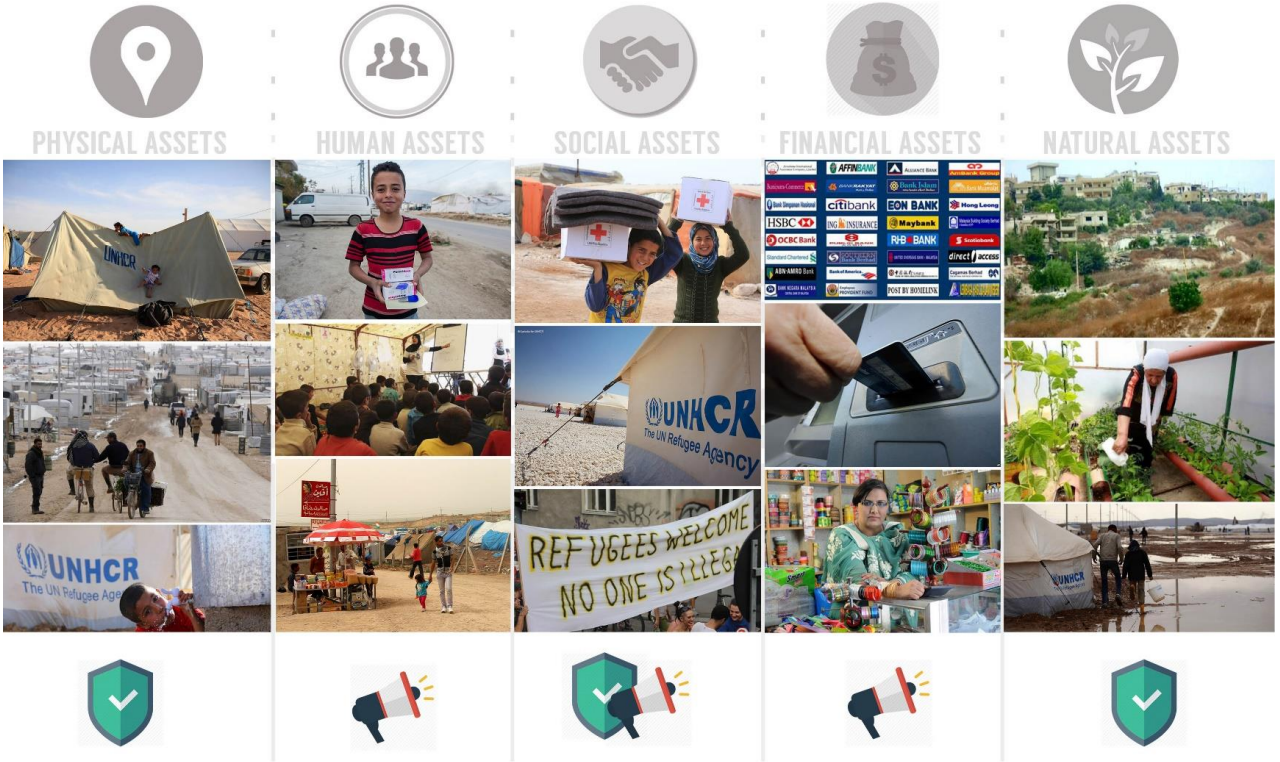
This need to blend the needs of the camp to the future of the region is the trigger for a combined design where the landscape grows with the camp.

2-INTRODUCING THE ASSET ACCUMULATION THEORY:

Even for the most capable individuals in the most promising environments, the camp is a bottomless whole. The deep-rooted pattern of providing goods, food shelter for the camp contributes to the vulnerability of the refugees.

As asserted above, this vulnerability is already altering their potential space and latent social interaction with the hosting community and NGOs. The aids received for camps depend on media coverage and tend to reduce over time, however, camps grow bigger and needier for more permanent infrastructure. This inversion between the received aids and the needed funds is a great factor of risk.

For Moser, poverty is a static state, but vulnerability is a dynamic process, people can go out of their vulnerability zone, and this is made possible by accumulating assets.



Example of assets, the promotional assets are marked with a megaphone, the protective with a shield social assets such as solidarity or NGOs can be both promoting and protecting –by author

WHAT IS AN ASSET?

Generally, an asset is identified as a "stock of financial, human, natural or social resources that can be acquired, developed, improved and transferred across generations. It generates flows or consumption, as well as additional stock" (Ford 2004).

Physical assets can be housing, shelters, transport, etc. human assets are related to health, education and labour. Social assets involve the community participation, NGO help, solidarity chains and any type of relief assistance. Financial assets can be loans, micro credits or savings, and finally, natural assets encompass environment quality, soil, air, and water resources. In addition to these consensual assets, Moser, Alsop and Appadurai define other nuanced assets including political assets that focus on rights and freedoms (linked closely to assets, as for the right to the land, labour right, free education, etc.)

It is by accumulating assets that we can reduce vulnerability. Physical and human assets are protective, a shelter, basic fulfilled need, nutrition and health insure the minimum livelihood while financial assets, education and rights are promotional assets, the latter help build a ladder to overcome vulnerability. Social assets however are the glue, a bridge between protection and promotion, solidarity and the sense of community can protect as well as give means of knowledge or production.

ASSET ACCUMULATION AND CAMPS

As stated earlier, the camp as a disconnected entity is failing in shaping suitable conditions either for refugees or for the hosting community. In that sense, building assets ought to be mutual.

Thus, the aim is to socially modify the hosting community landscape and to spatially modify the refugee situation: the social and spatial are mutually shaping forces.

In one hand, the established landscape /city/environment, that is amputated neither from its Civitas nor its Polis needs an ontological spatiality where space is a social product, and it is by reshaping the social that we build a better and more resilient landscape, capable of absorbing bigger flows of people.

In the other hand, the camp as "the purest form of makeshift architecture, last ditch living and emergency urbanism" (Lewis, 2008) is solely organized on the principle of function, efficiency and impermanence.

To shift the camp from being a materialization of the state of exception to a matrix of asset accumulation, we need to adapt to the landscape while shaping it.

3-TRIGGERING THE SOCIAL CHANGE BY THE SPATIAL INTERVENTION:

-THE PAIRED INTERVENTION:

Linked to the assets, the paired intervention meaning by that, any mutually beneficial measure involves mainly the physical and the environmental assets.

The natural formative power of landscape through ecological parameters intervenes on both spaces and blur the line between the producing landscape and the consuming camp.

This can be done by granting the camp spaces of production and by adapting spaces of trade (social or economic) between the city and the camp. To develop more this thought, an interpretation on the data collected by the UNHCR handbook is needed. It shows that willingly or unwillingly, a trade exchange is usually established between the city and the camp, this eagerness to interact is made difficult by the inaccessibility of the camp (fences, army presence, disconnection from the infrastructure) and the inadequacy of the policy (interdiction of trading, of leaving the camp or working outside of it) (UNHCR, 2012).

Physical assets materialized mainly through the flowscape can be optimized between the camp and the agglomeration: by sharing the infrastructure.

Sharing resources instead of doubling inputs and outputs is both a spatial optimization and a social trigger for more interaction and exchange.

-RISKS AS OPPORTUNITIES:

Reconstructing together initiative to buy land and rebuild houses for the poorest in New Orleans -goingdeep.hu-

As Agier claims, in a camp, "everything is potential" and though it can be understood as an evocation of the fragility and the uncertainty of the materiality of the camp, it can also be understood as the slight advantage that a camp has over the city as a norm: its capacity of rapid change and mutation, its nomadism and unfinished aspect.

These unstable yet promising aspects of a camp are both signs of vulnerability and a potential for infinite possibilities.

This pragmatic and positivist view of risks is typical of the asset approach where zones of breakage are considered to be lines of opportunities. Disasters are resets for better beginnings.

The case study of the Katrina Disaster in New Orleans showed that despite the destruction of the physical assets of the vulnerable and less vulnerable, this massive collapse allowed a better redistribution of the land and assets and thus, helped reduce the racial inequality.

The same applies to the camp, this setback, this reset not only develops a sense of entrepreneurship and initiative for refugees but it also allows better connections to the hosting landscape, most of the time, unknown and untamed.

Cuny describes 3 stages were refugees are altered by the camp, then alter the camp. The 1st stage: initial occupancy, is a passive phase where there is a minimal involvement with refugees simply following orders. The 2nd stage: re-organization is a reaction phase, it is characterized by some adjustments that refugees bring to their space (regrouping tents, centralized services), and 3rd stage according to Cuny: the tenure, it is the transition between the temporary facilities to more permanent ones (Cuny 1977). I would describe these phases differently always in association to the passive/active relationship to the landscape and the camp: agreeing with Cuny on the first stage, the 2nd with its soft adjustments is an acclimatisation phase where some reactions to the space are developed. It is when it comes to the 3rd stage, that a more effective participation would insure the connections to the hosting community and the surrounding landscape: a productive phase, where the refugee reconnects with his skills, the camp with the landscape and the consuming to the producing. And while doing so, the tenure, the temporal evolution of the camp and the landscape occurs.

4-THE TEMPORALITY:

The temporality in a camp is both for space and people: for Soja, Individuals are not only social and spatial beings but also temporal. Similarly, Peteet argues that a camp is a "perpetually suspended place".

The formative powers in landscape can be natural, cultural, urban and architectonic (Nijhuis & Bobbink, 2012), hence, by taking a landscape approach relying on these processes, we already build in time, especially if we include ecological and social parameters. Both a sustainable design and an economic resilience hold the seeds for an evolving landscape where the camp and the city can grow or shrink through needs and occupancies.

One of the assumptions that I made initially was the different futures for refugees, those who stay, and those who leave. And this already creates 2 camps in a camp and 2 needs from the landscape, a need for mobility and a need for integration.

Another important temporal aspect is the process of accumulation, again through the formative shapers of landscape: building a greener energy, a new water management system, building a hybrid place that can contain the citizens and the refugees, or simply connecting and innerving the 2 spaces as part of one whole.

People come and live and sometimes children are born in camps, growing up there as their parents grow older. And this anchors the need to loosen the grip of the tarp the/tent/the camp scheme to a tent/a shelter/a home scheme.

This uncertainty that the time factor implies makes a methodology based on the Azimov Model more complex. Concretizing the abstract impermanence while simultaneously questioning feedbacks from more tangible aspects can be problematic.

It is important in that level of intricacy where time, space and stakeholders are different to rely on the shortcut of the understanding through creativity and therefore through design.

V. AD FLEXUM

The roman camp, the decaying city, the refugee camp

1-HISTORY AND REMINISCENCES

3 of the 6 cities on the necklace were roman cities or camps thousands of years ago. Some of them still keep traces of this era and some keep the last stones locked in museums, and Latin syllabi attached to their names.

Isis temple "Iseum", reconstructed , in Szombathely -Wikipedia by Szamu Muemlek-

SZOMBATHELY:

It was founded by the Romans in 45 AD under the name of Colonia Claudia Savariensum, commonly named Savaria, and it was the capital of the Pannonia Superior province of the Roman Empire. It lays close to the important "Amber Road" trade route. The city had an imperial residence, a public bath and an amphitheatre. In 2008, remains of a mithraeum were discovered and Isis temple was reconstructed.

SOPRON:

When the area that is today Western Hungary was a province of the Roman Empire, a city called Scarbantia stood here. Its forum was located where the main square of Sopron can be found today.

During the Migration Period, Scarbantia was believed to be deserted. By the time Hungarians arrived in the area, it was in ruins. In the 9th–

11th centuries, Hungarians strengthened the old Roman city walls and built a castle. The town was named in Hungarian after a castle steward named Suprun.

MOSONMAGYAROVAR:

Detail of the Tabula Peutingeriana with the border garrisons and the distances in Roman miles. Significant places are marked with a double house: Carnunto - 14 - Gerulatis - 16 - Ad Flexum (now Halaszi in Mosonmagyarovar) - 13 - Stailuco - 12 - Arrabo fl - 30 - Brigantio - 5 - Lepauist – 13, etc, along the Amber Road –wikiwand.com-

The area around Mosonmagyaróvár has been inhabited since the 5th millennium BC, but settlement of the city proper can only be traced to around the 1st century, which was when the Roman Empire was extended to the Danube, creating the province of Pannonia. The Romans established a camp called Ad Flexum at the site of Mosonmagyaróvár; it is likely that the Hungarians from the Árpád era would name the place Óvár due to the Roman ruins which would still be present during the 11th century. The purpose of Ad Flexum was to defend the Mosoni-Duna, but the security the legions provided also drew civilian settlement, especially since a major east-west trade route ran through the area.

Mosonmagyarovar is therefore a perfect example on how a roman camp grew to become a city and the blurred line that separates the 2 types of settlements.

2-THE ROMAN CAMP

The Roman camp has a set of principles and components recognizable by a consistent visual language that remain unchanged whenever it is located.

