Italcementi

trAILs - Alpine Industrial Landscapes Transformation

Project studies in the Winterterm 2018 - 2019
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trAILs
Interreg
Alpine Space

Content:

ITALCEMENTI

Project studies on the trAILs pilot-site in Borgo San Dalmazzo

The city of Borgo San Dalmazzo lies at the foot of the Mediterranean Alps, in the transition zone of the steep mountain topography and the vast plains of Torino, the capital of the Piedmont region. Its relicts from historic times date back to the year 300 BC, when the city was founded by the Romans on top of the descending slopes. The landscape just south of the city's foothills is not only characterized by the Alpine panorama and the Gesso and Vermenagna torrents, but particularly defined by the immense industrial colossus of the cement factory. Protected from the river by a solid bank reinforcement and surrounded by high walls, fuel tanks, chimneys, towers and huge halls with rotating ovens lie like artificial rocks in the valley of the Gesso. The Alps delivered limestone and hydropower, two important resources for construction and production as well as energy generation. These natural resources alongside an existing railway connection provided for an ideal location for a cement plant that was eventually built in 1945 after a construction delay due to the second world war. The plant never really recovered from the economic break-ins during the last world economic crisis and was facing an imminent closedown in 2009. The takeover by Heidelberg Cement in 2019 brought about an easing of tension, however, the future of the location remains uncertain. Therefore, the city is looking for a sustainable perspective for this potential industrial wasteland which could contribute to a successful urban development.

The rotating ovens are one of the most characteristic remnants of the former cement plant

In October 2018 landscape architecture students from the Chair of Landscape Architecture and Industrial Landscapes visited the former Italcementi cement plant in Borgo San Dalmazzo (Cuneo), which is one of the pilot areas of the research project trAILs (Alpine Industrial Landscapes Transformation), see following page. During the site analysis students visited the factory, a former quarry and the landscape context of the Gesso-valley. In a cooperative workshop the students have elaborated first concepts for the site transformation and shared them with project partner LAMORO and key local stakeholders like the Mayors and representatives of Borgo San Dalmazzo and Valdieri municipalities.

After the project excursion to Borgo San Dalmazzo, five teams of 7th semester bachelor students in the design studio and the masters student Theresa Finkel which developed her master's thesis about the cement plant Italcementi have worked on suitable transformation concepts. The results show different approaches such as partial renaturation, establishing recreational areas, developing a research campus, a cultural campus or launching a creative lab. The final projects will be integrated in the trAILs WP T3 workshop foreseen for September 2019.

trAILs

Alpine Industrial Landscapes Transformation

The decline of traditional heavy and manufacturing industry is occurring nowadays even in peripheral and less urbanized regions, such as the Alps. Here, in the so-called “green heart of Europe”, this process is leaving behind impressive former productive landscapes of relevant size and complexity: Alpine Industrial Landscapes (AILs). The potential value of AILs in terms of sustainable development is strongly connected to Alpine-wide ecological, economical and social key challenges, such as the regeneration/improvement of blue and green infrastructures, the reactivation/upgrade of regional economies and the promotion of local identity and cultural heritage. However, at the present only few AILs have been reused and transformed for these purposes, mostly those located in proximity or within large Alpine cities and urban agglomerations, where good accessibility and a rather developed socio-economic environment have allowed so. The majority of AILs are indeed to be found in small municipalities and economically marginal contexts, burdened by financial, technical and planning limitations.

The project trAILs - Alpine Industrial Landscapes Transformation, initiated in 2017 by the Chair of Landscape Architecture and Industrial Landscapes of the Technical University of Munich and officially approved by the Interreg Alpine Space Committee in April 2018, aims to generate significant knowledge about AILs and to develop and test sustainable transformation strategies applicabile and replicable in the whole Alpine space.

To achieve these objectives, the project builds on a strongly multidisciplinary and transnational partnership combining proved expertise in the fields of landscape architecture and environmental sciences (Technical University of Munich, University of Ljubljana), spatial planning (Polytechnic University of Milan, Vienna University of Technology) and socio-economic sciences (University of Verona) with regional and local Alpine

The transnational partnership of trAILs around the Alps

communities represented by regional development agencies in Austria (VESTE/Styria), Italy (LAMORO/Piedmont), France (CAUE84/PACA) and Slovenia (BSC KRANJ/Gorenjska).

The foreseen activities are structured around four work packages. The first one (Map AILs) deals with the implementation of an AILs database starting from the data available in the project pilot regions and the subsequent development of an interactive GIS web-based platform to visualize the current situation across the whole Alpine Space. The second and third work packages (Assess AILs and TestAILs) are based on the project pilot sites (Eisenerz/AT, Borgo San Dalmazzo/IT, L'Argentière-la-Bessée/La-Roche-de-Rame/FR, Tržič/SLO) and focus respectively on the comprehensive and multi-criteria assessment of AILs actual conditions and the development of a test-design procedure for AILs transformation. Test-design, in particular, represents a core activity of the whole project, since will bring together project partners, regional stakeholders, experts and international observers in a participatory planning process taking place on-site through a workshop format of several days. The last work package (Manage AILs) will transfer the generated knowledge to end-users through the establishment of an AILs knowledge exchange, information and decision support platform as well as the publication of a methodology handbook and a learning module for advisory and training activities.

Workers of Italcementi guided the students and teachers of the design studio over the site

With this approach, the project will support local and regional stakeholders in the complex process of sustainable AILs transformation, providing them with clear strategic planning tools for the future as well as with hands-on experiences. Several institutions have already expressed their interest in the project activities and outputs, and thus joined the project as observers. Among them, the Regional Authorities of Bavaria, Lombardy, Piedmont, Auvergne Rhône-Alpes and Provence-Alpes-Côte d'Azur, the Slovenian Ministry of Spatial Planning and Environment, Alpine-wide organizations such as the Permanent Secretariat of the Alpine Convention and CIPRA International, and the universities of Graz, Zürich and Bergamo.

Marcello Modica

The project is founded within the EU-Interreg Alpine Space Programme (Priority 3 - Liveable Alpine Space, Specific objective 1 - Sustainably valorize Alpine Space cultural and natural heritage) with 2.187.400,30 Euro and will last until April 2021.

More information, news and events can be found on the project website: https://www.alpine-space.eu/projects/trails

Background analysis

SITE BORGO SAN DALMAZZO

After the Second World War, in Borgo San Dalmazzo and Valle Vermenagna, some of the most important heavy industries in the province came into operation. The first settlement of heavy industry in the Province of Cuneo was the Italcementi Spa plant in Borgo San Dalmazzo Municipality. In 1947 Italcementi started the first two furnaces for the production of lime and two hydroelectric power plants. In 1955 and 1956, two other furnaces were added in order to encourage greater production. Until 2008 three furnaces were active. The Borgo San Dalmazzo plant boasts a long history on the territory and, for many years, the cement factory was one of the best sources of work for those who lived in the area, from Cuneo to the valleys. Since 2009, the economic contraction and the obsolete plant type almost to a shutdown. After strikes, protests and interventions of various kinds, the closure was implored and the plant was transformed into a grinding center. As a result, the number of employees dropped drastically. Today only 20 employees remain. [1]

1 LAMORO 2018: P. 31 et seq.

4 Location of the industrial conversion landscape in the Piedmont region in North Italy.

(above) The former cement plant lies in the transition zone of the steep mountain topography and the vast plains of Torino

(down) The site is bordered by the medieval core of Borgo San Dalmazzo in the North and of the torrent Gesso in the South

ECONOMIC AND SOCIAL SITUATION

The major pillars of the economic development in the pilot area is represented by the agriculture and livestock, manufacturing industries, energy production and tourism. Borgo San Dalmazzo also receives the benefits from Cuneo city. As a mountainous territory, the pilot area is characterized by common aspects: depopulation by young people, high rate of ageing people, with the related problems about services for older people, low level of accessibility due to the morphology, lack of infrastructures like internet via fast line and social infrastructures, low level of services like schools, hospitals or health poles. Commercial Structures, like shops, are fragmented. But the economic situation of the pilot area as a total is positive, because the tourism is the leading sector, for example the Limone Piemonte ski infrastructures and Natural Parks facilities.[2] About 12.500 inhabitants (2016) live in the municipality of Borgo San Dalmazzo, which is a density of 560 inhabitants per square kilometer. The Regional Territorial Plan describes the area where the pilot project is marked, as a region affected by the urban sprawl. Unfortunately, the urban sprawl is increasing, due to the fact that the abandoned villages are no more restored and new buildings are made on free soils.[3] The road infrastructures are important: the railway branches link the capital to the north with Fossano and then Turin, to the south with Nice, and to the east with Mondovì.

NATURAL CONDITIONS AND LANDSCAPE

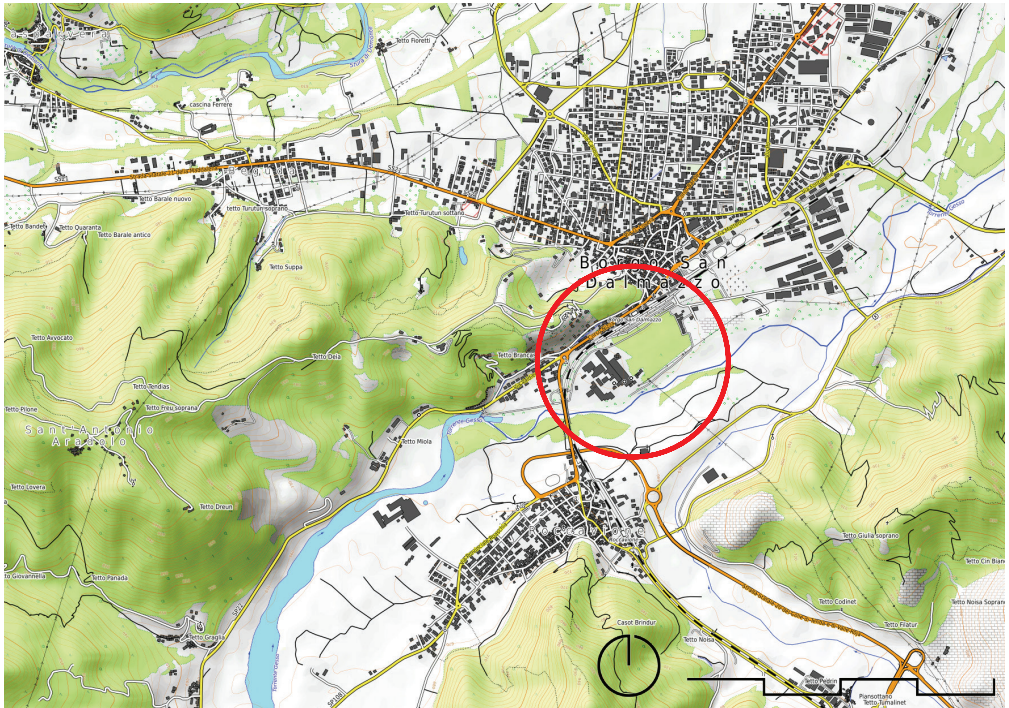
The pilot area is inserted in the Maritime Alps territory which embraces the part of the Alps between the Colle di Tenda (Tenda Pass) and the Colle della Maddalena (Maddalena Pass), including the three valleys that lie on the Italian side of the Maritime Alps: Vermenagna, Gesso, and Stura Valleys.[4] Borgo San Dalmazzo is situated on the edge of the Cuneo plain, which opens at the bottom of a series of valleys arranged in a fan and dominated, at both ends, by the peaks of Monviso (m 3841) and Argentera (m 3297). Therefore, the area is characterized by a strong hydrography, with rivers running parallel from south-west to north-east towards the greater waterways of the region, the Tanaro and the Po.[5] The pilot area is covered by many protected areas and high mountainous areas over 1600 meter above sea level. As protected areas there are two Natural Parks: the Parco naturale del Marguareis and the Parco naturale delle Alpi Marittime.[6]The climate change will have effects on the environment and ecosystems, as it will involve an overall higher heating during the summer than the winter. Other changes are expected in rainfall, with more frequent summer droughts and greater precipitation during the winter, and moreover an increase in extreme weather events, like floods, heat waves, dryness and so on. These changes pose greater risks for a territory that is fragile from a hydrogeological point of view, for example the risks of landslides and flooding.[7] The climate change will also have an impact on the economic activities derived by the winter tourism, as the amount of snowfall during the winter is decreasing.