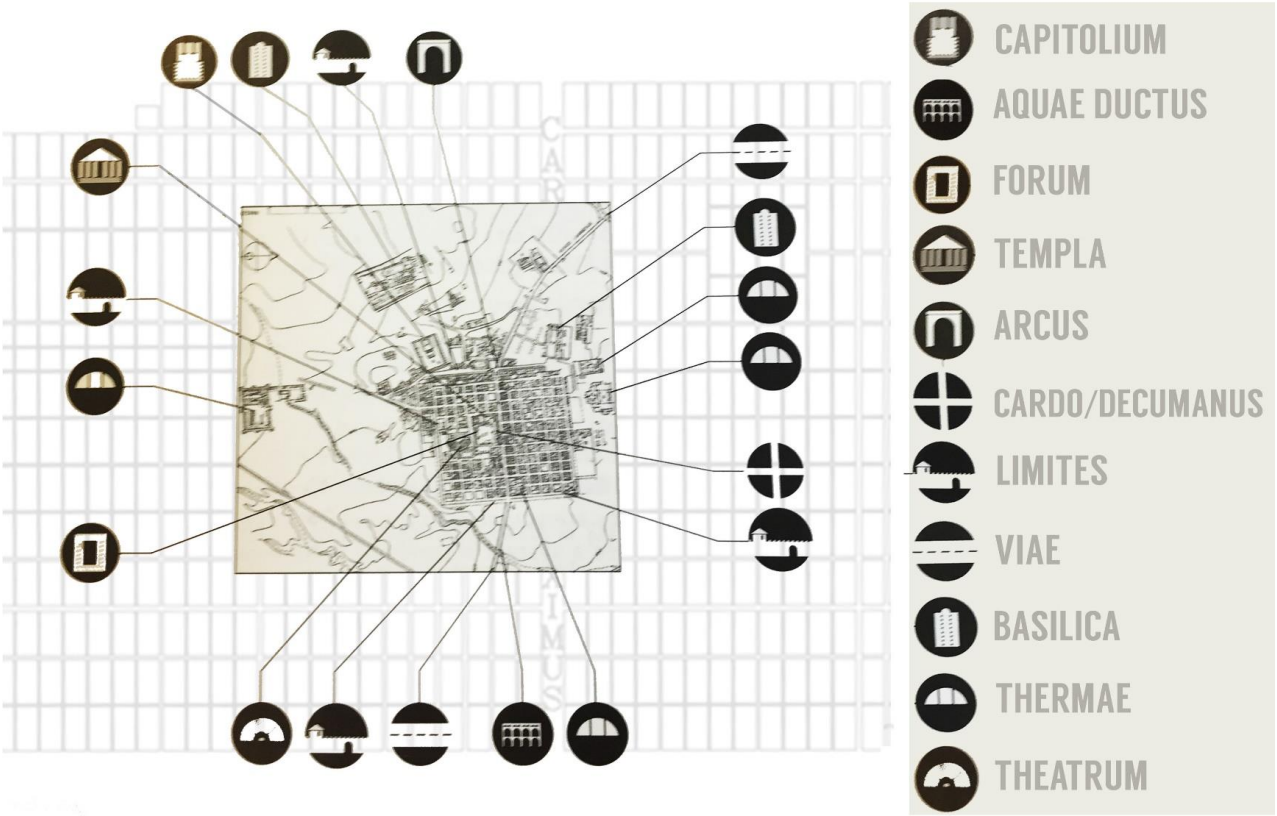
4 elements define the configuration of the roman city/camp:

-The city/camp is composed of a list of known and exhaustive components according to an unchanged matrix (the 2 axis), these parts and the axis tracing are easily recognizable.

-the organization is determined by cultural, social and political principles that can be translated visually in urban and architectural expressions (the column head, the number of columns, the location on the matrix)

-the camps is a result of an interlacing between ongoing flows and immutable templates.

-this generic setting still gives rooms for contextuality and adaptability depending on the topography, the climate and the culture.



The Roman camp and its components -from the book Mutations -by Rem Koolhaas OMA and the Harvard Project-

So what are these standard components of the Roman settlement?

-buildings:

The basilica: for gatherings and commercial activities, to be located next to the forum.

The capitolium: the temple of state religion, with a triple deity, the capitolium is easily recognizable with its tripartite plan. Its presence is a sign of allegiance to the Roman emperor.

The Templa: religious buildings for the veneration of God and or the royal family, usually in the core of the city, integrated into the religious, economic and social life.

The Theatrum: used for the presentation of games and performances apart from the commedia reserved for the Amphitheatre.

-Monuments:

The Arcus (such as the Tirumph arch) commemorates usually a victory, in the gates of the city.

The Columna: for commemoration as well but used more in the city center.

-Planning:

Cardo and Decumanus: the matrix, defined a traced according to ritual performed by a Magistrate according to the solar orientation.

The Centuratio: process of gridding the city and the agriculture which establishes an unbreakable link between the city and its surroundings.

The Forum: a central outdoor space for exchange of goods and services, its size gives enough retreat for the monuments perception, the perspective control is central for the Roman planning.

-Infrastructure:

The Aquae Ductus: to transport and distribute water.

The Limites: the edges of the city that can be walls like in Eastern Europe or ditches as in Germany, they create and introverted city model and allow to control the goods and people flow from and toward the city.

Viae: a paved network of roads that connect different camps/cities in the Roman Empire and facilitate trade and transport.

RELATION BETWEEN THE CITY AND THE LANDSCAPE:

Although the standardization of components might seem limiting, the Roman camp still follows the landscape logic by optimizing the potential of the location: an island city gives more security but less connection. The width of streets and the architecture of buildings should depend on the climate and the orientation, the perception of the surroundings should always favour the open views to strengthen "the relation with the sky".

The proliferation of the city must fulfil the local needs first and connections to the surrounding cities has to always be secured and maintained, no city is an island.

In short, the Roman camp has the paradoxical condition of being generic and contextual at the same time. By defining clear principles and standard components, the establishment and growth of the roman city is made easier and faster without altering its relation and connection to the landscape, tracing of the axes can be altered by topography, location of the main buildings can be changed with the sun orientation and the blue and grey networks follow available resources and the natural relief.

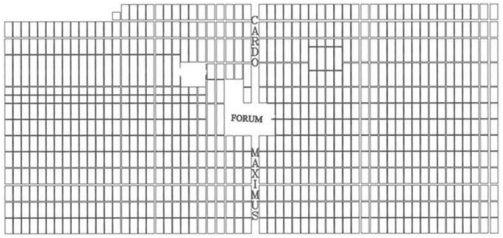
PARALLEL WITH THE REFUGEE CAMP

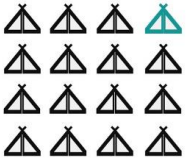
The refugee camp is openly inspired by the Roman camp and copies in its rigid components the settling and formation of the Roman Settlement.

The organization of 16 housing units into a community and 16 communities into a district, etc. replicates the Roman organization.

In its grid and its arrangement, the Roman and the refugee camp share similarities, but these similarities extend to some of the basic components. The Basilica becomes the informal shopping area, the forum is the leftover space, the Capitolium is a Hybrid space that can be either the ONG headquarters or the representations of the hosting government or region.

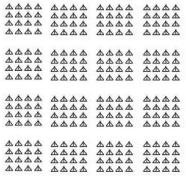
Viae Ducti became water trucks, and the main paved axes are often muddy roads that take to nowhere. The missing components are the core of the Roman civitas, the social identity of the city defined by its social and cultural production. However the camp doesn't recognize this identity for many reasons: mainly for security, camps are spaces of social diversity. Thus, identity is dimmed to keep social peace between different ethnicities or religions. The Cultural production is also minimized since it needs dedicated spaces and accommodating conditions that are lacking in the camp. The grid organization denies adaptability and customisation, which was not the case in the Roman city. For matters of efficiency, gain of time and money, the UNHCR banks on short to medium term economical solutions and settings, which allows a fast and functioning configuration that becomes later less and less adapted to long stays and further growth.





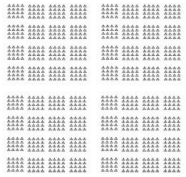
X16 80

1 COMMUNITY



X16 1250

1 BLOCK



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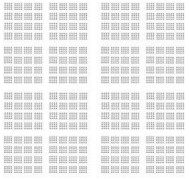
1 SECTOR



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1 CAMP

The similarities between the Roman camp and the Refugee camp: structure and grid -by author-

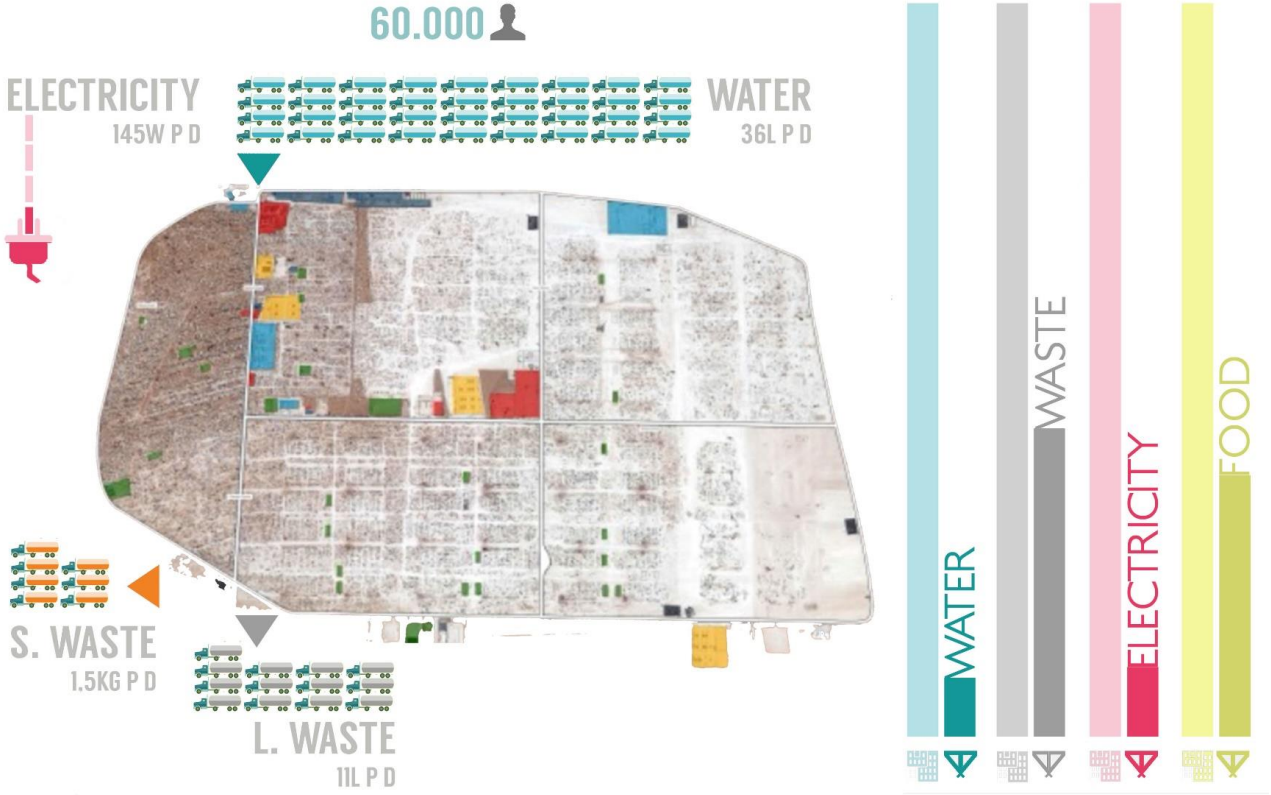
3-THE CAMP METABOLISM

When we look into the numbers of the refugee camp and by that we mean, its consumption of resources, water, electricity, and its generation of solid and liquid waste, we are confronted to 2 realities, first, the camp consumption changes widely depending on the number of people and the location of the camp, the quantity of water consumed for example differs by the double or triple if we talk about an Asian or an African camp.

In one hand, the camp supply chain is often disconnected from the usual and common networks whether we are talking about supply of energy or water or getting rid of waste. This disconnection with the informal and sometimes illegal ways of getting electricity, wood for heating or gas makes it difficult to quantify the camp consumption.

But it is for certain, that a camp with its restrictions, difficult conditions and very elementary housing consumes way less in water and electricity than the city, and theoretically generates less waste. But the perishability of the camp materials, like the tents (that only lasts 6 months), the tarp (2 years), the heater or fan (2 to 3 years), blankets(3 to 5 years) and other consumable goods make the pile go bigger and bigger in time. The difficulty to manage or recycle waste also influences the impact of the camp green footprint.

Therefore, it is not a matter of quantity, when we compare the refugee camp to the city, it is the difficulties of supply and management that makes the camp less sustainable with a pathological metabolism, especially when costs of water, gas and waste transport add up.