2 LAMORO 2018: P. 28

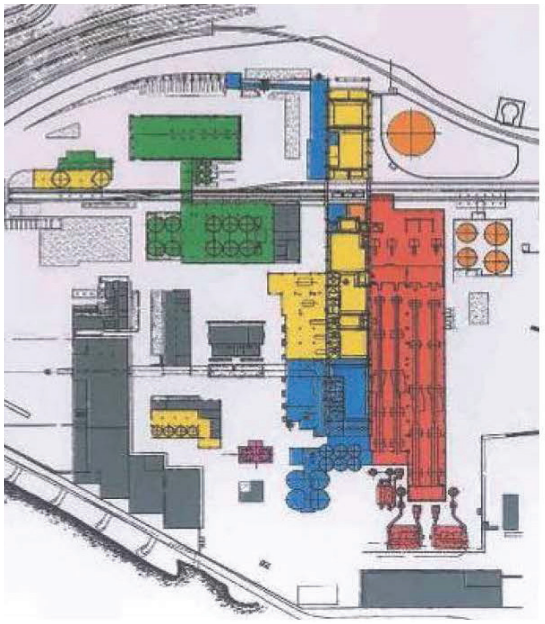
3 LAMORO 2018: P. 22
4 Ibid. P. 7

5 LAMORO 2018: P. 16
6 Ibid. P. 10 et seq.
7 Ibid. P. 17 et seq.

The site is divided in a former production and a forest area



Functional processes of the cement factory Italcementi



Rawmaterial-Storage and rawmill

Rotating ovens

Clinker-storage, admixtures and grinder

Transport of clinker and cement

Fuels

Lime processing

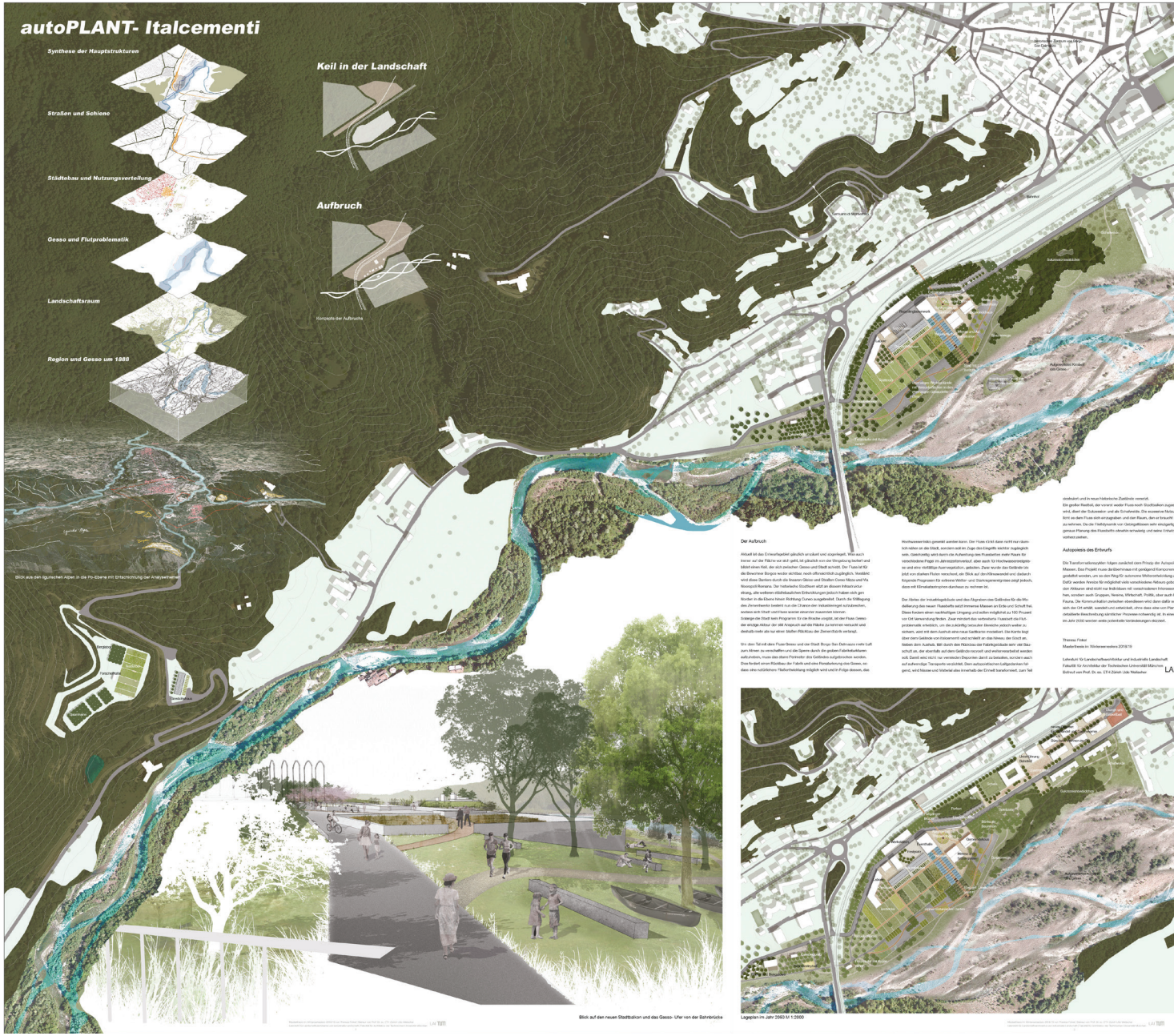
General services

autoPLANT- Italcementi

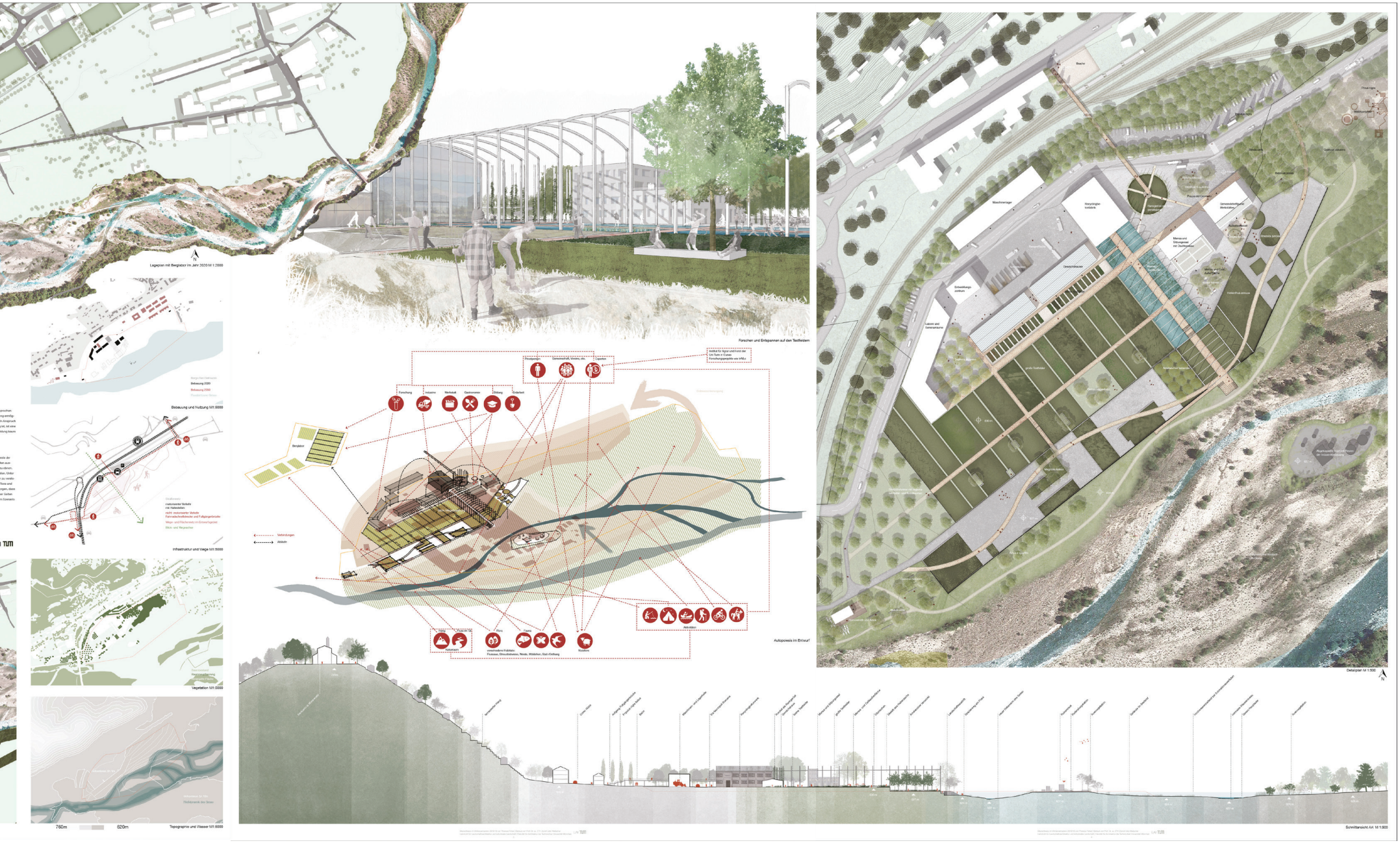
Master‘s Thesis Theresa Finkel

Landscape architecture as a planning discipline is, from the moment of completion, expected to design spaces that will work for everyone, everything, and almost forever. Constant conflicts of interest, the rapid progress of our society and climate change, however, are only a few factors that show us how these are unfulfillable ideas and that places should not be set in stone. With the awareness that we and our environment follow the rules of evolution and are only components of a larger structure of action, the question arises what sustainable planning should look like at all?

This work therefore seeks answers in the theories of auto-poiesis. The system-theoretical approach states that closed systems can reproduce themselves and evolve evidently, but are nevertheless aware of their environment and allow for exchange. Autopoiesis finds its origin in biology, in which it describes the dynamics of autonomous systems, such as cells. Apart from that also in sociology and architecture is worked in the tenets of autopoiesis. At the core of the theoretical discussion, autopoiesis is positioned in relation to landscape architecture working out its main criteria. Are these principles directions for a contemporary and at the same time timeless planning strategy?

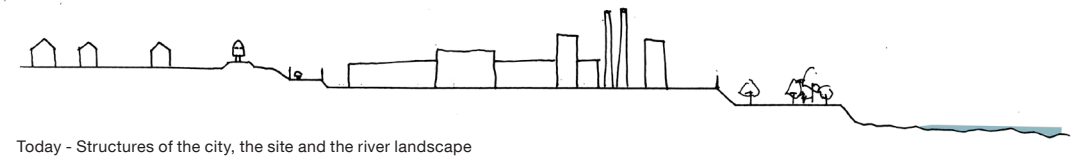


4 presentation panels (original scale DIN A0)


Lageplan mit Bergrabor im Jahr 2020 M 1:2000
Forschen und Entspannen auf den Testfeldern
Bebauung und Nutzung M1:6000
Infrastruktur und Wege M1:6000
Vegetation M1:6000
760m
620m
Topographie und Wasser M1:6000
Detailplan M 1:500
Schnittansicht AA' M 1:600

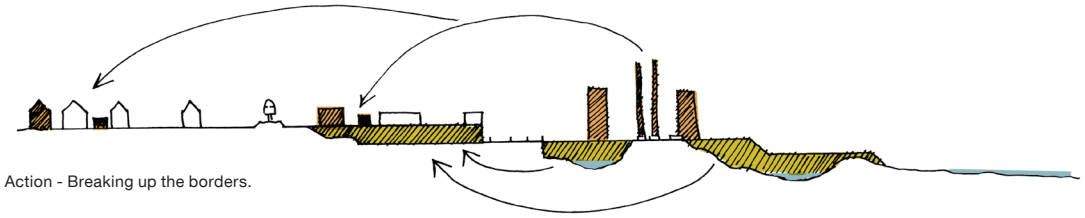
Using the example of the decommissioned cement plant of Italcementi in Borgo San Dalamzzo (Piedmont, Italy), it is being examined how the rules of autopoiesis can be implemented in the draft. The isolated industrial area lies like a wedge in the middle of the Gesso Valley and cuts the city off the river. In order to reopen the gateway to the Alps at the site, the concept calls for a break-up of the rough factory structures. The abandoned buildings are almost completely dismantled and processed on site in a recy-cling- concrete plant. In order for the river and the city to get closer again and at the same time to reduce the flood problem, large amounts of earth mass are being excavated to broaden the river bed and used to model a raised city edge.
The transformation cycles follow the principle of autopoi-esis of the masses. Finally, the project must be equipped with enough components to pave the way for autonomous development. In return, incentives are offered for as many different players as possible. Among the actors are not only individuals with different interests to understand, but also groups, clubs, business, politics, as well as flora and fauna. The communication between them will then ensure that the place preserves, transforms and develops without the need for a detailed description of all processes by planners. First potential changes are outlined in the scenario in the year 2050 in order to check whether autopoietic design actually holds, what the elaboration of the theory promises.

Connecting the former divided structures by breaking and opening up the site through restoring to nature, terrain modelling and recycling

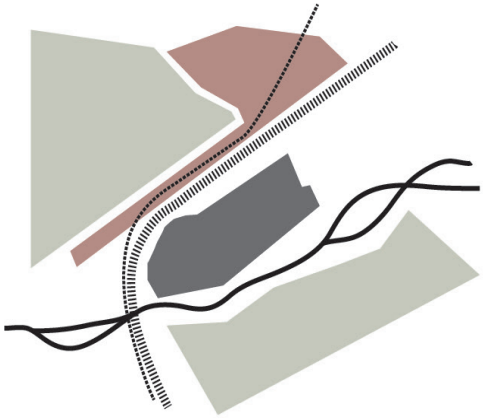


Today - Structures of the city, the site and the river landscape are divided from each other.

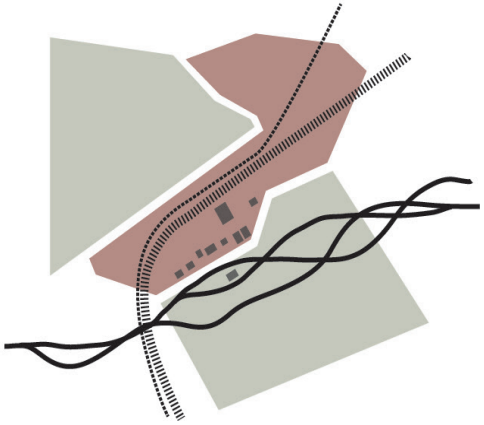
In the focus design zone the terrain modelling results in three levels - The city, the company grounds and the riverside area



Action - Breaking up the borders.

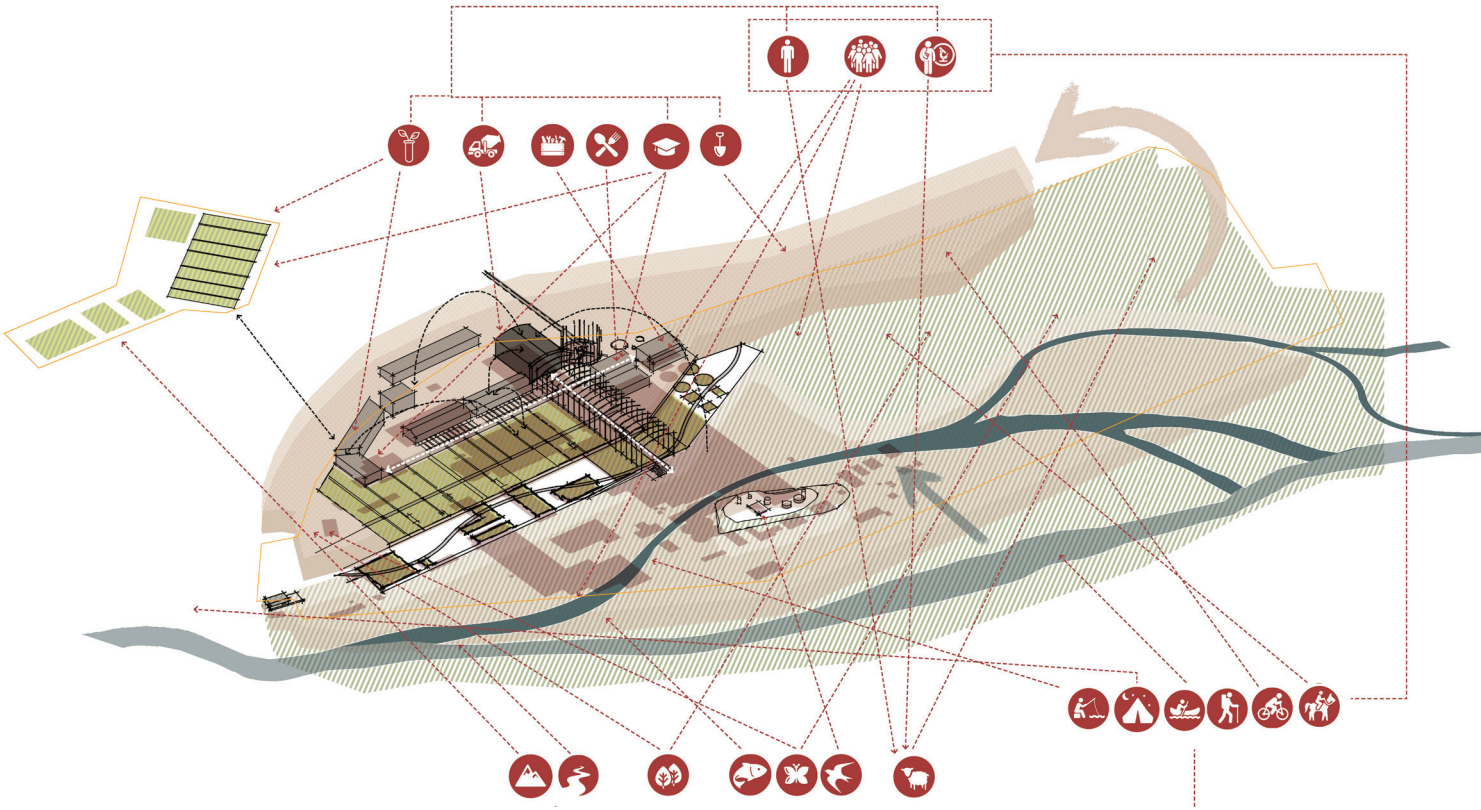


Blocking rock in the landscape

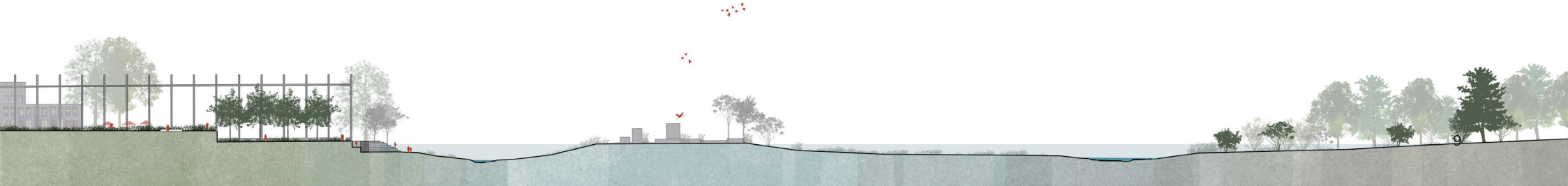


Breaking up the rock

Breaking up the blocking character of the cement plant structures



The functional processes of the transformed site follow the autopoiesis philosophy



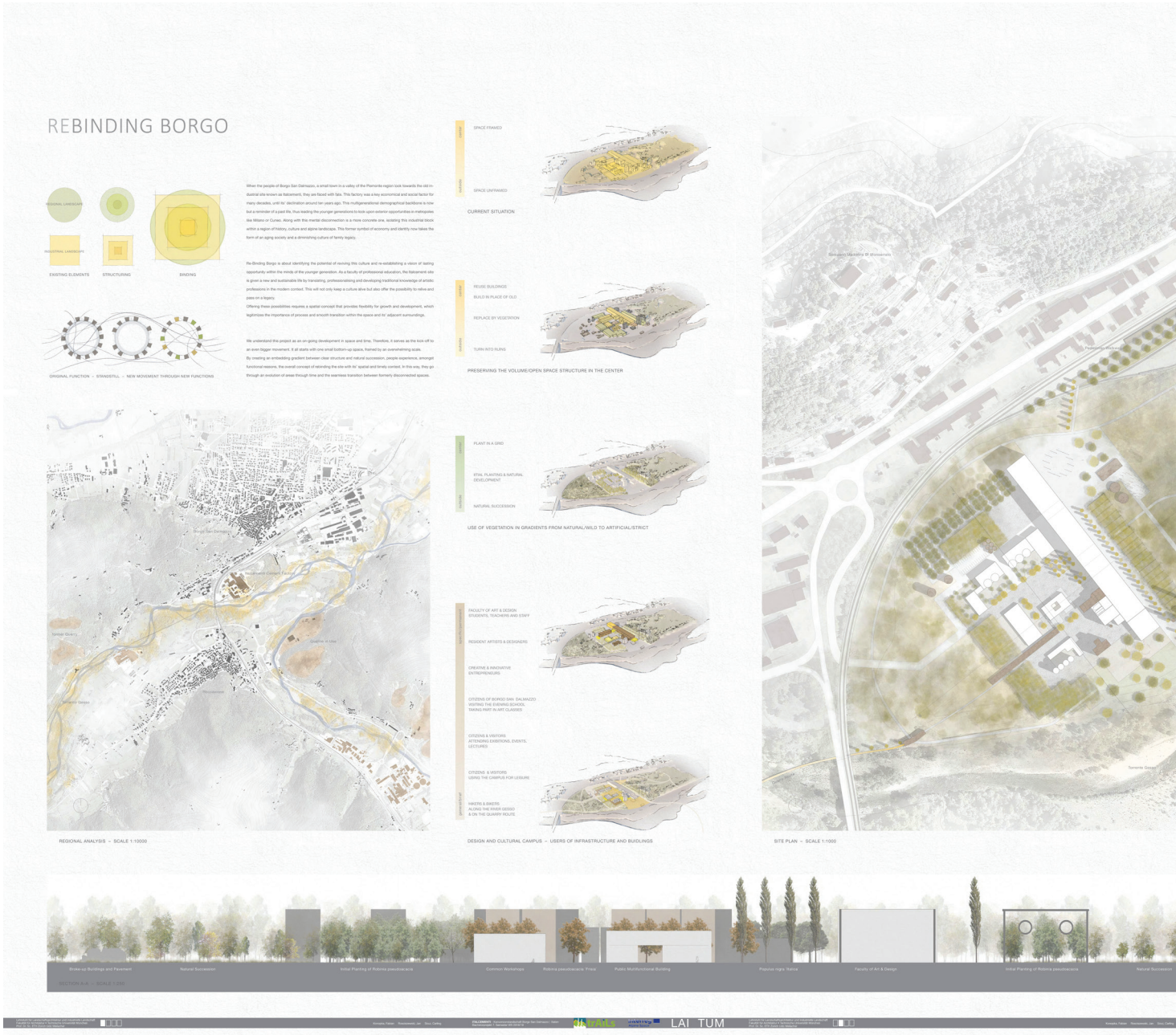
REBINDING BORGO

Fabian Konopka, Jan Rościszewski, Carling Sioui

The vision „reBinding Borgo“ addresses the contrasts between the post-industrial site “Italcementi” and its spatial, social and economical context. Contrasts which particularly became unraveled during the process of withdraw over the past 10 years. In their diversity of problems between a declining economy of heavy industries, a loss of future opportunities for upcoming generations, a therefore aging society and by that declining traditional economies and cultural heritage, these contrasts show a high level of complexity and are in this way a symptom for a large process of small cities within the sub-alpine region in North Italy faces.

Seeing these multilayered contrasts not only as a challenge but as a melting-pot of potentials to direct the future of those places and in that way define future principles for a regional problem, the project aims to re-integrate the site in a physical and metaphysical way into the landscape and with its actors. By implementing new functions on the site and spatially integrating it into the context the project focuses the problem of the simultaneous social and a spatial disconnection with the site. Understanding this as a process that develops in space and time rather than a single step builds the backbone of the concept and leads the spatial design principles. The gradient of working with the existing structures and their development in that process builds the core element of the spatial design to reveal hierarchies in space that build the base of a flexible development in time and a poetic clarity.

At the end the integration of these contrasts within the project respect the unique character of this place and at the same time offer new visions which to continue telling the story of that place instead of overwriting it.