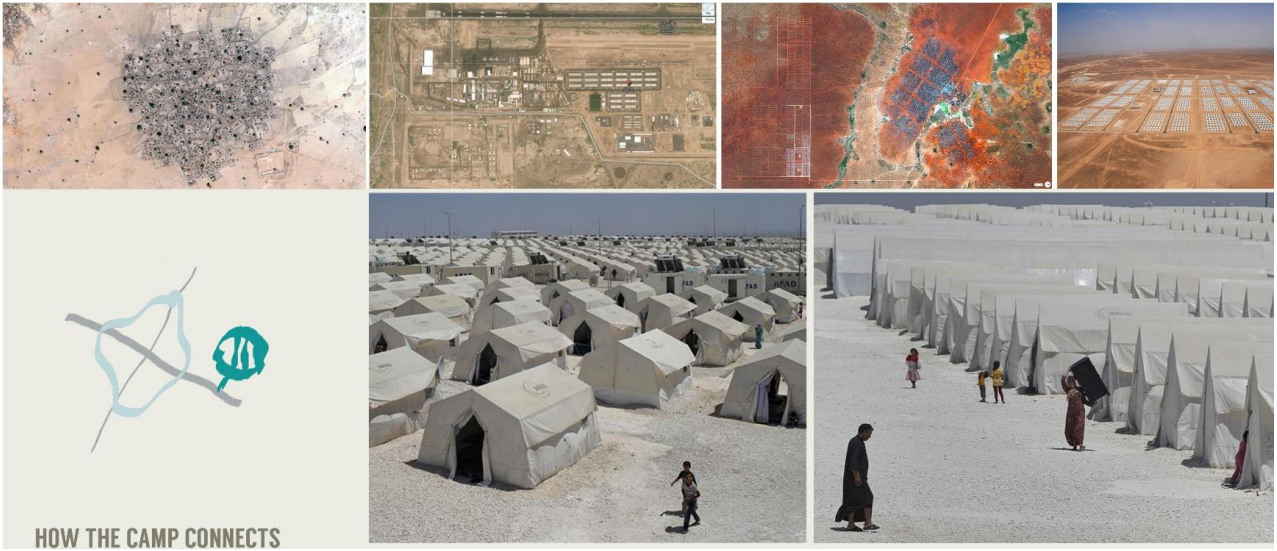
The camp metabolism, goods in garbage out, the transport cost and a comparison to the average statistics of a European city-by author-

4-THE CAMP [DIS]CONNECTION:

Through top views of different camps leaving aside their location or their size, one quick observation can come to mind: the disconnection of the camp.

Not only in a matter of networks and transport but also in terms of patterns, resources and assembly.

Satellite images show clear cuts in the landscape where the camp begins, and where the camp ends, trees are cut, the roads becomes thinner and then stops, a buffer zones surrounds the camp as if it is a space of confinement or contamination. This



The camp disconnection, the void surrounding it, the 'appendix' connection -aerial photos from different camps (African and middle-eastern camps) Associated Press-

camps of disconnection are the main manifestation of their dysfunction, their uncomfortable isolation is a synonym of an unspoken segregation that is defined by policies, applied by planning and translated in hostility.

It is both appealing and alarming to see the close correlation between space and behaviour and how one generates the other. We can't aim for integration if we continue to design camps as appendixes, unwanted, useless and isolated, and we cannot aim for connection if we don't bridge the gap between a hosting community that is asking for growth and not burden and refugees that are asking for dignity and not exclusion.

5-SPOTTING THE DECAY

The decay in Sopron city center, Saturday evening- by author, field trip-

Camps are always an emergency setting, a space hit by waves after waves of unprecedented and unpredicted numbers of people in a short amount of time, and in a small amount of space. But does it always have to be like this?

Is the emergency situation coming from an impossibility to predict or a blind-sided appreciation of the situation? Usually it is both, and prevention is rarely taken into account when it comes to the refugee issue, only when the flows are moving do we acknowledge a need of relocation and safety.

But how do we free the camp from the yoke of the perishable tent and the standard tarps.

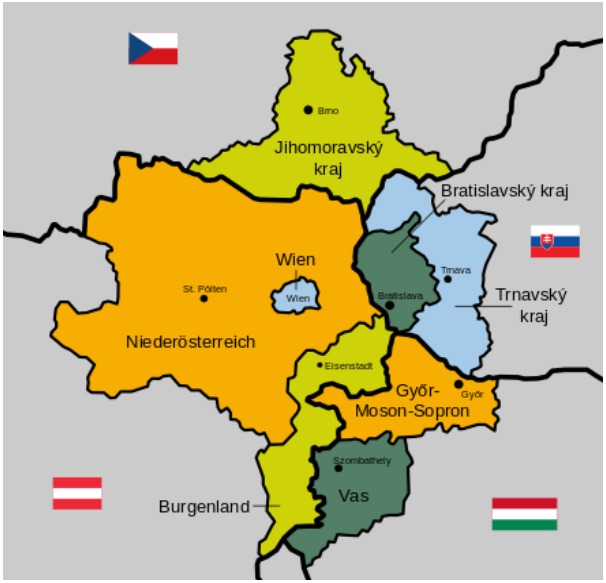
Spotting the decay is a local solution in peri-urban areas of shrinking cities. The decay has a potential of occupation with a minimum of preparation, it shortens times of building from scratch and servicing unoccupied locations.

A camp from ruins, the cinis-city (ruin city) is then a draft of a camp, an alternative to the perishable, an optimization, that in time will beneficiate the camp and the region. The benefits of the camps are in the emancipation from the emergency usual solution and an ending of the disconnection scheme, whereas for the region, it is revealed in a regeneration of the urban mesh and reactivation of hibernating or abandoned functions (such as schools, shops, housing).

VI. UT SUPRA

Elaborating a strategy

1-FITTING INTO CENTROPE



CENTROPE consists of regions that lie on either side of the northern and eastern borders of Austria -by Stefan Lefnaer-

'CENTROPE is a European strategy to establish a multinational region in the Central Europe encompassing four European countries: Slovakia, Austria, Hungary and Czech Republic.

It is a joint initiative of the Austrian Federal Provinces of Vienna, Lower Austria and Burgenland, the Czech Region of South Moravia, the Slovak Regions of Bratislava and Trnava, the Hungarian Counties of Győr-Moson-Sopron and Vas as well as the Cities of Bratislava, Brno, Eisenstadt, Győr, Sopron, St. Pölten, Szombathely and Trnava. They all work jointly towards the creation of the Central European Region in this four-country quadrangle.

CENTROPE CAPACITY is the lead project funded under the EU programme central Europe. In the period until 2012 it aims to create a multilateral, binding and sustainable framework for the cooperation of local and regional authorities, enterprises and public institutions in the Central European Region. Specific goals consist in creating of polycentric cooperation framework which should allow all the partners to work jointly and more effectively on the cross border issues. Project also offers them new tools for

a balanced spatial development as well as integrated development strategy and action plan.

Translated into a set of directed plans, it is crystallized in 5 approaches:

REGIONET ACTIVE: encouraging entrepreneurship and SME initiatives.

PANANET: Pannonian nature preservation.

ESPAN: the energy strategy towards a full self-sufficiency from the imported fossils

EDUCORB: Educational cooperation in the Austrian Hungarian border to learn languages and skills.

CITT: CENTROPE information technology transfer

With a total budget of 4.515.462, 00 € an ERDF contribution of 3.628.358, 30 €, the European Union gave means for this strategy to succeed.

In what aspects CENTROPE can fit in the future vision or a thriving region with functioning camps?

DESIGN TASKS:

REGIONET: platforms for start-ups and synergies between the cities and camps.

PANANET: ecological bridges, cleaner agriculture, riparian buffers.

ESPAN: expanding wind farming and hydraulic energy use.

EDUCORB: establish a network of bilingual schools open for locals and refugees.

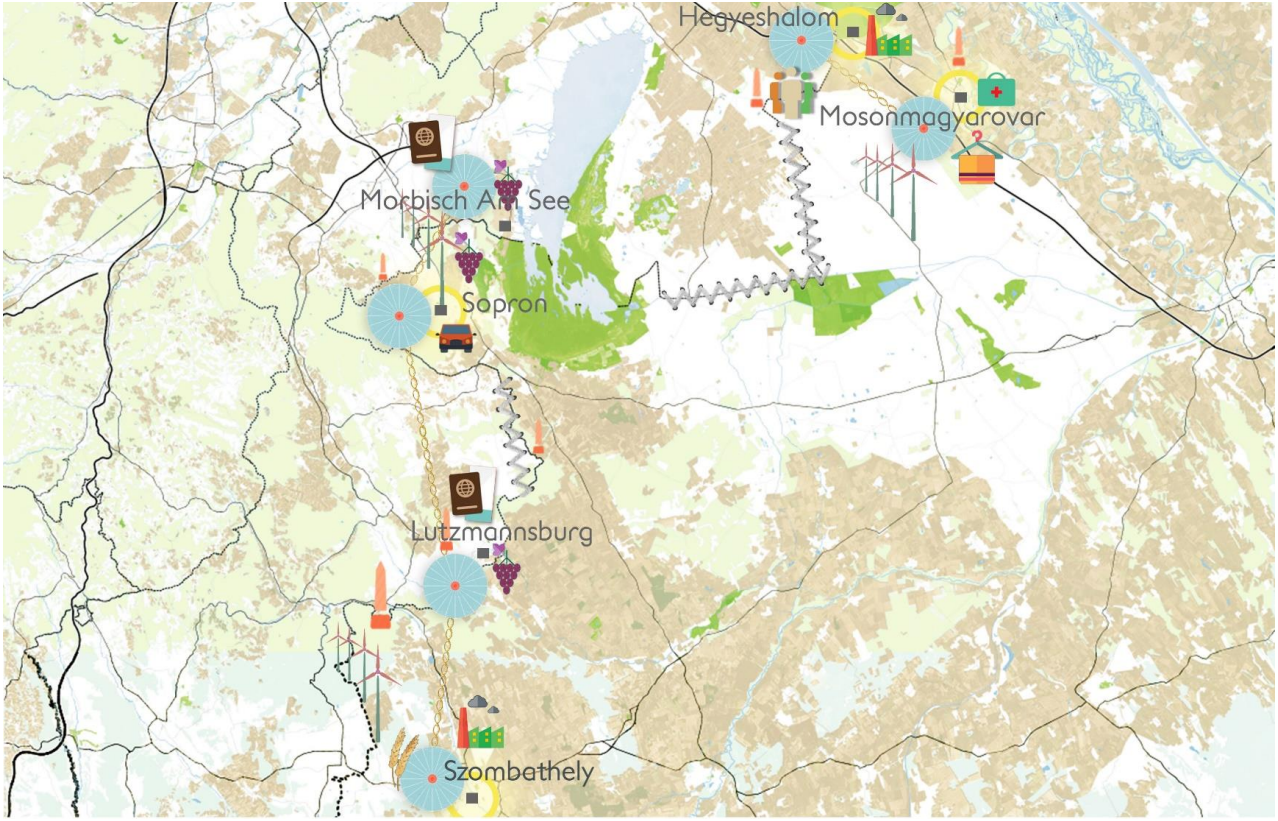
2-THE SHELTER NECKLACE:

As stated in the site analysis and the camp understanding conclusions, one of the strategies to design a different camps is to change the way it starts (switch the emergency phase from a plastic era to the cinis-city) and the way it grows (a controlled growth that activates new location instead of uncontrolled expansion). The region carrying capacity is a thermostat that can tell what size for what location and when do we move to a new one.

The carrying capacity is measured with the available resources, the size of the community and the number of inhabitants, it also takes into account the blue, green and grey networks available, a necklace is above all a closed circle of connection, a thread that is connecting milestones.

It is not only a matter of connection to the surroundings but also a need to connect the camps for the sake of infrastructure optimization, so that some central services can be met halfway in between 2 dots.

It also stitches back two countries different in their economies, policies and cultures and yet continuous in its flowscape through highways water and green lines and main water bodies.



The shelter necklace connecting sites with potential: social diversity, job market offer and ecological value -by author-

3-THE REGION PHASES

As introduced in the social capital Study by R. Putman, there 3 types of social interactions: bridging, bonding and linking.

Based on these types, we phased the region interventions in 4 stages: prepping, bridging, bonding and binding.