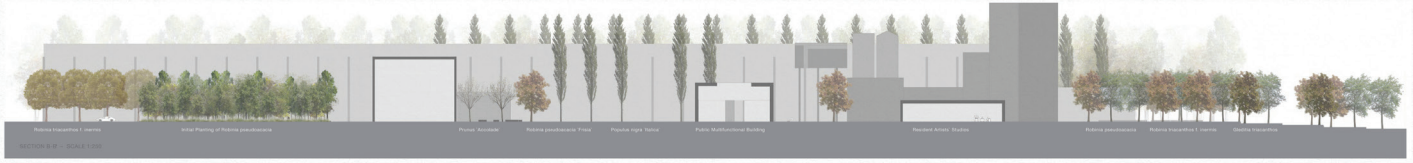
4 presentation panels (original scale DIN A0)

THROUGH THE PIPES

MAIN SQUARE IN AUTUMN

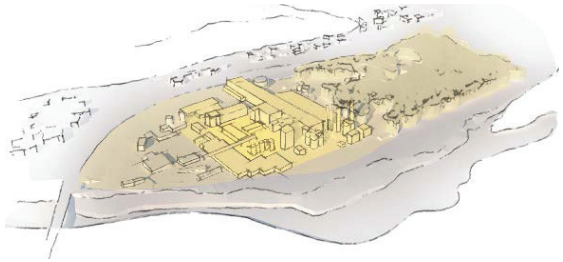
VIEW FROM THE SANTUARIO MADONNA DI MONSERRATO

SITE PLAN DETAIL – SCALE 1:200

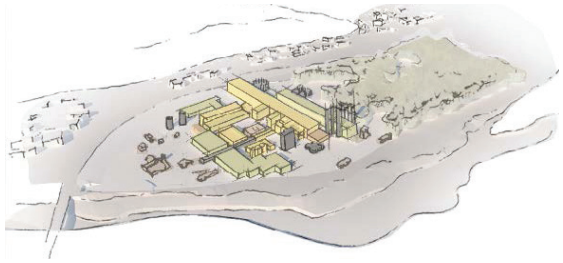


SECTION B-B' – SCALE 1:200

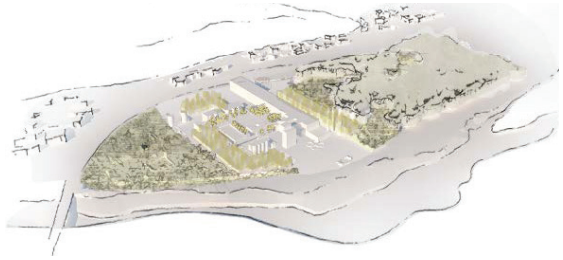
center
Space designed and mantained
outside
Space natural development



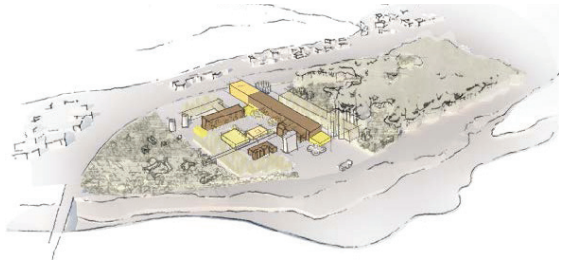
center
Reuse bildings
Build in place of old
Replace by vegetation
outside
Turn into ruins



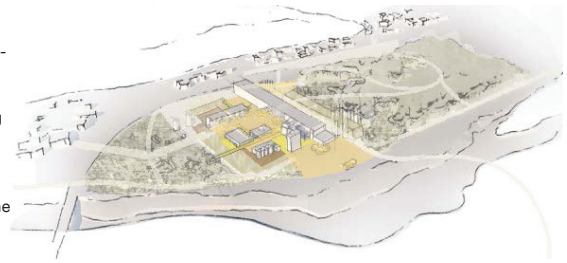
center
Plant in a grid
Inital planting and natural development
outside
Natural succession



specific/permanent use
Faculty of art and design students
Resident artists and designers
Innovative entrepreneurs
Citizens of borgo visiting evening art school



general/brief use
Citizens and visitors attending exhibitions
Citizens and visitors using area for leisure
Hikers and bikers along the river and quarry route

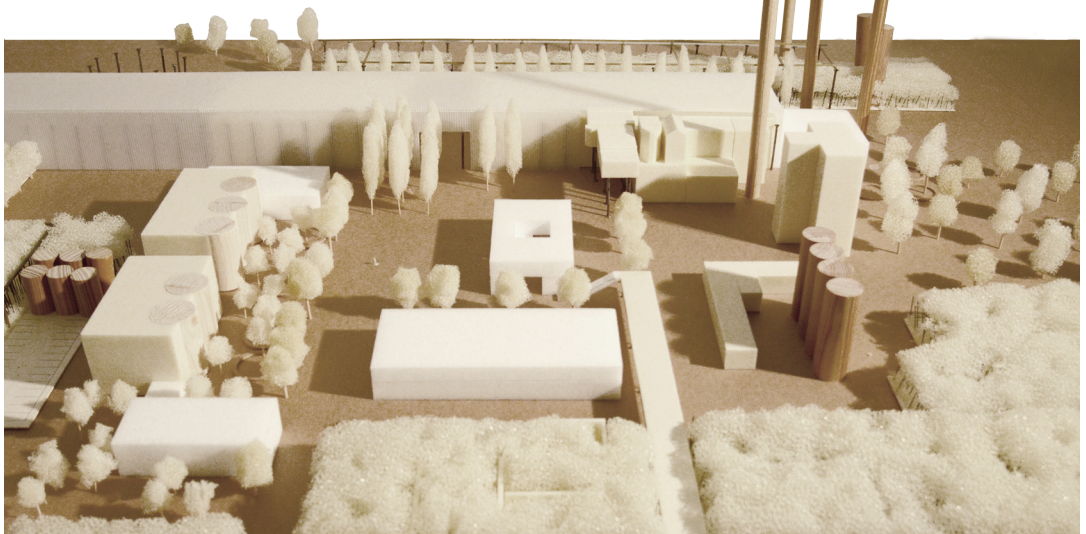


Spatial design principles of preservation and transformation

N

Central activity core of the culture campus

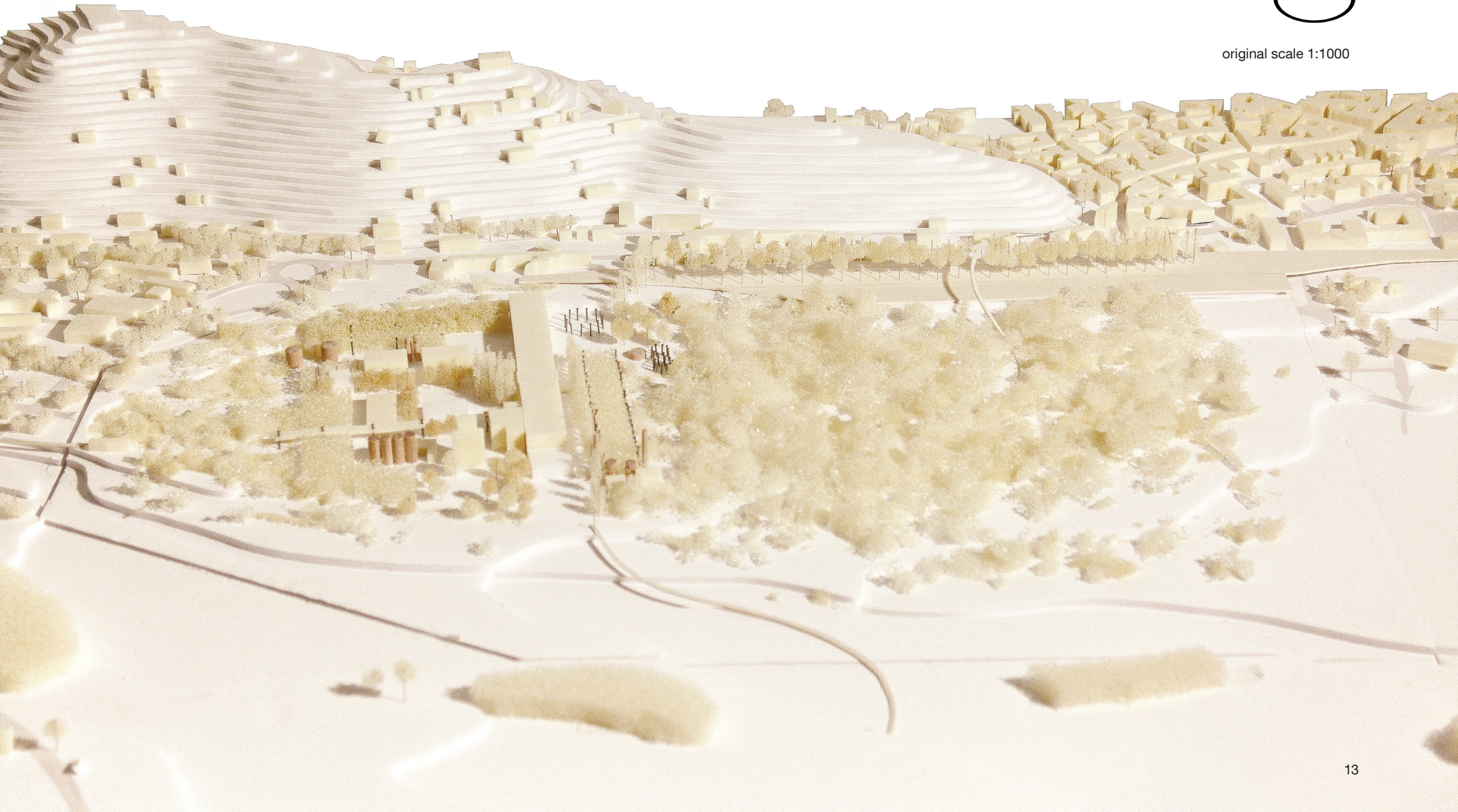
original scale 1:200



The concept is represented by the implementation of a spatial gradient that defines different spaces with graded levels of functions to mend the cement plant with its spatial and social context.

N

original scale 1:1000

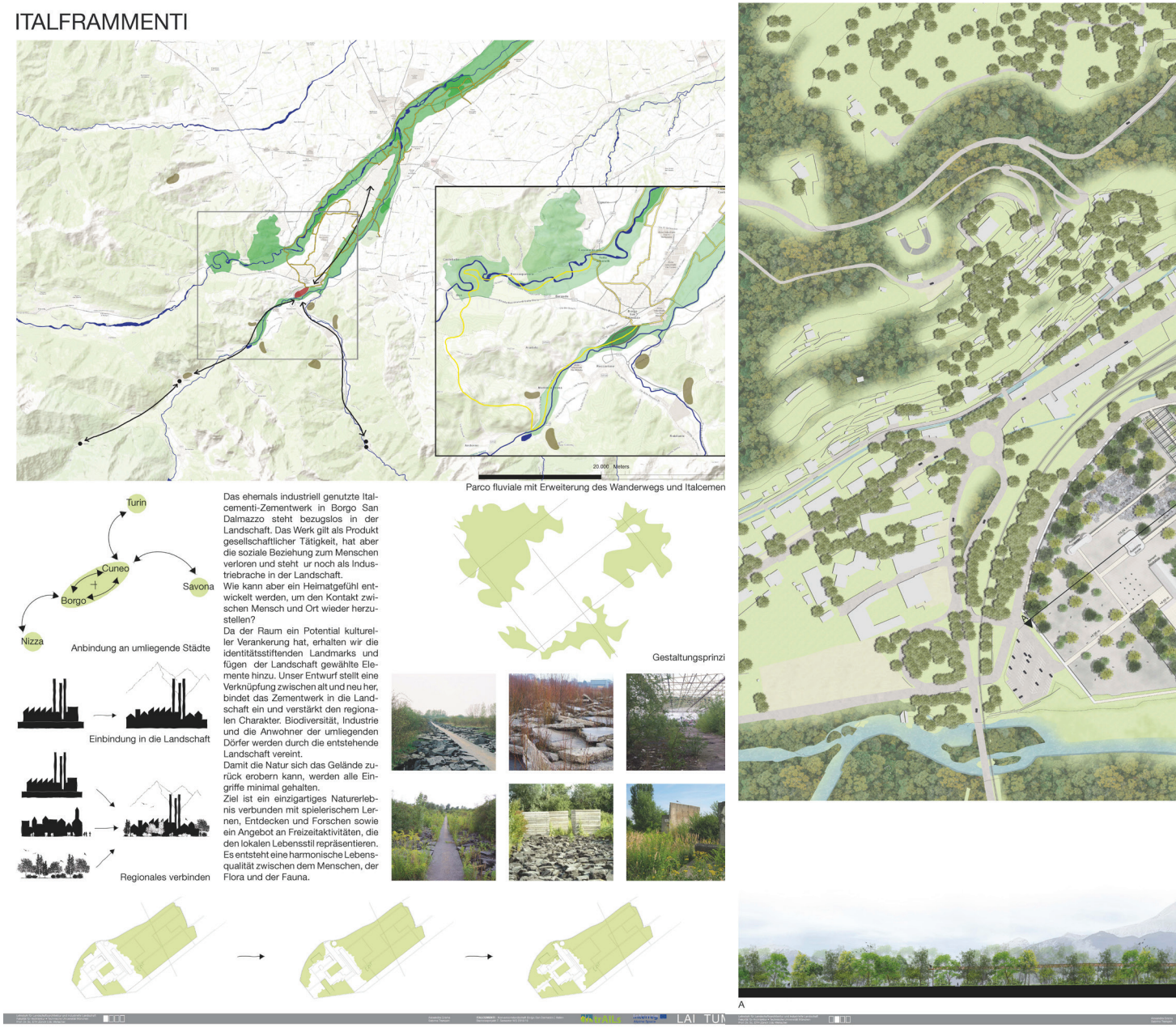


ITALFRAMMENTI

Alexandra Grama, Sabrina Trampen

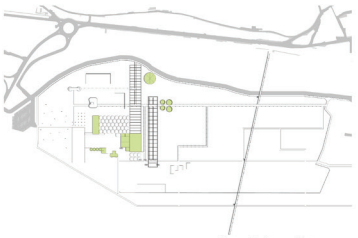
The design concept ‘italframmenti‘ is bringing nature back onto the site through minimal interventions, while also preserving the identity of the cement plant by keeping the key elements of the industry. The overall concept will tie in on an already existing nature park and will follow its goals of integration social usage and reviving the image of landscape and biodiversity. Thus, social, economic and ecological goals should be achieved by engaging in tourism and education services. With this design, the cement plant will be integrated into its surroundings, gain infrastructural accessibility, in order to change the perception of a seemingly isolated element in its landscape. After carefully analyzing the essential factors of this landscape, the most important spatial elements can be filtered, which are then to be preserved. Furthermore, the addition of new elements in order to connect key layers and overlay the spacial elements of the site, can be revised. A concept, which works as a long-term strategy to bring back nature on an industrial site and to make it visible and enjoyable to people. This will be achieved by removing built structures, which do not serve the purpose of reuse or exhibiting a landmark-like character, as well as breaking the concrete pavement open, in order to initiate spontaneous succession. Earthbound and elevated walkways for pedestrians, joggers, and cyclists are increasing orientation in the park. Secondary walkways let the visitor explore and experience nature very closely. A central square showcases cultural activities, educational buildings like museums and workshops, sports activities and recreational facilities. A marketplace for regional products and a cafe shall strengthen social interaction and local identity in the alpine region. All demographics will be brought together onto the site, so kids, parents and seniors can enjoy the landscape they are used to and call their home. Over the years, they will witness italframmenti come together.

3 presentation panels (original scale DIN A0)

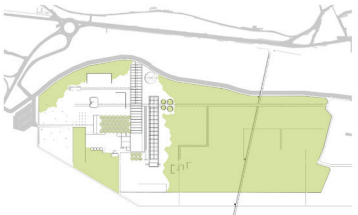


M 1:1000

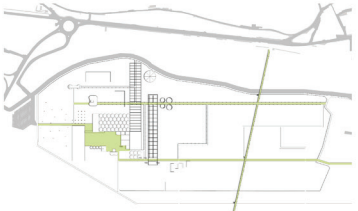
M 1:500 A'



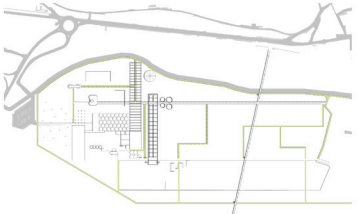
Entschichtung Nutzungen



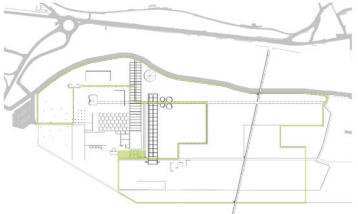
Entschichtung Vegetation



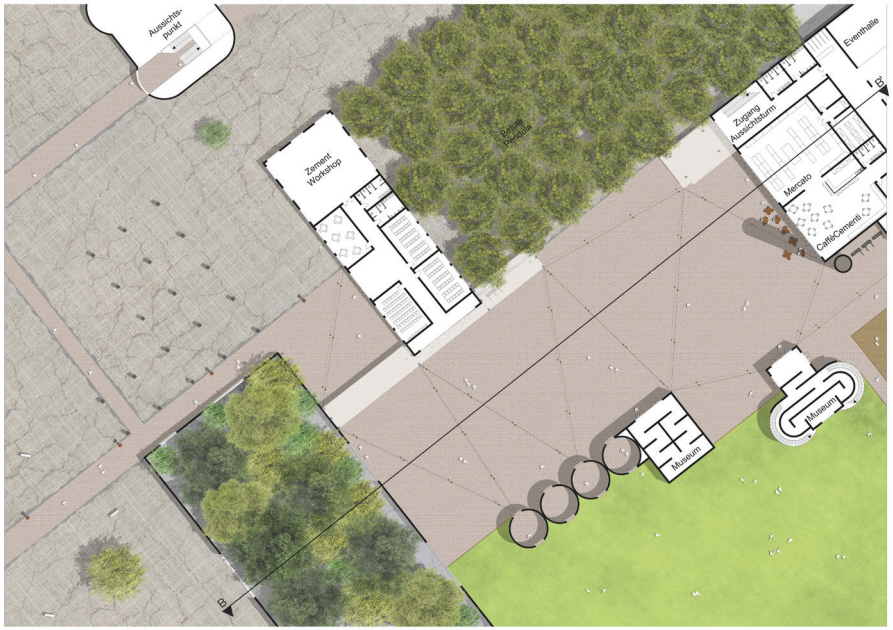
Entschichtung Hauptwegeachsen



Entschichtung Entdeckerwege



Entschichtung Joggingstrecke



M 1:200

B

M 1:200 B'

Characteristic elements of the factory are preserved to keep the identity while nature takes over the site

The design concept brings nature back onto the site and connects the area to an already existing natuRe park, while preserving the identity of the cement plant through the preservation of industrial remnants.

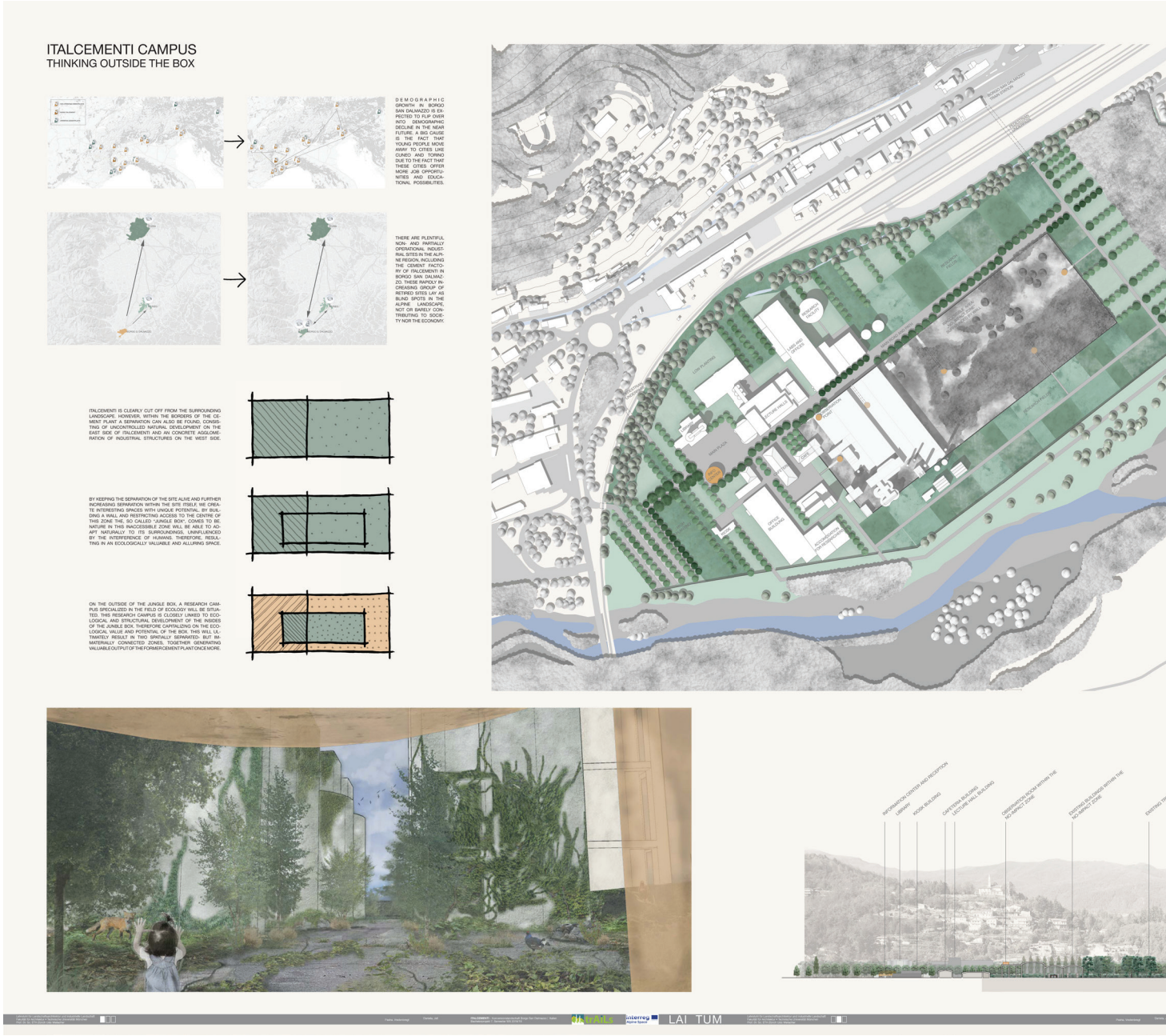
N

original scale 1:1000

ITALCEMENTI CAMPUS

Daniela Jell, Pasha Vredenbregt

The concept ‘Thinking outside the box‘ solves these problems and at the same time offers a solution for other abandoned industrial conversion areas.
Establishing a barrier in form of a wall within the site creates two clearly separated zones. Both zones host similar conditions but develop in a contrasting way, since they are maintained differently. The zone inside the wall is an area where no human impact is possible. It’s a natural zone, where industrial structures get overgrown. In contrast, the outer zone is an area with high human impact, where a research and education campus is based.
The natural zone serves as the object that is observed and monitored by the surrounding campus. It can be seen as a test field to find out if succession in combination with old industrial structures are benefiting the local ecology. If so, this concept can be implemented to other abandoned cement plant sites.
On the campus itself, study and working places as well as community areas are provided. These include an information center, lecture halls, seminar rooms, test and research fields, offices and a café at a main plaza. The two zones are linked through observation rooms, which are located within the natural zone and can be reached by enclosed pathways. In this way people can get an insight into the enclosed area without interfering with it. Letting people see and experience nature slowly taking over the manmade structures makes them aware of the impact they had on the natural landscape by building industrial factories like the Italcementi cement plant.



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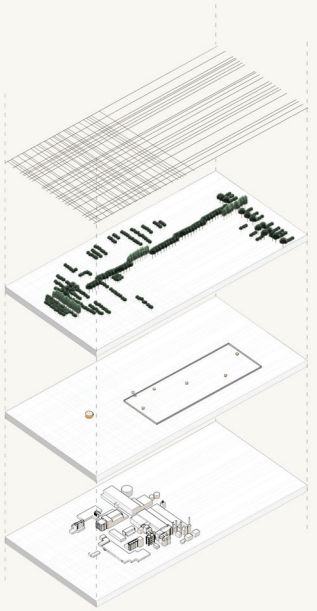

DESIGN CONCEPT

THE GRID STRUCTURE FORMS THE BASE FOR ALL DESIGN CHOICES. THE GRID ITSELF COMES FROM THE OUTLINES OF THE FORMER INDUSTRIAL BUILDINGS AND STRUCTURES, RESULTING IN A CLEAR AND INTUITIVE COHERENCE BETWEEN NEW DESIGN AND OLD STRUCTURES.

NEW VEGETATION IS PLANTED TO CREATE VARIABLE OPEN AND CLOSED SPACES PLEASING TO ITS VISITORS.

NEW BUILD STRUCTURES CONSIST OF A WALL SEPERATING THE JUGLE BOX FROM THE RESEARCH ZONE, AN ENTRANCE BUILDING HOSTING INFORMATIONAL AND LEISURE FUNCTIONS AND VIEW BOXES ALL SITUATED ON UNIQUE LOCATIONS WHITHIN THE UNACCESSABLE JUNGLE BOX.

REUSING FORMER INDUSTRIAL BUILDINGS AND STRUCTURES, AS LONG AS IT HAS AN ADDED VALUE TO THE RESEARCH CAMPUS, IS AN IMPORTANT PHILOSOPHY THAT HAS SHAPED OUR DESIGN AND INFLUENCED THE CHOICES MADE.

Different observation stations offer inviews into the „Jungle Box“ and the developing nature.

The principal axis leads from the main entrance on the east side along the research campus and the „Jungle Box“ to the west side

Establishing a barrier in form of a wall within the site creates two clearly separated zones. Both zones host similar conditions but develop in a contrasting way, since they are maintained differently.