PREPPING:

**Long-term investment in sustainable energies: implementing more wind farming in order to absorb eventual over consumption.*

**Rehabilitation of the decaying infrastructure (roads and buildings) with a triple investment: Europe, the governments and the UNI-ICR. Bringing back the productive city to the centre.*

BRIDGING:

**Sharing the Civitas makers: education, health and social infrastructure*

**Activating the CENTROPE initiative on different scales - 0 by implementing the natural connections between the 2 sides of the border.*

**Adjust the productive tissue to the new demand, revive old patterns/create new ones.*

BONDING:

**Creating synergy spaces: free economic and social trade: where fences and bans go down.*

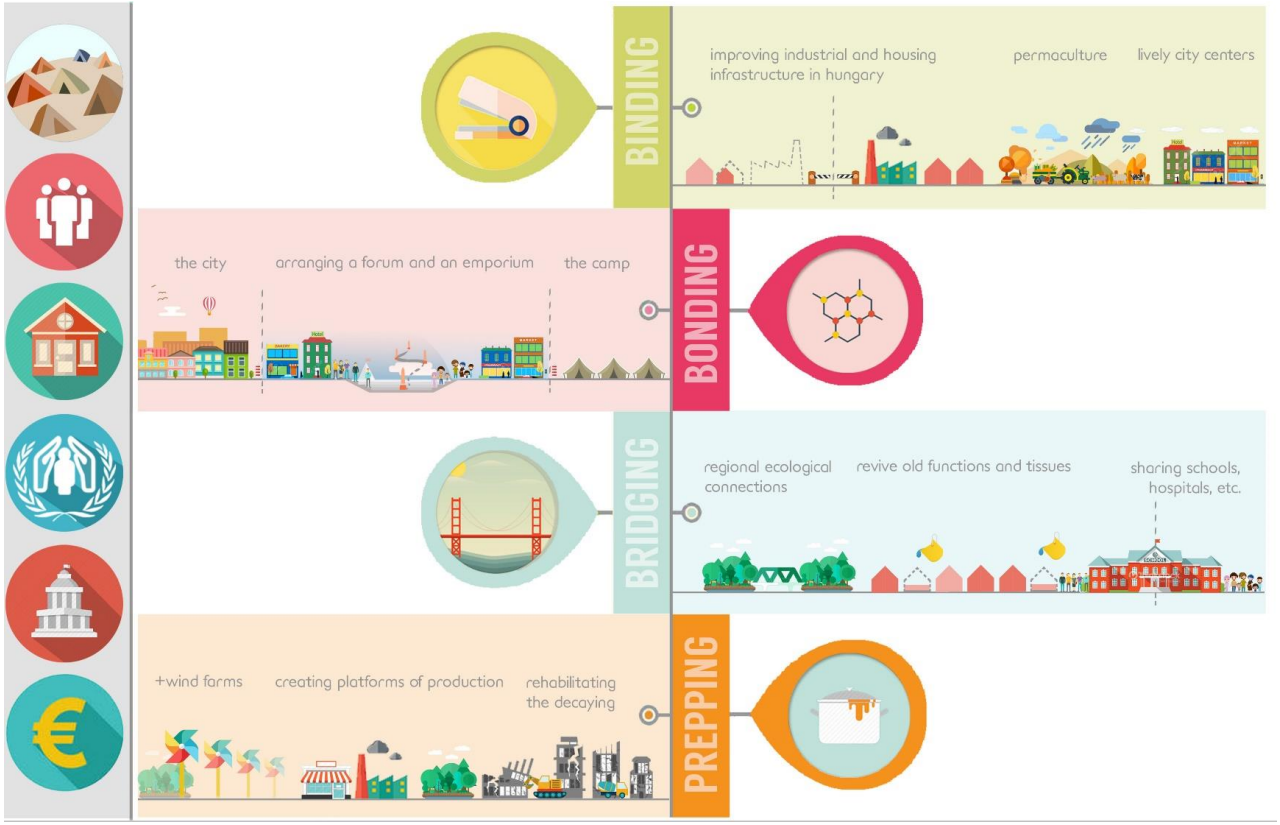
**Building a common memorial network holding both the new and the old refugee history*

BINDING:

**A new synergy of production/consumption, waking up the dorm city by changing the relationship between the cities and their suburbs*

**Changing the agricultural model towards a more sustainable one.*

**Creating a new balance of power between the 2 countries on the border.*



From prepping the region to binding with the camp: phases of a graft -by author-

These abstract principles are interpreted into more spatial principles:

PREPPING:

More wind farms

Creating platforms of production

rehabilitating the decaying

BRIDGING:

Regional ecological connections

Revive old functions and tissues

Sharing schools, hospitals, etc.

BONDING:

Arranging a forum and an emporium between the city and the camp

BINDING:

Improving industrial and housing infrastructure in Hungary

Permaculture

Lively city centres

4-THE CAMP PHASES

Cuny defined 3 stages for the refugee camps: initial occupancy, re-organization and tenure, based on the definition of these stages and a critic on their deficiencies we recognized the limits of the actual camps phases and their lack of adaptability and choices, this led to a 4 stage phasing: discovery, acclimation, production and mobility or integration:

From the discovery to integrating the region: phases of a graft -by author-

DISCOVERY:

**Choosing the right site: a network of mini -camps*

**Optimizing existing grey and blue network by connecting the camp*

**A different emergency pack that includes water and solid waste management*

**Assigning identity to the sectors with colours and landmarks*

ACCLIMATION:

**Integration by education and trainings*

**Adapting to an environmental friendly setting*

**Accessing the norm in the nomos*

->The right to the Civitas

Or

**activating mobility*

->The right of return

**Skill based assignment in the network of camps*

->The right to the landscape

PRODUCTION:

**Clean agriculture: permaculture*

**Fitting into the CENTROPE plan: developing the SME entrepreneurship initiative: physical and logistic means.*

->The right to the city

INTEGRATION OR MOBILITY:

**Activating mobility*

These abstract principles are interpreted into more spatial principles:

DISCOVERY:

Identic sizes: a network of cities and camps

Preserving the blue & green connections

The colour landscape: following the "colour code" of the region

ACCLIMATION:

Adapting to a green life style

Assigning skills to camps

Education and training infrastructure

PRODUCTIVITY:

Opening barriers for production canals

Implementing a physical platform for SME in camp

Permaculture

INTEGRATION OR MOBILITY

The right to leave

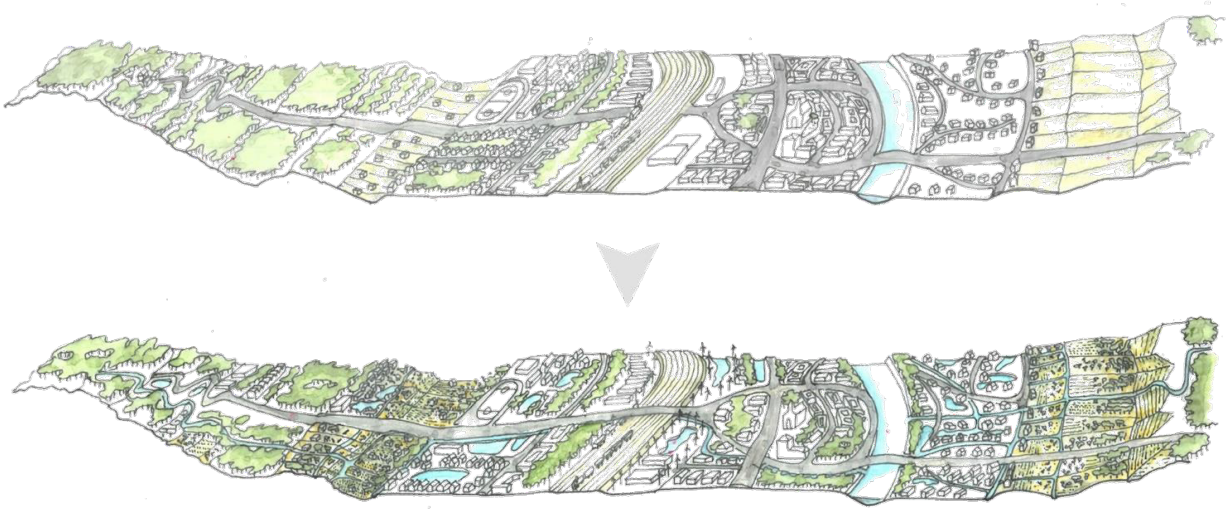
Turn shelters into homes

5-PHASING INTERTWINING:

The camp and the region seem to have different tempos of growth, development and stabilisation but beyond the diversity of design tasks, the prepping of the region already sets an approach of adaptability and productivity to the camps. The camps is then one of the activators of the development strategy of the region, it fills a fragment, regenerates the abandoned, repurposes the decaying and allows for diversity and interaction.

6-SOPRON AS A CASE STUDY:

Abstracting a stretch of Sopron, we can notice 3 main features, an inconsistent water system, canalized and erased in the agricultural outskirts, a mono level road system that cuts through train rails, and merges with the city ring. And an extensive agriculture that eats from the valley fringes little by little, the spaces of transition are blurred and ill-defined.

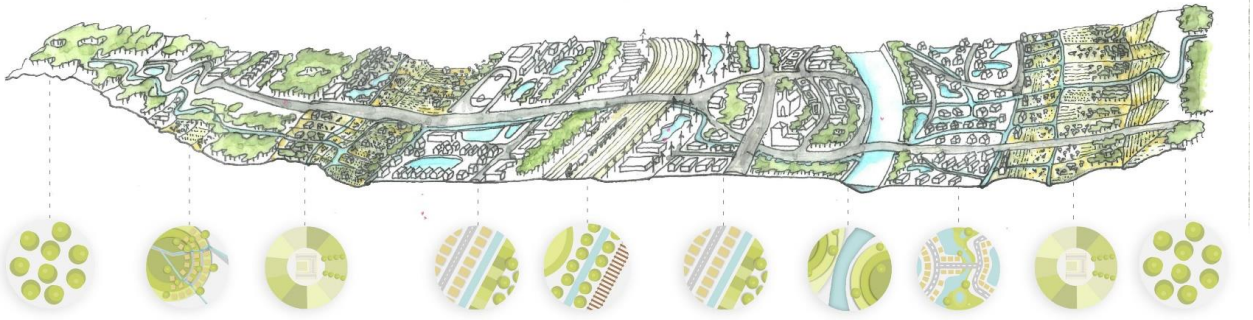


A stretch of Sopron: recovering the water, shaping conditions for new landscape infrastructures -by author-

Applying the region strategy, we can read the landscape in search for the missing water lines, and establish along these lines new transition spaces, camp included, by doing so, we design a drainage system for a new agricultural model, based on permaculture practices, which allows to clean the soil, to fragment the agricultural land which will allow the water lines to be digged.

By doing so, we create new in between functions, we re-establish network hierarchy and we give identity to suburbs, the wet area gives more resilience to the city for flooding. And the camp becomes the missing link to reactivate hibernating connections.

A stretch of Sopron: new landscape ecologies, hybrid landscapes, room for water and for the camp-by author-



VII. SCIENTA POTENTA EST

Creating from understanding, processes of a design

1-MOSONMAGYAROVAR AS A CASE STUDY:

Traces of the meanderings, Mosonmagyarovar –google maps-

As stated in the analysis, the city of Moson has a rich palimpsest through natural and historical stratifications. If we look closer to its genesis and structure we see the gradual disappearance of the Mosoni Duna meanderings and the continuing fragmentation of the green patches. The consistency through times of the roads and the mains water lines has led to sustain the logic of plots in the agricultural land that remained unchanged for the past 3 centuries.

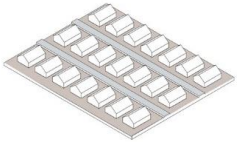
This interesting setting with natural enclosure formed by the Mosoni Duna River led us to consider the particular location between Mosonmagyarovar and Halaszi.

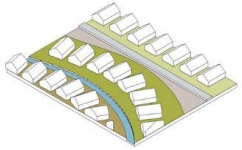
The camp in the landscape, the wetlands, the green connection: conditions for a regeneration –by author-

2-HOW LANDSCAPE SHAPES THE CAMP?

As stated in the methodology chapter, the redefinition of the camp from a space of a static place with a standardized function and definition to a space of flow where the ongoing processes of landscape are shaping and reinventing the camp structure has led to a set of principles that defines and clarifies on how the landscape as a formative power shapes the camp as a space of flows. And 5 guidelines emerged in a dialectic with the archaic shapers of the camp, confronting reconsidered conceptions to old ones:

THE GRID X NEW PATTERNS





When we talk about patterns, we generally describe physical manifestations of more intangible processes, the urban production, the topography, the water course, etc. are all matrixes for patterns and grids.

The Roman grid applied in camps de facto erases landscape and urban matrixes as generators of shapes and lines.

But how do we read patterns in the landscape? How to isolate the meaningful lines? And what is the mitigation process behind reshaping patterns?

The urban pattern:

To strengthen the continuity between the old urban settlement: the community and the new one: the camp, defining main urban irrigation lines and continuing them through the camp is a first step of inclusion. Roads don't stop in the barrier whether it is visible or invisible, don't avoid or restrain the camp.

The agricultural pattern:

The agricultural grid is not always a rooted or logical system especially in extensive or expansive agriculture where the greed for surface erases lines of topography and water. However in our site, the unchanged agricultural greed through centuries gives already a hint about the consistency of its logic, the over layering of its lines in time gives it a solid ground to be maintained and restored.