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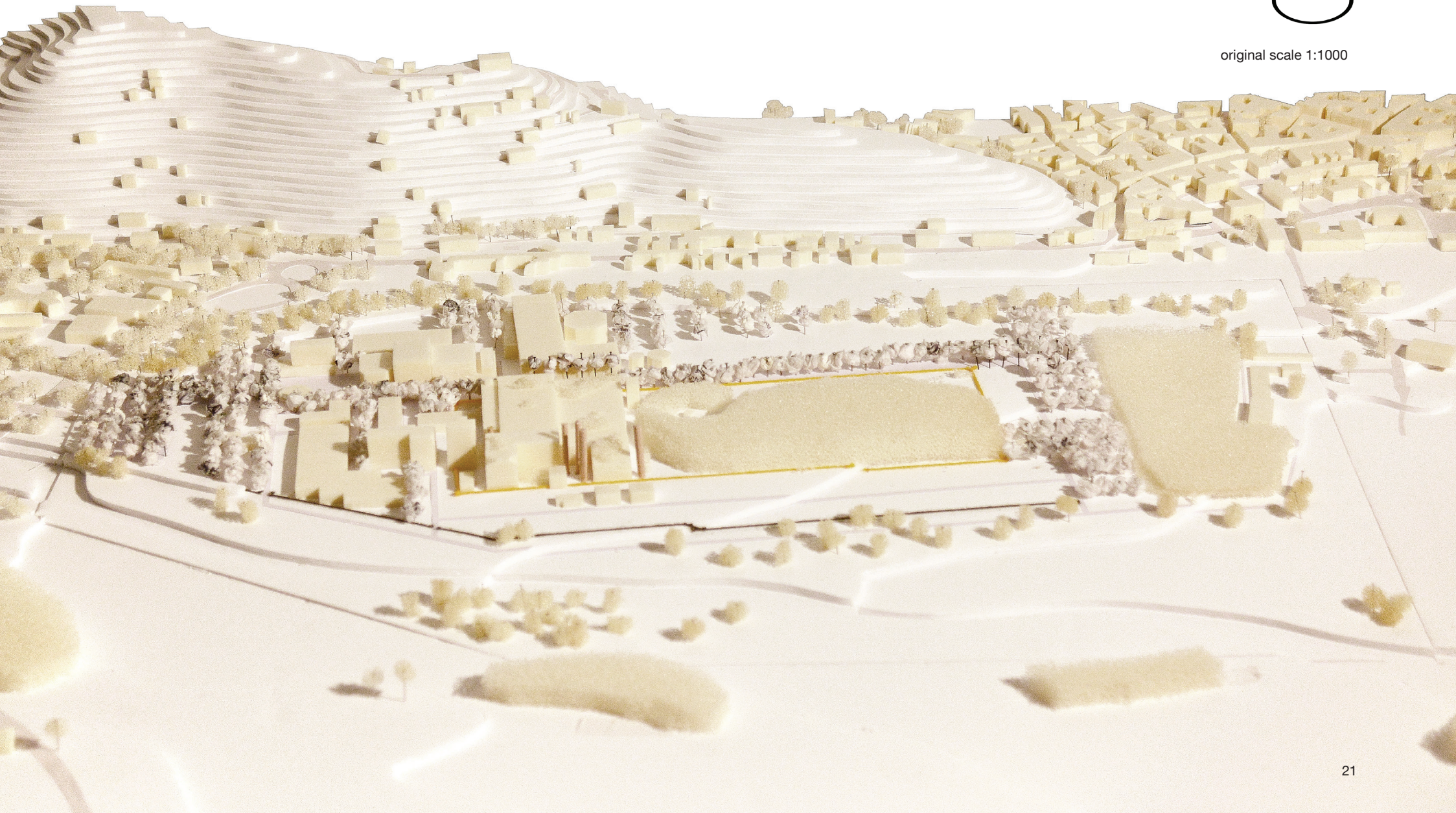
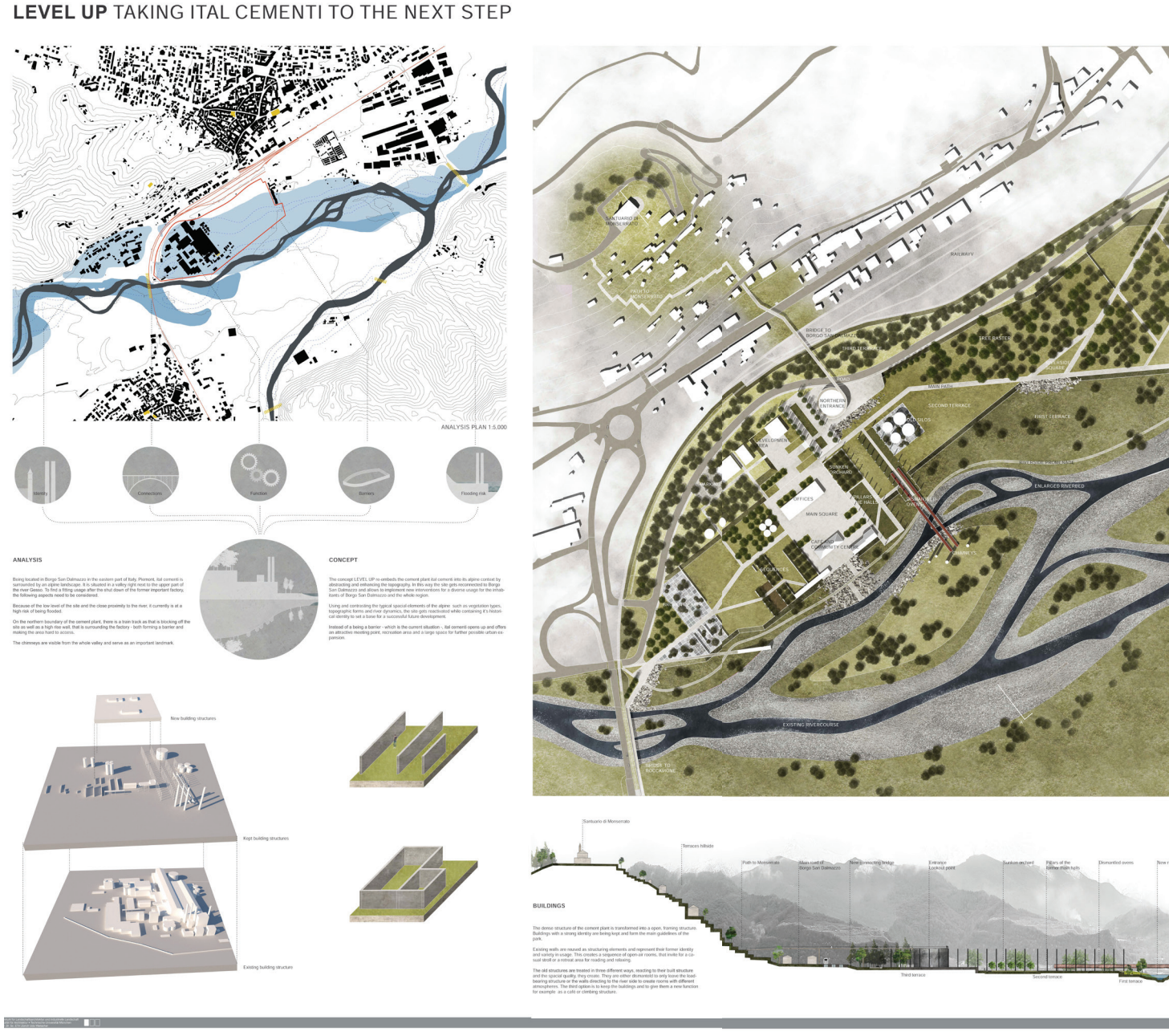


LEVEL UP

Larissa Böhrkircher, Josef Östblom, Lotta Steger

The concept ‘LEVEL UP‘ targets social, economical and ecological aspects by abstracting the terrace structures of the surrounding landscape and uses them simultaneously to tackle the very prominent high risk of flooding at the site and the nearby areas. Subdividing the intervention into three partially floodable levels, the design approach reconnects the river Gesso to the town both physically and mentally. By keeping and reusing elements of the existing factory, the identity of Italcementi and therefore its history is being kept, while the site takes new forms, offering a variety of possible uses and space for a further future development.
A key aspect of the project is to overcome barriers and to create new connections. May it be between the two currently separated towns Borgo San Dalmazzo and Roccavione or between the former industrial site and the pilgrimage church of Monserrato, which is of great importance to the people of the villages. Through this a clear and positive position is taken, showing that former industrial sites can indeed have a positive impact and are a rightful part of the alpine landscape.



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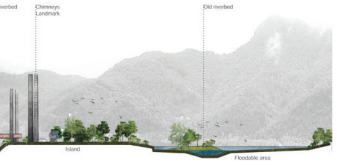
PLAN 1:1.000



SECTION A-A' 1:1.000

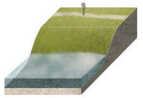
DESIGN PRINCIPLES - TOPOGRAPHY

3:1 SLOPE

Offering both a clearly visible and usable edge, the 3:1 slope constitutes the major part of the terraces. It creates subtle framed spaces and allows the visitor to explore the other levels.

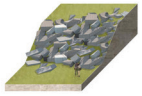
HARD EDGE

Pointing out the former building structures, the hard edge focuses on the contrast between industrial site and the riverbank, where this precise „cut" in the landscape makes both elements more visible.



NATURAL SLOPE

Connecting the river Gesso and the first terrace, the natural slope makes it possible to walk to the riverbank. Instead of shutting the site off the water, this gentle transition re-emembeds the cement plant into its environment. It also strengthens the identity by enhancing the unique alpine landscape structures with great potential.



CONCRETE TILES EDGE

To enhance the identity of the industrial site and the connection to the surrounding landscape, the typical element found everywhere at itat cement is given a new function, now forming terraces at lookout points and squares. This special edge is constructed by recycling the leftover concrete tiles from the formerly sealed areas.

DESIGN PRINCIPLES - FLOODING MANAGEMENT

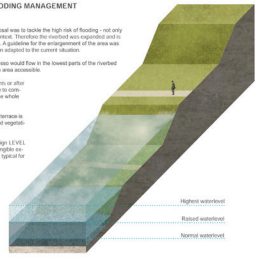
One of the core parts of the design proposal was to tackle the high risk of flooding - not only at the site itself, but also including the context. Therefore the riverbed was expanded and is now offering a large water retention area. A guideline for the enlargement of the area was the historical river course, which was then adapted to the current situation.

Under normal circumstances, the river Gesso would flow in the lowest parts of the riverbed only. This makes the rest of the gravelish area accessible.

If the water rises during small storm events or after snow melting periods, Gesso is now able to compensate parts of the peaks by flooding the whole riverbed.

During extreme weather events, the first terrace is floodable as well. Because of the adapted vegetation, a resilient system is created.

Apart from the functional aspect, the design LEVEL UP uses the terraces to give visitors a tangible experience of this strong dynamic, which is typical for alpine rivers.



DESIGN PRINCIPLES - VEGETATION

The planned vegetation structure supports the terraces.

THIRD TERRACE - FOREST

On the upper terrace, the space is covered mostly by forest, which connects the existing forest at the nearby mountains to the site. Also the used species are found in the surrounding alpine forests - such as larch, pine or oak trees.

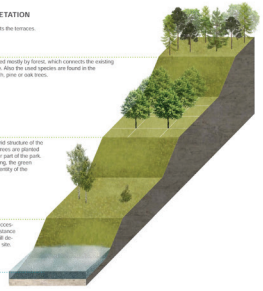
SECOND TERRACE - RASTER

The second terrace is using the strong grid structure of the industrial buildings. Based on these the trees are planted in grids to accomplish a well framed inner part of the park. Because of the architectural raster planting, the green structures are able to complement the identity of the cement plant.

FIRST TERRACE - SUCESSION

This lowest terrace is not planned, but succession will take place. Depending on the distance to the river, a gradient of pioneer trees will develop. This brings the river system to the site.