By choosing the party of a productive camp, we aim to maintain the function of landscape as a producing milieu, and therefore we should build upon its production lines, particularly the agricultural fabric.

Patterns as a cultural production:

Beyond the physical manifestation of patterns, their cultural identity is greatly significant. The refugee camp is first of all a gate for newcomers, people different in their situation background and culture. Beyond the social aspect of this new flow impact, the camp confronts 2 physical manifestations of 2 different identities, the identity of the space and identity of its occupier.

Vernacular architecture in Northern Hungary, corbelled villages in Eastern Syria -stock photos-

When we look closer in the surroundings of the camp, we find ourselves immersed in an agricultural landscape with a rural suburb, with individual housings, silo farms, arranged alongside roads or water lines or both.

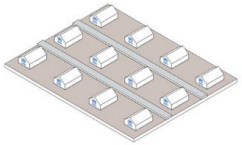
The familiarity of this arrangement is confronted with the different setting of middle and extreme eastern refugees past situation.

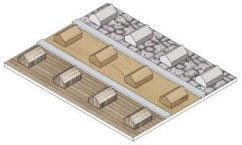
By isolating the main providers of Refugees: Syria, Iraq and Afghanistan and looking into the traditional urban and rural system, the vernacular architecture and the settlement armature of cities and villages, we come to a very different organization.

Notions of transition from public to private are very different for the Eastern European ones. While in our region, the private sphere begins with the doorstep, in oriental cultures/countries, gradients of privacy are favoured, with stages of transition: the public road, the community courtyard, the extended family garden and the private house/room.

These transitions ask for a different planning, the grid that favours individuality works against hierarchisation of roads and spaces, and therefore, an organization around a family and community cores along roads that depend on distribution and function fulfil the need of transition while fitting into the urban and agricultural patterns.

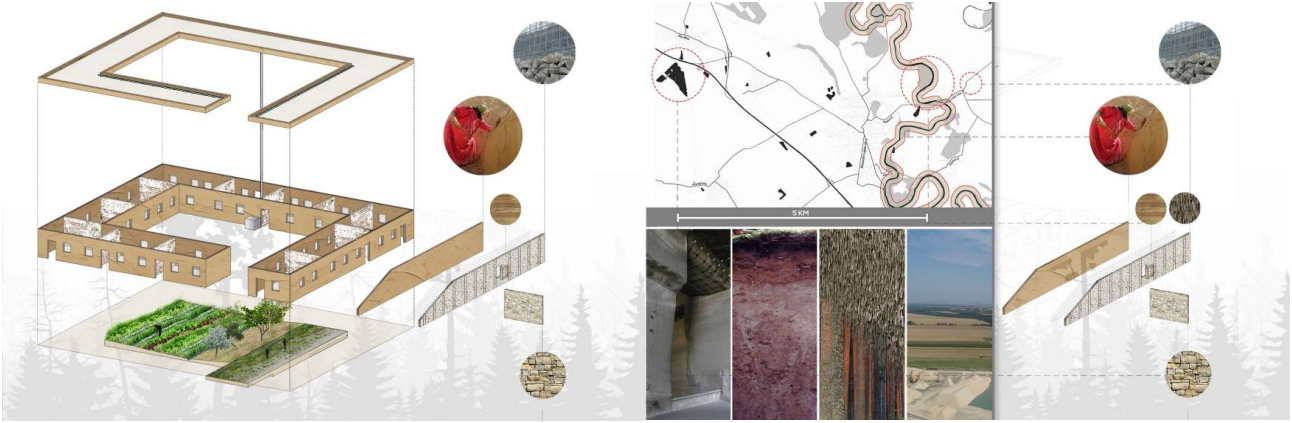
THE STANDARD X THE LOCAL





The UNHCR camps are recognized by the white and blue colour palette, the hand logo, and the UNHCR letters on tents, tarps and containers. From the depths of the South American jungle during natural catastrophes to the tropical heights of the Cambodian camps in Thailand during the red Khmers ruling, the landscape components change location without changing

materials. People differ, their reasons, the weather can go from freezing to a burning sun, the camp can be deployed over the sandy extent of a desert or the humid loam, the tent will still be in plastic, the tarp, woven and the containers, metallic, no matter what resources and materials does the region contain, the rigidity of standardization doesn't give room for customisation.



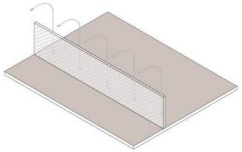
Proposal for a palette of local materials bearing in mind proximity and skills –by author-

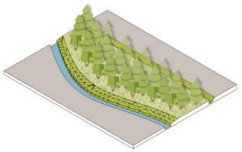
By acknowledging the available resources and their cycle of renewal, new possibilities take shape, allowing a more organic layout and planning of the camp and extending lifespan of the perishable and the sustainability of the base materials.

In our region, the availability of the reed and the expertise of the locals to use in buildings, the accessibility of the clay and the proficiency to use it as a construction material by the refugees, the limestone and gravel quarries nearby, already provide a spectrum of materials that can allow different sizes and purposes.

In a circle of 5 km with a very minimal transport cost and going hand by hand with the region rehabilitation of the wetland the green connection, enough materials can be extracted to build and set up a camp. The initial investment is less of a burden for the NGOs due to the involvement of different stakeholders and to the joint benefits that can be generated.

THE WALL X THE NATURAL FENCE





Some lines in the landscape are lines of connection, a water course, a green stripe, a road, but some are material for segregation: walls, fences, barbed barriers. Although the camp exclusion doesn't only depend on the materiality of its limits, the wall itself prevents from any visual or perceivable connections, and pattern continuity will fail short when obvious barricades are enclosing the camp.

How do we isolate without excluding?

As for the border, natural limits are the least disruptive parts of the line. The site location choice already gives a natural enclosure that can be reinforced by different solutions:

-the water lines: the old loop and the new meanderings.

-the green patches: the riparian buffer and the wetlands can act a buffer zones allowing a continuity in perception and a compartmentalization in functions.

-haha barriers: the most efficient way to insure continuity without trespassing the refugee camp policy of enclosure.

The haha and a green wall, the new camp border –by author-

-buffer buildings: using shared building infrastructure as abuffer zone, allowing to create a space of mitigation without allowing a completely free flow. These buildings can be shared schools, administrations, medical facilities or ateliers.

-the road: the road can be both a connection and a separation: by unifying the function on its both sides we insure that the cut it practices on the landscape is gapped by the consistency of use on its both shores.

This leads us to consider the connection of the camp.

THE DIS-CONNECTION X THE RE-CONNECTION(S)

The spine or the main connecting road is not only the backbone of the camp but also the armature of the site, it is first a historical road, a main artery in the city since its goes through the center, over the river and it is also a major national road that links the city to its major suburbs and to its industrial zone.

By placing the camp on its side, we break up with the appendix pattern and reinforce the connection initiated with the patterns and the local materials use,

This proximity is not only physical and symbolic, it is also materialized in the economic vocation that this interface allows. By initiating production and shopping activitites on the camp side, we trigger an economic trade on the other side and ultimately through the city along this axis.

This line of connection is strengthened with a bundle of networks:

-starting with the wind farming area on the industrial outskirts, this wind energy will provide clean and green energy to the city, its suburbs and the camp.

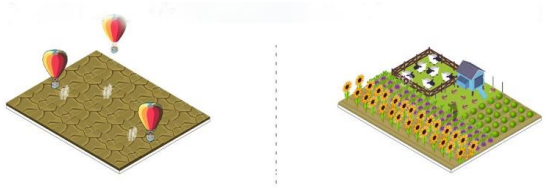
-running beneath the bitumen the sewage pipes will service the suburbs that are not yet connected and the camp

-the transport facilitation and the movement of people and goods.

The main zones in the camp are also relatable and connected to the spine. (Internal shopping street and buffer buildings).

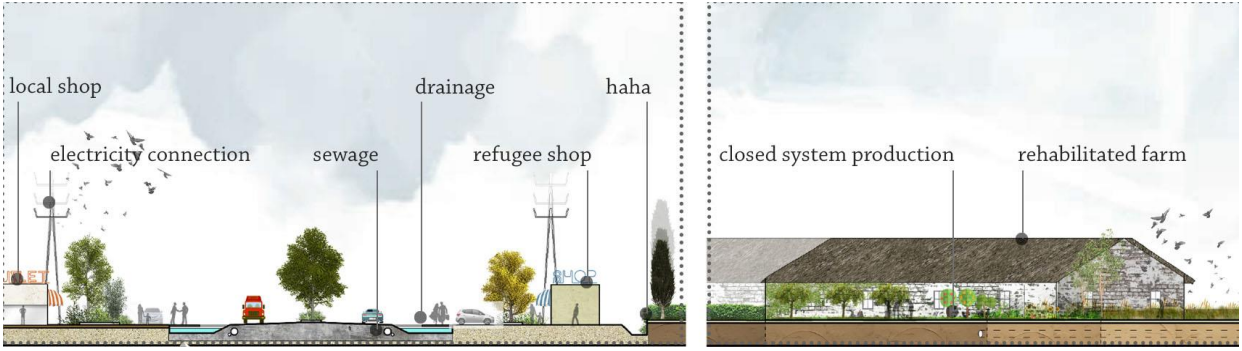
Section on the spine: the bundle of networks: sewage, electricity, physical and economic connection –by author-

GOODS X PRODUCE



A productive camp is a contextual camp that first acknowledges the patterns of production in the region and builds upon them layers of activities.

First, the agricultural production: the camp site is divided in a residential and multi-functional area and an agricultural zone. A new pattern of production is introduced through the camp in the expectation to extend it beyond the camp limits. The permaculture as a close economy system will allow an autonomous production and a clean use of soil and water, beyond its organic dimension, it also allows a complete waste control and a diversity of products that will give more opportunities for base materials: fruits, seed and vegetable harvest, meat, dairy or wool, different possibilities are given by choosing a hybrid model using both animals, crops and trees to withstand a sustainable production.



Section on the spine: the trade interface: 2 different productions, physical and economic connection –by author-

Alongside the agricultural production for trade purposes, the enclosed courtyard in the residential blocks allow to support a familial production with a small orchard or vegetable gardens. This practice is very common in the Syrian and Iraqi courtyards where the useful meets the enjoyable.

Apart from the agricultural activities, the working force demand in the industrial area in Mosonmagyarovar and Gyor can be fulfilled through the spine that allows quick transportation control.

Acknowledging each refugee skills, different opportunities are given:

Teaching and administrating in the buffer buildings, working in engineering and production in the factories, or harvesting, and treating base materials to extract different end products, although the enclosure is real and the circulation is limited, the ability to generate a revenue, and to be effective restores both the dignity of the refugee and the function of the landscape as a support for human activities and a generator for economic growth, cultural and ecological values.

A combination of new considerations give a different layout and zoning in the camp. Along with the criteria cited in the UNHCR guidebook, these 5 principles offer a sustainable approach to the camp design while giving more room for adaptability.

Nonetheless, by supporting since the premises a reciprocal consideration of benefits for the region and the camp, the question can be asked differently:

3-HOW THE CAMP RESHAPES THE LANDSCAPE:

By using the urban landscape approach as a method and a framework, the presumption was earlier made about the necessity of benefits in an integrative design where the landscape through its flows regenerates places whether we talk about the city,

Cleaner energy, better resilience, better ecology, more diverse economy and society and more services –by author-

the suburb or the camp. Therefore, we have to see the earlier stated principles in an integrative context where we recognize aside with their impacts on the camp their effects on the region.

NEW FLOWS

The flowscape of the camps is first defined by the 'new blood' it brings to a region, not only in terms of refugee numbers but also the new actors, the attention in brings and the new structures that this social upheaval convey.

In a context of shrinkage, decay and aging, this new addition causes both disruption but fills also a void in demand, supply and occupancy in the region.

If we consider the temporality of the camp not as a space but as a status, the refugee status is supposed to be transitory and yet this transition is not limited in time, thus, it is not the temporary that freezes the camp in limbos, it is its transitional state. And this new relation of the region is both about staying and leaving, adapting and integrating or preparing an imminent or far departure. This blurry relation to the landscape brings a new perspective and looks through different lenses to the potentials of the landscape structure as facilitators of both settlement and movement.

NEW PRODUCTION

The establishment of a new production scheme in the same agricultural fabric gives a new approach to agriculture as generator of growth in an ecological approach where development goes hand in hand with resiliency.

The end goal of this implementation is to go beyond the camp limits through the carrying structures of landscape and to extend a greener and more ecological agriculture to the surrounding farms, and from there through the border.

TRIGGER TO CHANGE

As stated earlier the camp gives a new perspective and sheds light on a forgotten and hibernating regions.

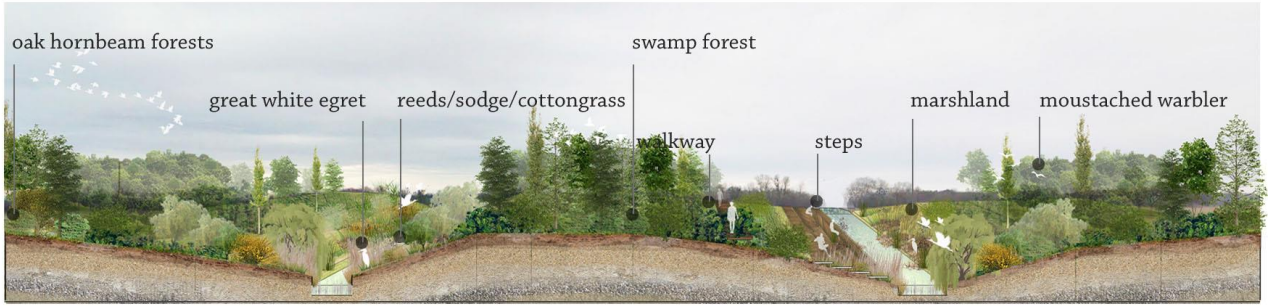
By overturning the region functioning, this reverse will become an impetus for change, through new production, new people, new settlements, new patterns…this physical metamorphosis of the region will trigger socio economic and ecological transformations: more resiliency to floods, a new relation to the city, a distinct infrastructure connecting dots on the necklace and a different border dynamics.

SELF-SUFFICIENCY AND GREEN MANAGEMENT

The camp need for autonomy and self-sufficiency triggers a change in the energy scheme of the region. The establishment of the wind farming as a supplier for the camp and city already fulfils the ESPAN strategy in CENTROPE by aiming for autonomy from fossil energy. The infrastructure that the camp calls for challenges the existing region networks.

By adopting a zero waste policy, by re-using the vernacular construction materials and by dealing differently with agricultural waste, the camp sets an example, a capsule of management that might extend and disrupt the common model.

The attention that the camp brings stirs the region in a different direction, a perspective of sustainability (green energy, local materials), a perspective of resiliency (to flooding and to economic vagaries), a value of bio-diversity (re-establishing the wetlands, redesigning the mitigation tools, and cleaning water and soil) and a greater social mix (new patterns, new production methods).



Recovering the endemic species of the Danubian floodplain –by author-

Section on the new wetlands, a space for nature to regenerate with a very light intervention for leisure –by author-

Suspended pathway and immersed steps –by author-

Synthesis of the 3 sections: Water fluctuation with a big seasonal gap, suitable for diversity and reed harvesting–by author-

4- STAKEHOLDERS

When the region or the site becomes more than a matrices or a ground, it is not only the infrastructure that is used and taken into account, it is also the different actors that become involved.

A shared responsibility changes the reliability and shifts benefits to more than one group or organization. It also lightens the financial burden on the UNHCR and gives more possibilities of funding and execution.

Who are the new actors on the refugee issues scene? And what changes in their involvement?

THE UNHCR:

The main stakeholder with the structure and the administration that can set up and sustain a camp

THE EUROPEAN UNION:

As an actor playing on both sides of the border, meaningful also by the projected laws that outrun those of the 2 countries. Setter of the immigration policy and the crossing border condition until the recent refugee crisis. The CENTROPE development strategy is a financial manna to outdo the usual camp objectives.

THE GOVERNMENT:

Responsible for major infrastructure projects and a country level of coordination such as habitat fragmentation, water policies and applying the European directives.

THE MUNICIPALITY:

A direct actor that should and has to work closely with the UNHCR for the choice of sites and the available resources.

THE REFUGEES:

Although they are powerless in a traditional camp, in this new setting they participate more actively in shaping their lives and their environment. With their skills recognized and developed, the camp doesn't strip them from their humanity and instead it promotes their integration.

THE LOCAL COMMUNITY:

Their involvement makes all the difference between a jail-like camp and an integrated camp, their level of participation determines the final outcome of the settlement and it is their reaction to the new productions, patterns and constructions that we can bank on to change drastically the region.

THE DESIGN TEAM: URBAN PLANNERS AND ARCHITECTS:

As designers, they are involved in the making of the camp by gridding and allocating components and infrastructure. They are somehow less prominent with the involvement of the refugees in the making of their own houses with their skills and knowledge. They however provide conditions and framework that allows the design and the people knowledge to come together in the camp.

THE LANDSCAPE ARCHITECT:

The landscape architect reads the landscape and acknowledges its formative powers, and by doing so, he actively participates in the effort for a site location, then preparation.

The palette of materials and the patterns can be a joint decision with the board of designers, the locals and the refugees.

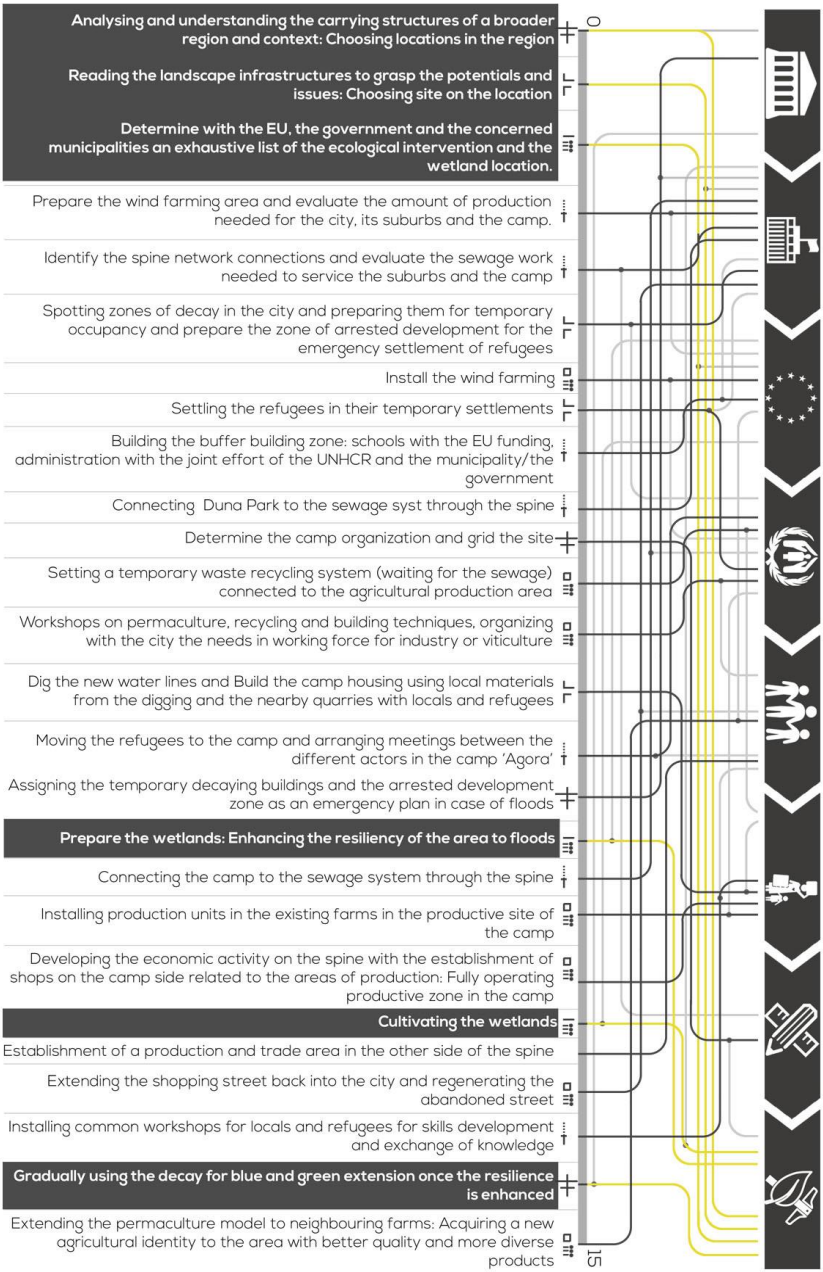
The landscape architect is therefore very important in the first stages of the camp settlement since he sheds a new light on the region potential and offers a new understanding to its structure. He is also responsible for the regional development of the necklace as a whole, in the interlacing of the different processes existing in the region or brought by the camp.

When we look closer into the diagram on the page 102, we can see that the landscape architect has a role of preparation: shaping conditions for a new dynamism, for new landscape infrastructures to form, and then a role in the maturation, once certain conditions are achieved, other steps can take place.

However, from the intricate involvement of different actors in the large spectrum of actions, it is clear that it is a joint responsibility to take and joint benefits to harvest.

How do these actors shape on a long term vision the region and the camp?

A set of actions with the direct or secondary involvement of each stakeholder, the landscape architect highlighted by author-



5-PHASING:

-1ST PHASE: PREPPING THE REGION. DISCOVERY BY THE REFUGEES:

The emergency phase where the decaying buildings act like emergency houses for the refugees. In our site, the zones of arrested development with their ready to use infrastructure and networks can be used almost immediately, the municipality spots the decay and the abandoned and communicates with the UNHCR. A first identification of the spine, its potential networks is necessary.

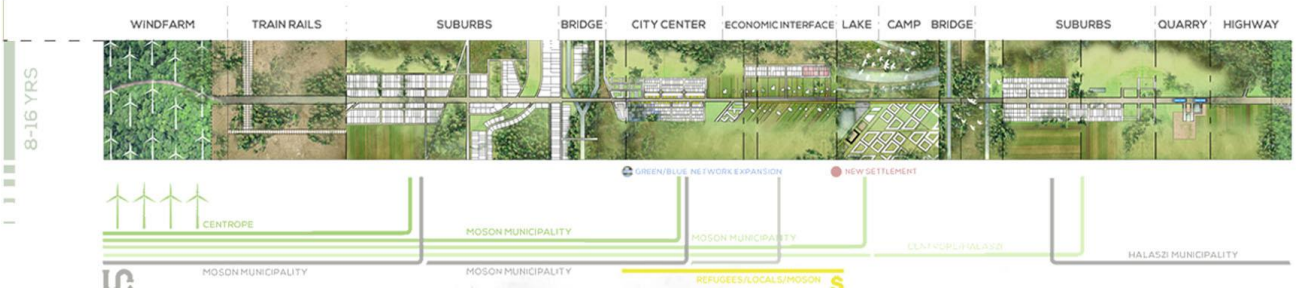
-2ND PHASE: BRIDGING BETWEEN THE CAMP AND THE REGION, ACCLIMATION BY THE REFUGEES:

The gridding of the camp and the preparation of the revived water lines and the wetlands are going hand in hand. The windfarm with European funding sits in the fringe of the industrial area. The first network is set. The buffer zone with the shared buildings is conjointly constructed with the municipality, the government and the UNHCR.

-3RD PHASE: BINDING WITH THE REGION, PRODUCTIVITY OF THE CAMP

The camp is functioning, the patterns are filled with buildings, and the emergency relocation of the refugees in the first phase becomes an emergency plan for the region in case of flooding (that occur every 6 to 7 years). Water lines are digged and the material extracted was used in the camp construction. The wetlands are beginning to shape. The sewage system that is connecting the city runs through the spine to connect the suburbs. The camp establishes its economic interface and triggers the facing suburb to do so.

4TH PHASE: STABILISATION



The camps functions in a self-sufficient pattern, the bundle works to its full potential, the economic interface runs through the city and activates the old shopping street. The resiliency of the region to floods is enhanced with the new wetlands and waterlines and therefore part of the emergency plan of relocation is given back to the green and blue network with intrusion of water in the city. The new agriculture generated by the camp extends beyond its borders.

6-FEASABILITY:

THE CAMP INVESTMENT

*The cost of a refugee in urban areas is around **US$1000** per year (1), the assistance package in this case is building on existing services.*

*According to Qatar Red Crescent (QRC) that launched a humanitarian project to shelter the displaced Syrians delivering a 36 m^2 house build out of clay blocks from the natural environment **costs US$2000**. (2)*

The Center for Immigration in the US estimates 12 times what the UN estimates it costs to care for one refugee in neighboring Middle Eastern countries. (3)

*Annual nutrition cost per refugee sums up to **US$**400 (4)*

*Assuming that a refugee will spend on average 10 years in a camp this will result in a total of **US$**10000 spend by UNHCR, during which the refugee has been in a transition stage all the time ,did not get any significant support to integrate and join the working force.*

Our view is that with half of that investment over 5 years and by directing a significant amount of this allocation to a dignifying housing alternative that ensures stability, safety, and privacy for the inhabitants we can contribute to a more efficient transition for the refugees that settles for a more permanent solution and shift their focus on building know how and expertise provided by means of additional financial support shifted to the goal.

The alternative solution will also cut costs per refugee over 10 years by 50% as refugees are expected to take an active part to the working force by end of year 5 latest and contribute to the local economy, a contribution that can result only by tax payments in recovering the initial full investment made on them in less than 4 years.