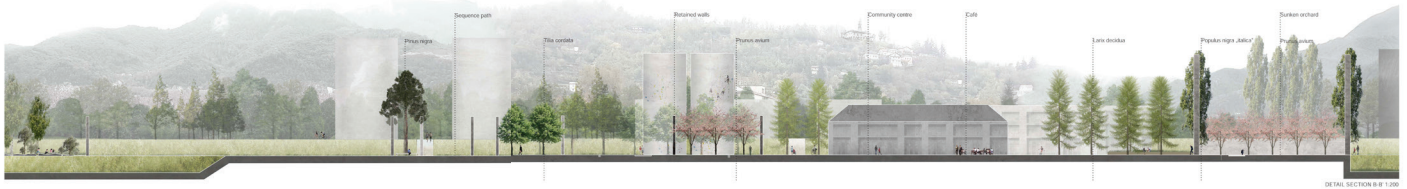
RIVER GESSO



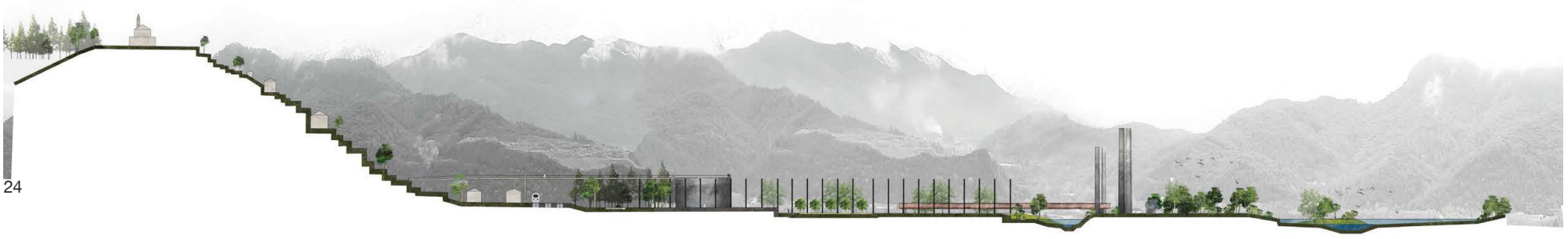
VIEW OF THE RIVERSIDE PROMENADE

VIEW OF THE SECOND TERRACE

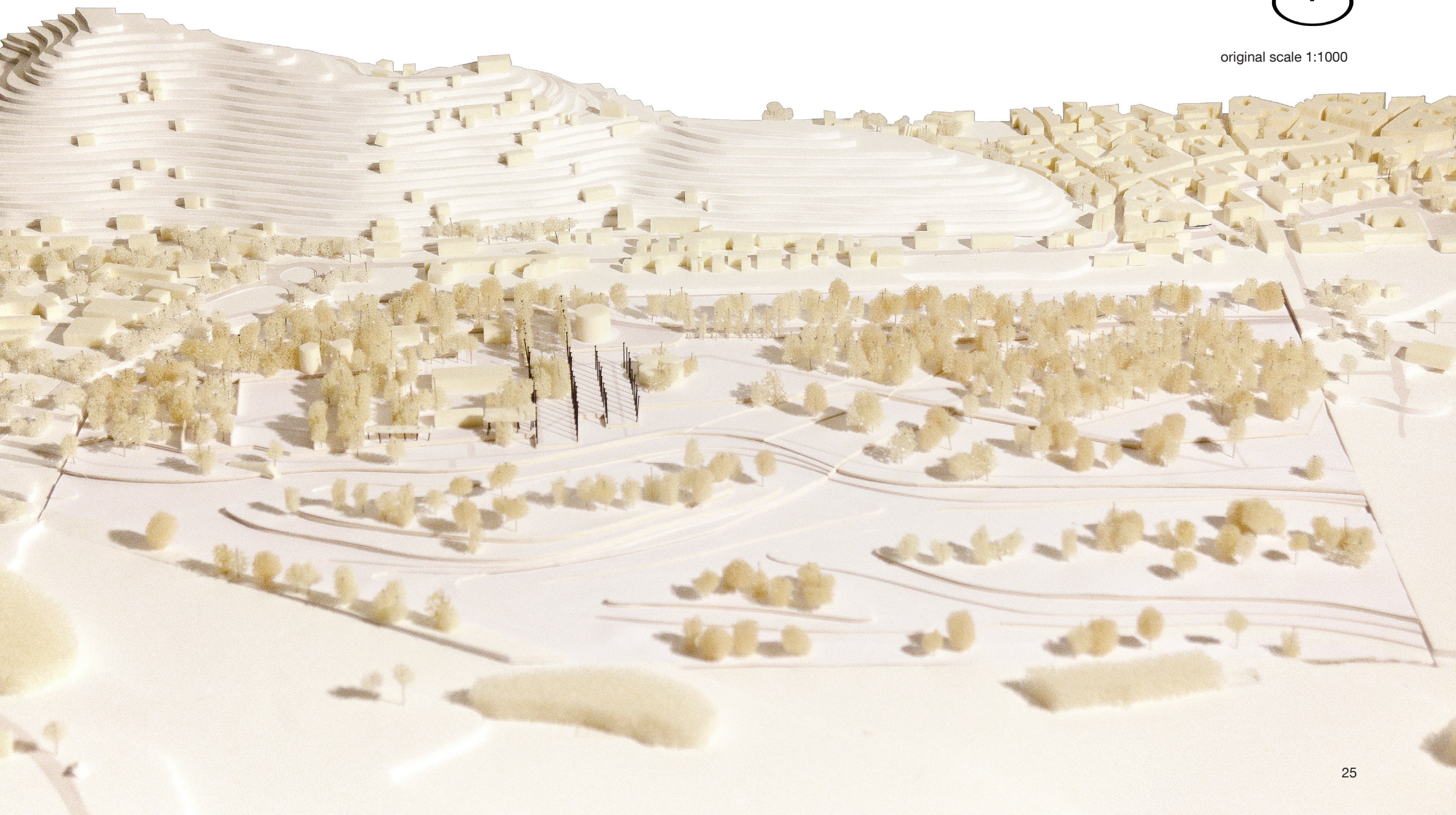
DETAIL PLAN 1:200



DETAIL SECTION B-B' 1:200



In the concept, the river is given back its space and the formerly present river branch is reintroduced. Terraces structure the steeper topography and contribute to the adaption of the site into its surrounding landscape.



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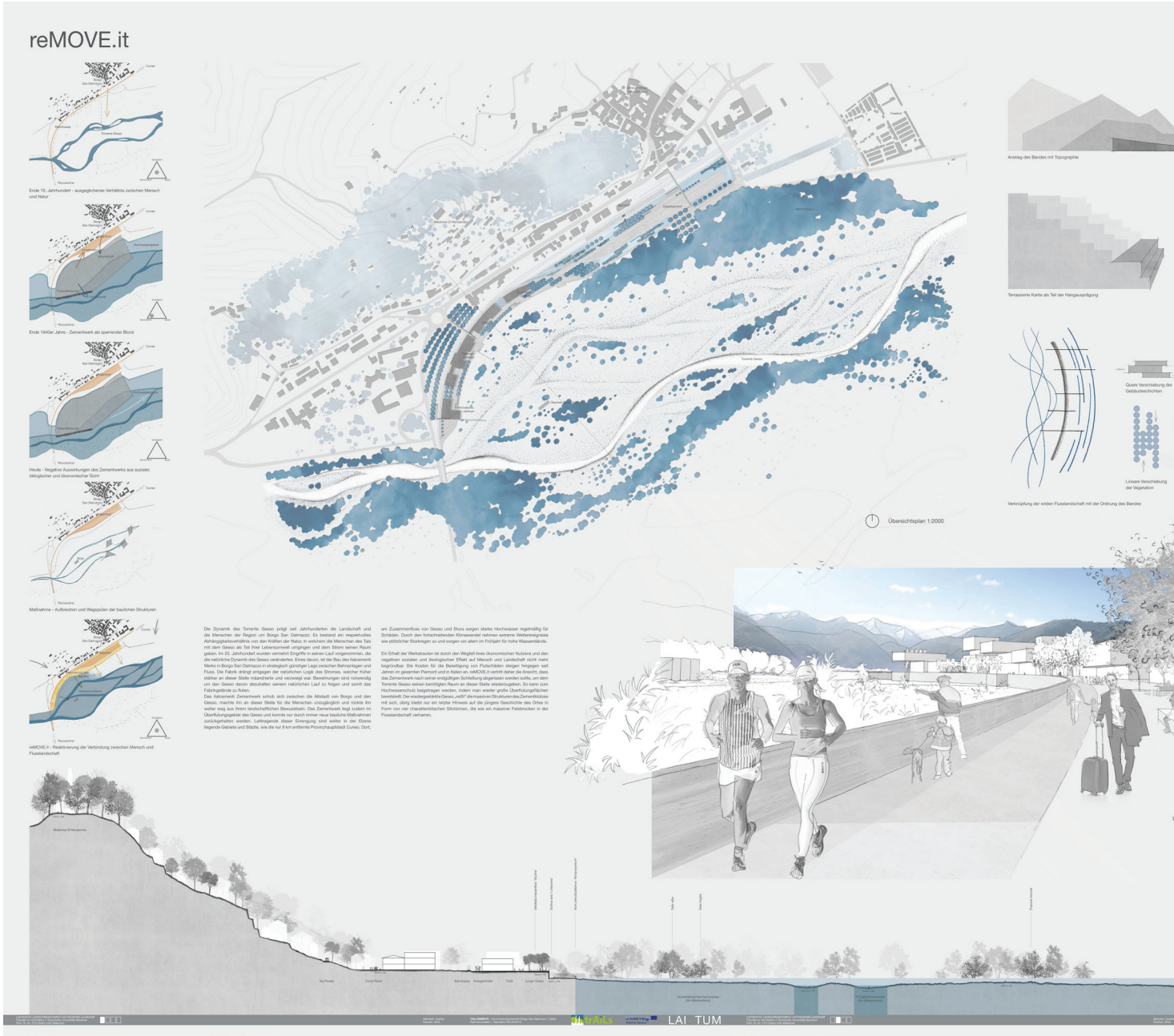
reMOVE.it

Sophie Allendorf, Alina Kersten

The mountain river Gesso has been forming the landscape around Borgo San Dalmazzo. In late spring, it regularly triggers flood events in Cuneo, which are becoming more and more extreme and frequent at times of progressive climate change. Due to the construction of the cement plant in the 1940s, bank reinforcements severely interfered with the course and dynamics of the torrent in order to prevent the flooding of the factory site. The connection to the city of Borgo and the accessibility to the river Gesso was interrupted as well. The preservation of the factory buildings is no longer justifiable due to the loss of their economic benefits and the negative social and ecological effects on people and landscape. reMOVE.it thus holds the view, that the cement plant must be dismantled so that the torrent Gesso can regain its proper space. On the northern edge of the area along the railway, a connecting strip is formed, which is strengthened by the reshaped dynamic river landscape. The southwestern part of the strip will be a building area, creating a promenade-like situation with a magnificent view of the Maritime Alps. By establishing a conference and congress center, Borgo will gain supra-regional radiance and in turn profit from the leisure tourism. In addition, facilities for the needs of the inhabitants of Borgo and the region are being created, such as co-working spaces or an event hall. The promenade, rising with the topography, should be considered as part of the landscape and forms a final strong edge to the wild river area. reMOVE.it wants to recreate the dynamic of the torrent Gesso and transfer it to its surroundings. In this way, the site won't remain in a silent state of an empty factory but will be transformed and moved towards a promising future.



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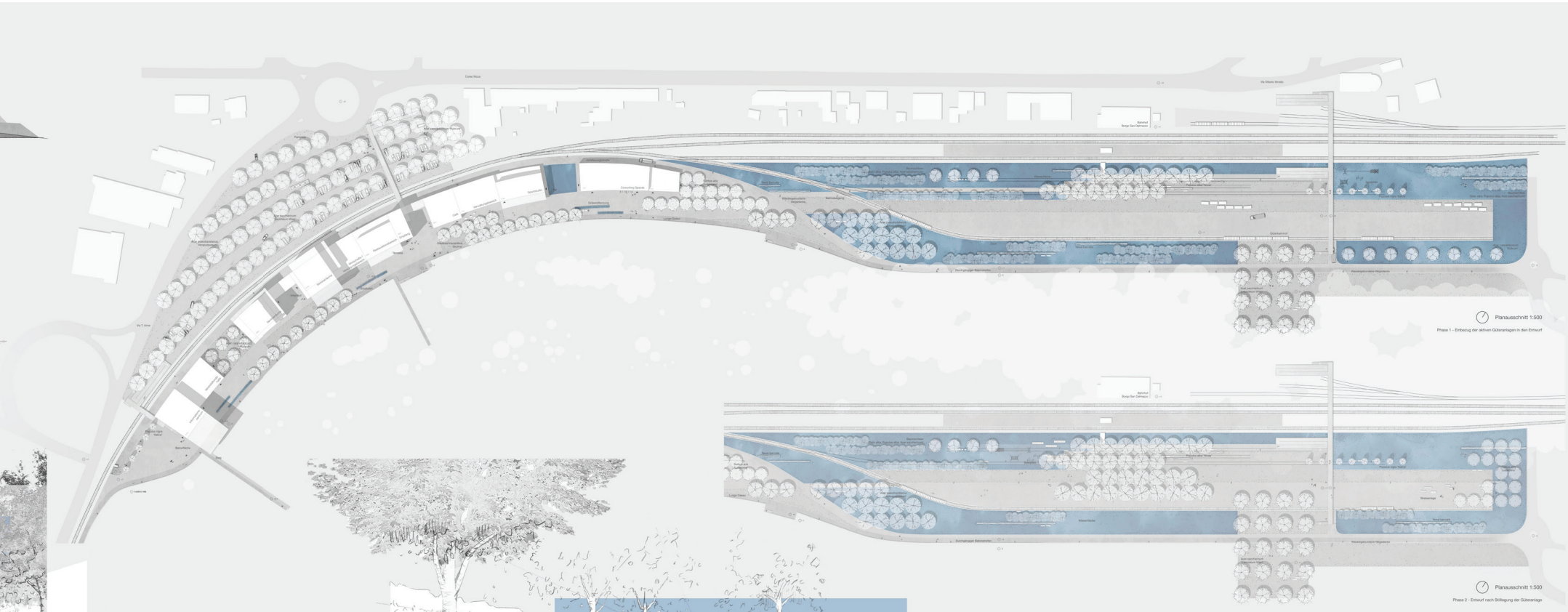
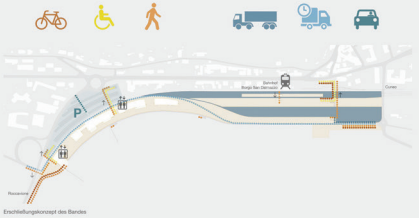
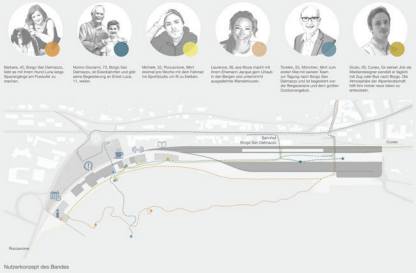