*(Assuming a tax payment of **US$**1250 per year over 4 years, for a salary of **US$**12500 per year (10% Tax)).*

Hypothetical Split of the US $1000 for a refugee for current UNHCR setup

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
HOUSING UNHCR	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500
Catering	-400	-400	-400	-400	-400	-400	-400	-400	-400	-400
Health, Clothes	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
Adaptation/Skills	0	0	0	0	0	0	0	0	0	0
Tax Payment	0	0	0	0	0	0	0	0	0	0

Alternative Split of the US $1000 for a refugee for a take ownership setup

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
HOUSING CLAY	-1500	0	0	0	0	0	0	0	0	0
Catering	-400	-400	-400	-400	-400	0	0	0	0	0
Health, Clothes	-100	-100	-100	-100	-100	0	0	0	0	0
Adaptation/Skills	-200	-200	-200	-200	-200	0	0	0	0	0
Tax Payment	0	0	0	0	0	1250	1250	1250	1250	1250

*Giving the exact same initial investment over 5 years of **US$**5000 in both setups ,it is clear that the second option offers a better return on investment resulting in a net benefit of **US$**1250 (25% BENEFIT) recovered through a tax payment where the first option will result in a net loss of **US$**5000 (100% LOSS) .*

Another way to look at it is that for the current spend as set up by UNHCR for one refugee over 10 years we can support over 5 years two refugees enabling them to deliver each 25% BENEFIT over 10 years plus ensuring that they become fully independent and integrated through work into their hosting economies.

NATURAL REHABILITATION

Wetlands provide an abundance of valuable functions and services, including flood storage, wildlife habitat, pollutant removal, recreation and commercial products. These "free" services are often taken for granted and can be difficult (if not impossible) as well as very expensive to replace, as wetlands are altered or degraded in a watershed.

Despite the expense and uncertainty associated with replacing the lost ecological services of wetlands, urban and rural development, which accounted for 61% of wetland losses during 1998-2004 (Dahl, 2006), continues to impact wetlands. Preventing the loss of wetland functions is a challenge, particularly when financial gains for individual parcel development seemingly outweigh non-market wetland values for the greater community. To address this concern, scientists have begun to assign economic values to the important roles of wetlands. This is done through a process known as economic valuation that aims to make ecosystem goods and services directly comparable to other sectors of the economy. Some examples include:

Constanza (1997) estimated the global value of wetland ecosystems at $14.9 trillion

In a recent European study wetland services in continental Europe were valued at $9.4 billion per year for freshwater wetlands and $1.2 billion per year for saltwater wetlands.

Replacement Options for Wetland Services	
Wetland Services	*Replacement Options*
Flood protection	*Stormwater treatment practices (storage); dikes and levees; advanced floodplain construction design*
Recreation	*Wetland restoration; species stocking*
Maintain drinking water quality	*Water filtration plants, develop new water source*
Shoreline property protection	*Revetments; stream bank stabilization and repair practices; stormwater treatment practices for channel protection*
Maintain baseflow in streams	*Deeper wells; alternative water source*
Wildlife habitat and biodiversity	*Wetland restoration; species stocking*
Commercial products from wetlands (e.g., peat, timber, cranberries, rice, fish, shellfish)	*Wetland restoration*
Reduce pollutants in streams and stormwater	*Stormwater facilities designed to meet water quality criteria (WQv)*

Placing an economic value on wetland functions and services may serve as a useful tool to help a community justify wetland protection.

Wetland Type	*1997 $ Cost/Acre*	*Wetland Type*	*1997 $ Cost/Acre*
Aquatic bed	*$45,000*	*Emergent*	*$43,675*
Complex	*$95,000*	*Scrub/Shrub*	*$124,144*
Freshwater mixed	*$52,000*	*Intertidal emergent*	*$415,007*
Freshwater forested	*$124,000*	*Open water – emergent*	*$273,700*
Freshwater emergent	*$84,000*	*Open water shrub/forest*	*$130,220*
Freshwater tidal	*$78,000*	*Emergent scrub/shrub*	*$351,591*
Salt marshes	*$49,000*	*Emergent/intertidal*	*$59,238*
Mangroves	*$24,000*	*Emergent – forested*	*$235,799*
Prairie potholes	*$4,000*	*Riverine emergent*	*$82,928*

CENTROPE allocated diverse REGIONET constructions budget € 3.628.358,30, a lot can be done to rehabilitate the lost habitats.

In fine, investing in nature and in people is admittedly a long term investment but certainly a sound one.

7-CONCLUSIONS:

What can be inferred through the design process is how the research by design undertaken at this stage has changed priorities and direction of the design and the plan both for the region and the camp. It is through design as a generator of understanding that the main features of the camp took shape.

The contextuality of the proposition is both a proof of rooting in the landscape and a side effect of it.

The governance layer is vitally important to operate within the new principles of the camp.

VIII. IN FINE

operability / Reflecting on the hardware, the software, the orgware

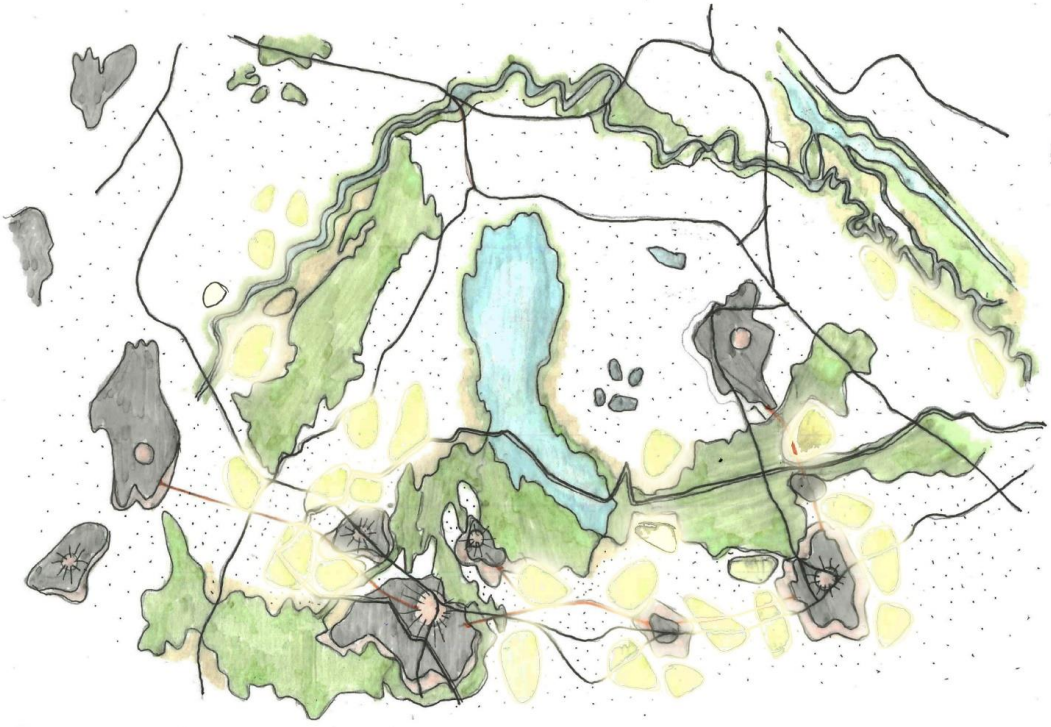
1-THE PHYSICAL: ZOOMING OUT: WHAT FUTURE FOR THE BORDER?

We were first confronted to a region with a crossing border condition, facing soil and water pollution threats and occasional floods. With an unbalanced growth on both sides of the border with shrinking and aging cities. What is expected to change with the strategy?

Zooming out to the border, a new organization can be projected. Connected networks with thriving city centres due to new incomers, a cleaner agricultural production that is spreading on the region, a new pattern of mobility with a transversal movement of people in between the dots of the necklace, revitalized economy, a consistent green fabric and more social and economic opportunities.

Although these assumptions are corroborated with examples, the experimental subject gives them a dimension of prediction rather than projection.

To validate these assumptions, a comparative study is to be considered as a next step.



What to expect: a better transversal connection along the border, radiating new agricultural model, regenerated urban fabric in the bordering cities and a more consistent green and blue networks–by author-

2-THE PEOPLE: THE HUMAN DIMENSION: WHAT ARE THE SOCIAL IMPACTS OF A DIFFERENT CAMP?

It is worth noting that more than anything else, the complexity of the stakeholder scheme involved with the imperative or the reciprocity in benefits makes it easier to reap the reward of the strategy implementation on many levels.

A comparative story: same starting point and 2 girls born in 2 different camps: the camp like we know it and the camp as we project it

Nevertheless, the operability of the strategy and planning depend greatly in human resources and actors involvement. It is both a strong argument for the strategy and its potential Achilles heel. The projected strong involvement of non-contractual actors makes it difficult to assume for certain their willingness to participate meaning by that the refugees and the locals. Permaculture is for example very demanding in maintenance and working force. However, in a Zimbabwean camp, there was an implementation of permaculture on small scale, more individual gardens meant for individual consumption. 2 main conclusions were drawn from this experience review: first, the relative success considering the harsh weather conditions and second, the difficulty to apply such a transformative process on a small scale. Therefore, it is firmly believed that despite the difficulties of predicting human behaviour and social trends, it is more likely that with the suitable weather conditions of the border with enough rain and fertile soil, in addition to the site allocation and the production purpose will allow the permaculture to thrive and to become economically sustainable.

In that sense, physical condition can overcome the difficulties of social predictions.

3-THE POLICY: ADDENDUM TO THE UNHCR GUIDEBOOK:

It is important to remind first the 9 criteria for site selection and camp design that the UNHCR guidebook states in order to review them:

-close to water source
-45m2 per person, clear separation in functions, collective functioning for the waste, toilets and showers.
-land use/land right in coordination with the local government.
-Areas with gentle slopes and no risks of flooding
-accessibility for supplies and health care
-climatic conditions and local health
-vegetation to reduce erosion and dust clouds (in desert climates)

-social life: taking into account the social background of the refuges

We first formulate a critical analysis of these criteria by highlighting their implications and their limitations.

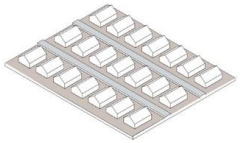
UNHCR CRITERIA	CRITIC / ADDITION	UNHCR CRITERIA	CRITIC / ADDITION
Close to a water source	Efficient for the short term but suggests only a consuming approach, the water will be consumed, not treated, recycled, quality improved. The camp will be completely dependent on this supply with little or no manoeuvre for innovative and efficient solutions for water management.	Accessibility for supplies and health care	Going even further by connecting slow traffic lanes as well as public transport. Connecting the green corridors or the green patches, being part of the landscape system and the urban patches.
45m2 /person, clear separation in functions, collective functioning for the waste, toilets, showers, etc.	Top-down approach where the real experience of the camps has shown its limitations, gives little space for people to change the camp and shape to their needs and their identity. the collective facilities are barriers separating the camp from the city.	Climatic conditions and local health	No problem of epidemics in Europe, the architecture of the tents and the facilities can be inspired by the local architecture, ad adapts to the specific climatic conditions of the area
Land use/ land right in coordination with the local government	When we use exclusively the no mans land places, the confined desertic plains, or the furthest locations we establish already a disconnection to the hosting community, the land right should be more flexible it can be buildings in the city, it can be areas that will be developed in the future and unused now and it can be zones of abandon.	Vegetation to reduce erosion and dust clouds (desert climate)	Using vegetation for more purposes, to link to the surroundings, to the green lines and patches, to cultivate, to produce, to beautify
Areas with gentle slope with no flooding risks	If the space allocated for the camp belongs to a city where people are established in mountains or valleys, plains or disturbed terrains, the camp should follow the structure and integrate by it shaping in the urban milieu. It can a catalyst spatial factor to a social integration as well.	Social life: taking into account the social background of the refugees	Adding to that: taking into account the social background of the receiving community, raising awareness for the host culture in camps, educate the children in the local schools to integrate them. Workshops, classes and joint decision making between hosts and refugees
		Security: protecting the camp from the outside attacks and protect from within	Neutralize violence with the UN policy of gun free camps, encourage inter-ethnic dialog between refugees, raise awareness in the hosting community about the condition of the refugee and the international laws significance

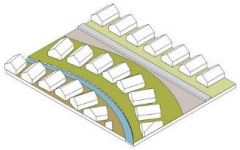
How do we translate our principles to a set of criteria eligible for the guidebook?

By first synthesising the result of the old and the new instead of confronting them, we can elaborate operative principles that can be included as new criteria or edit old ones.

THE GRID X NEW PATTERNS

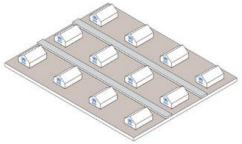
(The urban pattern, the agricultural pattern, patterns as a cultural production)

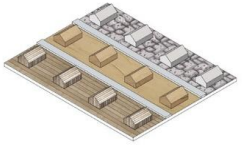




-> taking into account the existing patterns and the cultural settings of the refugees to design a consistent fabric within the landscape logic and infrastructure.

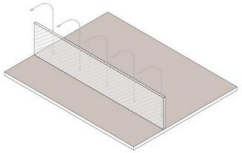
THE STANDARD X THE LOCAL

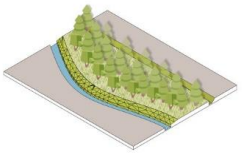




-> exploiting the renewable resources of the site to build sustainable networks and favour local building materials with a minimum cost of transport.

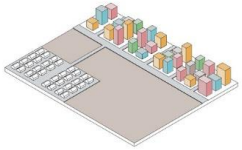
-> taking advantage of the construction expertise of the locals and the refugees to optimize material use.

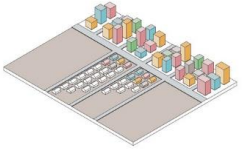




THE WALL X THE NATURAL FENCE

-> choose naturally enclosed locations to limit the use of artificial barriers and prefer green and blue barriers over walls and fences.





THE DIS-CONNECTION X THE RE-CONNECTION(S)

-> connecting the camp to the main road system and creating interfaces of exchange and shared infrastructure that maintains the enclosure without disconnecting the camp.

GOODS X PRODUCE

-> explore the production possibilities of the area prepare a matrice for production in the camp or prepare transport towards areas of production outside of the camp.

->taking into account the skills and knowledge of the refugees to build their environment and improve their conditions.

NEW PRODUCTION

-> adding ecological value to the area with the use of green energies when possible, recycling waste and a smart management of available resources

-> use the camp establishment to establish green connection without disturbing habitats.

DEVELOPING THE REGION X BURDENING IT

-> Understanding the region issues and give bilateral solutions for a coupled development of the region and the camp.

When we look into new and old criteria we see overlapping as for accessibility (UNHCR criteria) and connection (new principle) but we also see contradiction when the UNHCR recommends easy flat terrains and minimised risks, the new principles recommend to work with the risks and the slopes with the local expertise, the regional identity and patterns of settlement.

Some criteria are paired with the new principles like the access to water and presence of vegetation, these 2 UNHCR guidelines are complemented with the recycling policy and the improvement of the region ecological value by protecting water sources and using green energies.

Some of the criteria relate to more specific locations like security and dust clouds, more common in borders next to war zones and with desert conditions.

In general, the actual UNHCR guidelines present a valuable starting point to build upon that can be in some cases reedited, and in others elaborated or revoked.

IX. COGITATIO

a reflection on the project process

1- THROWBACK: RESEARCH OBJECTIVE:

The purpose of the project is to apply a landscape approach to complement the efforts of NGOs, governments and related-design disciplines to solve the refugee camps issues.

The main intention is to use this landscape based approach to transform the refugee camp from a singularity to a continuity, and by doing so insure a regeneration of the urban and peri urban tissue along the Austrian Hungarian border.

On a broader scale, we aim to strengthen the role of the landscape architect in filling the gaps of incomplete political, social and sometimes spatial reforms of the refugee issue.

2- REFLECTING ON THE RESEARCH OBJECTIVE:

The research objective aimed first to place the landscape architect as a main actor in the refugee camp design issues, and landscape architecture as a valuable approach to reconcile spatial needs and social pressure. The theoretical framework of the asset approach gave a new direction on how to deal with the vulnerable, but it didn't provide a spatial framework in the earlier stages. It is the analysis of the camp and its stages of evolution through history that were the most valuable to reduce the camp to its essence and therefore give room for reinventing it.

3- REFLECTING ON THE PROCESS:

By analysing the region and dissecting its structures and processes, we gained insight on both the camp components and the region potential.

This interrelated understanding is made even stronger through the design process. The earlier division of the processes of the region versus the design of the camp proved to be obsolete in the light of design. Processes should be integrated from the beginning, benefits may come in different times for the region and the camp, but any implemented process, infrastructure or component is from the beginning integrative.

The design process shifted the focus: it came from a different understanding of the region and its carrying structures, and these structures are now used to generate the "neo" or "hybrid" components.

The camp takes from the landscape its ability to generate energy, fences, water supply, to generate habitat, construction materials and connection

And the region takes from the camp its ability to bring attention, funds, new flows of people, new solutions, its ability to question the old patterns, its new production methods, its self-sufficiency, its autonomy, and its bubble inside a bubble.

And therefore, the hand in hand approach that was strangling the process is becoming more flexible, less strict, unexpected interactions can happen from what first might seem like a unilateral process.

Conclusions can be made about the importance of design to unblock the planetary strategy into planning and it comes from overcoming the heavy theoretical expectations, and question their most solid arguments.

Further insights can be gained by working in time and through scales simultaneously and see how local interventions impact the regional scales, and how matured camps transform the region and the border. The border is subjected to metamorphosis through the camp and the changes in the region.

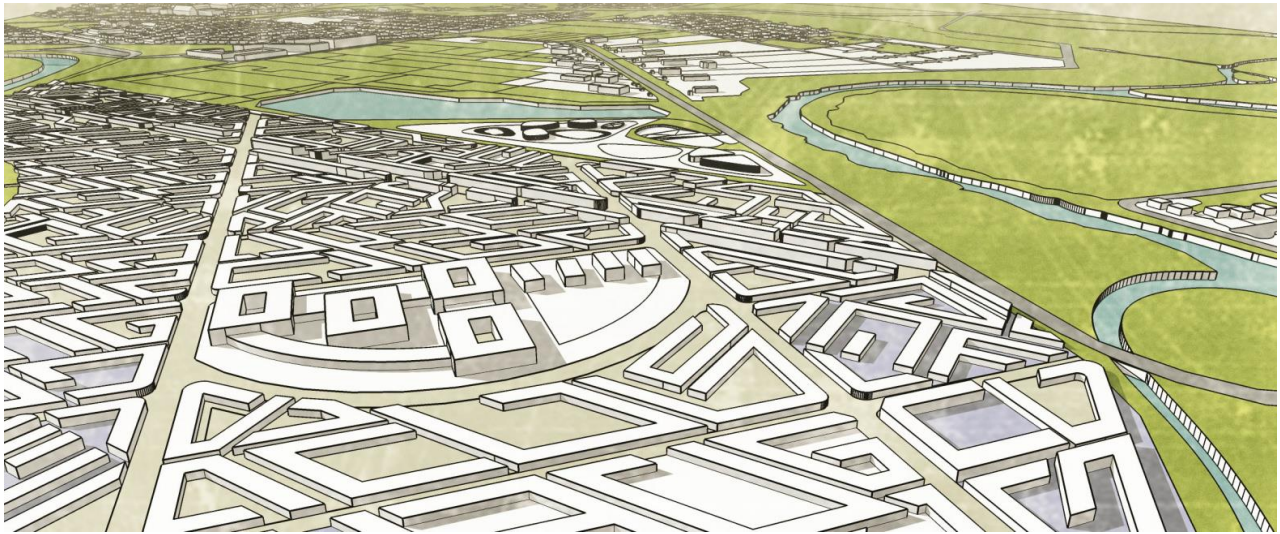
4- REFLECTING ON THE BORDER:

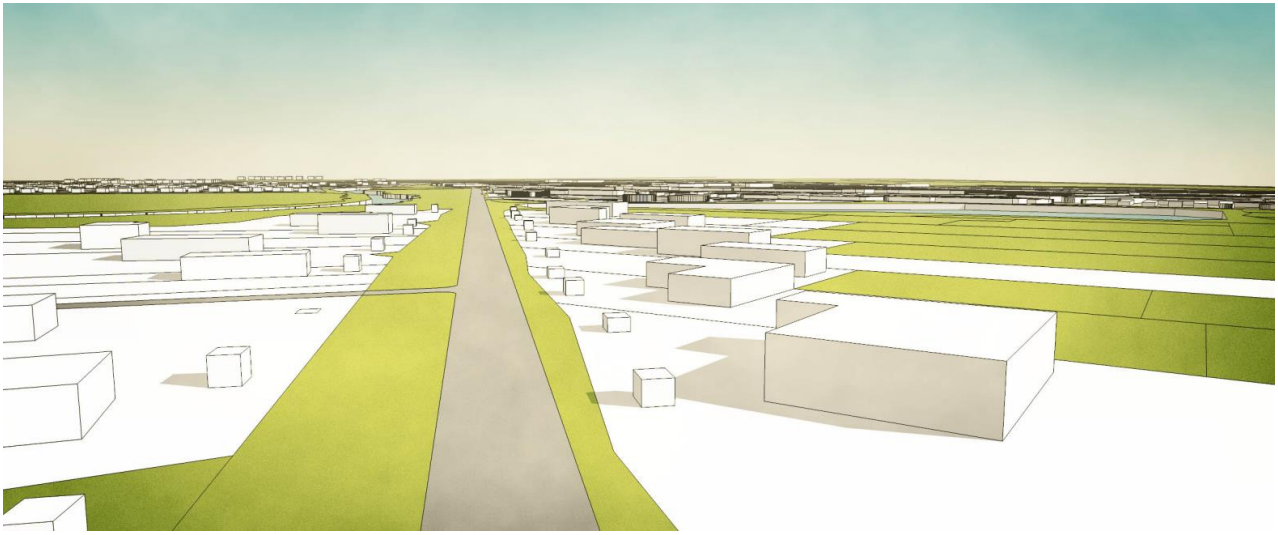
The Austro-Hungarian border is not only a spatial framework in this project, it is a central pivot and a determining line, by its historical luggage, its fake invisibility and its intangible repercussions (difference in policies, politics towards refugees, etc.). The border is a constant in refugee camp, it is never too far, reminding the refugee and the camp of the precariousness of their state. The border is both a shield and a firing line. In our case, the duality of a European border that is both open and close, the language and politics barrier and the economic disparities on both sides of the line, give a different significance to the border, more secure but still perilous.

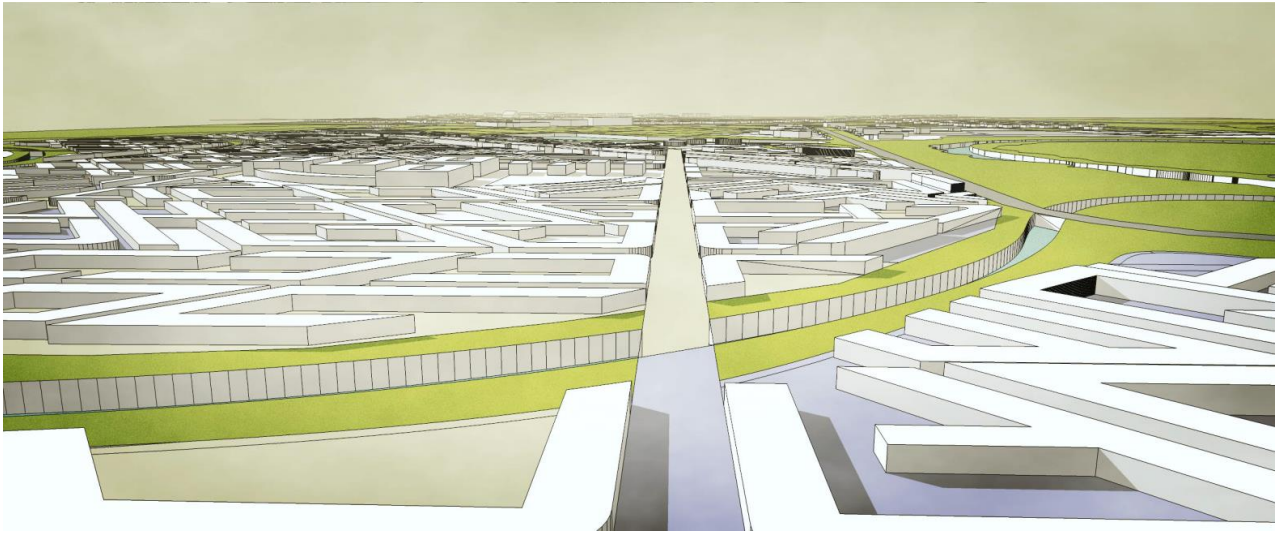
5- DEVELOPING A STRATEGY:

To give more substance to the principles and different scenarios of application, a different case study exploring a different region with a different urban landscape infrastructure can give more substance and new arguments to this plea for change. When we begin the design process by asking: How can the landscape shape the camp? It already places the region context as a highlight to any possible answer and therefore, we can expect that a different location with different challenges can give unforeseen observations and research outcome. But it is this same answer as contextual is it gets that can upgrade this landscape approach from its circumstantial background to replicability, only then it can be a valuable outcome in the refugee debate, only then we can with no doubt state that the research objective has been answered and that the landscape architecture

discipline gives a different answer, a missing link, a new understanding and ultimately a different design outcome to the refugee camp and its relation with its surroundings.







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“A rock pile ceases to be a rock pile the moment a single man contemplates it, bearing within him the image of a cathedral.”