Lungo Gesso erleben

Spaziergang am der Stazione di Borgo San Dalmazzo



Erschließungskonzept des Bandes



Nutzerkonzept des Bandes

Eine dynamische Flusslandschaft wird entstehen, mit großen Kiesbänken, Prall- und Gleithängen. In weniger häufig überschwemmten Bereichen können sich Weichholzauen oder magere Bereiche ausbilden. Es ergibt sich ein attraktives Gebiet, das sich in die Landschaft eingliedert und direkt an die Altstadt von Borgo San Dalmazzo angrenzt. Der nördliche Rand des Areals wird durch die Bahnstrecke bestimmt. Dieser erhöhte Damm wird durch eine Erweiterung seiner Fläche Richtung Flussbett zu einem verknüpfenden Band, das dabei hilft das einstmals vorhandene Gleichgewicht zwischen den Menschen und der sie umgebenden Landschaft wiederherzustellen.
Das Band soll eine abschließende starke Kante zum Flussbereich bilden und als Fortführung der Terrassierung des stadtbildprägenden Berges, des Santuario Madonna Di Monserrato, ausgeformt werden. Hierdurch entsteht eine Qualität, die neben der guten infrastrukturellen Anbindung und der Nähe zur Altstadt vor allem durch die außergewöhnlich landschaftliche Situation mit Gesso und dem grandiosen Alpenpanorama bestimmt wird. Um die Nutzungspotentiale besser ausschöpfen zu können bietet sich die Bebauung eines Teils des Streifens an, wodurch eine promenadenartige Situation mit reprösentativer Silhouette für Borgo entsteht. Die Gebäude auf der Promenade können als geschichtete Steinplatten als Teil der anstehenden Topografie verstanden werden, die sich durch Versprünge in und aus der Landschaft schieben und den Außenraum mit dem Gebäuden verknüpfen.
Der Außenraum und die Vegetation folgt der Logik der Bahnstruktur und der sich an den Fluss anschmiegenden Landschaft und fließt linear über den Streifen. Die klare Formensprache des Streifens steht im spannungsvollen Kontrast zur wild wechselnden Flusslandschaft und der Massivität des Alpenpanoramas.

Die MICE Branche, zu der auch der stetig wachsende Tagungstourismus zählt, ist immer auf der Suche nach Originalität und Nachhaltigkeit, daher schlägt reMOVE.it die Nutzung eines Teils der neuen Gebäudesilhouette als Tagungs- und Kongresszentrum mit Hotelbetrieb vor. Die übergionale Strahlkraft Borgo San Dalmazzos und der Region würde dadurch gesteigert und mehr internationales Publikum, gerade durch die Nähe zu Frankreich, könnte so angezogen werden und ebenfalls den Freizeittourismus weiter vorantreiben. Ein sanfter Tourismus, der mit den Qualitäten der beeindruckenden Landschaft arbeitet, könnte dabei eine Schlüsselrolle für den wirtschaftlichen und sozialen Fortbestand der Menschen und ihrer Traditionen im Valle Gesso und den angrenzenden Tälern nach der Zeit von Industrie und Kalksteinabbau spielen.
Ziel ist es aber genauso, diese neuen wirtschaftlichen Anreize mit den Bewohnern von Borgo zusammenzuführen. Es sollen daher Einheiten für Coworking Spaces für junge Kreative aus dem nahen Cuneo oder anmietbare Räume für Veranstaltungen und Kurse für die Bewohner von Borgo oder der umliegenden Ortschaften bereitstehen. Auch ein Fitnessstudio oder ein Café mit Blick in die Berge und auf den Fluss könnten sich als Anziehungspunkte für Besucher aber auch Einheimische etablieren. Eine Veranstaltungshalle, angegliedert an ein Informationszentrum über die Region und die Geschichte der Stadt soll sich als prominenter Brückenkopf ins Tal hineinschieben und somit einen guten Ausgangspunkt für Touristen und Wanderer auf ihrem Weg in die Berge bieten.
Der kleine Güterbahnhof gegenüber der Altstadt verfällt aktuell noch die Erzeugnisse anderer Ikifer im Tal gelegener Zementwerke und soll daher zunächst weiterhin erhalten bleiben. Der Entwurf für das Verbindungsstück zwischen Stadt und Promenade, dem „Lungo Gesso" bezieht daher in der ersten Phase nur die Bereiche um die Bahnhofsanlagen ein und konzentriert sich stärker auf die Linearität und den ziehenden Effekt, den die schmalerein, sich der Logik von Gleisen und Bahnanlage angepassten Bereiche erzeugen.

In einer zweiten Phase, nach der Stilllegung der Gleisanlagen, würde die volle Fläche genutzt und es entstünden großzügige Bereiche mit vielfältigen Nutzungsmöglichkeiten und einer urbanen Anlage welche direkt an die Altstadt von Borgo angegliedert ist und den Einwohnern ebenfalls für Aktivitäten zur Verfügung steht.
reMOVE.it will die Dynamik des Gesso wiederherstellen und auf seine Umgebung übertragen. Zukunftsperspektiven sollen auf nachhaltige Weise mit den Bedürfnissen von Mensch und Natur vereint werden. Der Ort soll nicht im Stillstand der leeren Fabrik verharren, sondern weiterbewegt und in eine verheißungsvolle Zukunft überführt werden.

The promenade, rising with the topography, should be considered as part of the landscape and forms a final strong edge to the wild river area.

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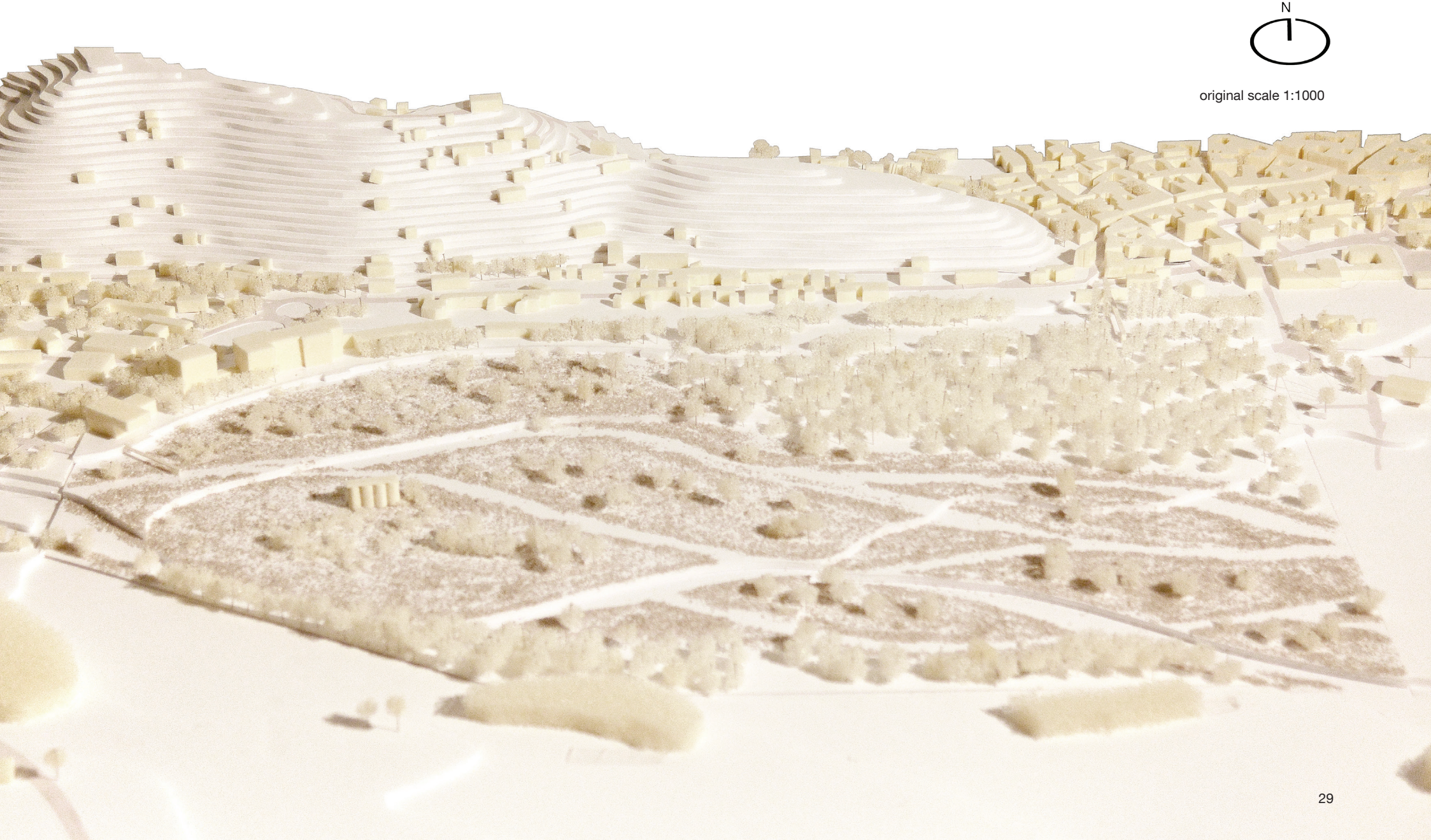

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Findings and Prospect
by Fabian Konopka

The special thanks of the students go to the responsible workers of the Italcementi cement plant and the key stakeholders like the mayors and representatives of Borgo San Dalmazzo and Valdieri municipalities. All of them contribute their time to introduce the students into the different aspects of the project and made it possible to get a solid insight into the situation on site. In particular due to the high complexity of the project, their support was highly valuable.

The project itself offered many complex challenges for the students. Especially the immense scale of the former cement plant, the spatial and immaterial contrasts between the site and the city of Borgo San Dalmazzo with the river landscape and most of all the unique location on the foothills of the Mediterranean Alps contribute to the complexity of the project. Within the process of searching, finding and working out transformation concepts, the students built models, implemented flowing studies of water in an artificial river landscape and analyzed other industrial areas all over the world.

One other aspect of the design studio was the experimental analysis on site in the context of a video-workshop. During the site analysis students filmed the cement plant and the landscape context in their own way. The filmed material resulted in five different short movies. Next to the short movies as a result, the video-workshop helped the students to get a new view and unexpected insights on the site and the landscape context which gave an orientation during the design process.
At the end of the design studio a large range of different transformation concepts were presented. Different visions like the restoration of the torrente Gesso with a new promenade park, the transformation of the structures into a cultural design campus or the implementation of a transformation concept under the philosophy of the autopoiesis theory represent the vast variation of developed ideas. In this way all the approaches reveal the unique character and value of this industrial conversion landscape. The visions may show different levels of feasibility, but definitely contribute a solid and creative base for the discussion about the future visions of the cement plant and other industrial sites within the unique context of the Alps.

The design studio of the TU Munich with project partner LAMORO, mayors and representatives of Borgo San Dalmazzo and Valdieri municipalities in the municipality hall of Borgo San Dalmazzo
from left to right, top row: Udo Weilacher, Domenico Sanino, Daniela Risso, Gian Paolo Beretta, Jan Rościszewski, Lotta Steger, Sabrina Trampen, Fabian Konopka, Alexandra Grama,
Pasha Vredenbregt, Sonia Abluton, Diana Böhm, Umberto Fava, Marcello Modica.
from left to right, bottom row: Josef Östblom, Larissa Böhrkircher, Alina Kersten, Sophie Allendorf, Theresa Finkel, Daniela Jell.

Sources

LAMORO Development Agency: WP T1 A.T1.3 Pilot Profile. Asti, 2018
Weilacher U., Modica M. (2019). “Transforming Alpine Industrial Landscapes”. In: TUM Department of Architecture (Ed.): Review 2018-2019. München; pp. 52-53.

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P. 4, (bottom, right) Aerial Picture Italcementi, from: Google Maps https://www.google.com/maps/search/Italcementi/@44.6870345,7.7033761,10z
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P. 5, (bottom right) la planimetria della cementeria, © Italcementi Group; translated by LAI
P. 30, (bottom, left) Guest Critic Peter Latz during final presentation Foto: Jonas Bellingrodt
P. 30, (botom, middle) Design Studio during Final Presentation Foto: Jonas Bellingrodt
P. 30, (bottom, left) Guest Critic Silvia Benedito and Prof. Udo Weilacher during Final Presentation; Foto: Jonas Bellingrodt
P. 31, Design Studio with representatives of the municipality in the City Hall of Borgo San Dalmazzo, Foto: Carling Sioui

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