

Movimento Indefinito

Transformation of the former freight yard Porta Nuova in Verona, Italy

Project Studies in the winter term 2021-2022 Chair of Landscape Architecture and Transformation Prof. Dr. Udo Weilacher TUM School of Engineering and Design Department of Architecture Technical University of Munich



Content

On Track(s) for the Future Landscape Architecture and Transformation in Verona Professor Dr. Udo Weilacher	2
An authentic fortified town Project studies on the transformation of the former freight yard Porta Nuova Antonia Koukouvelou M.Sc.	3
Freight Yard Porta Nuova Morphological, industrial, economical, ecological and social characteristics	4
Project Overview	6
Expect the unexpected Aimee Louise Simone Neff, Vincent Wenk	8
Porta prati Lea Andrea Aicher, Theresa Zierer	12
Borderwalk Anna Volkholz, Annalena Dietel	16
Stitching Jialing Zhang, Yinuo Chen	20
Opposites attract Daniel Wolfram, Lena Zintl	24
Catalyst to the city Kun Yan, Wuyue Chen	28
Frame Adam Hloušek, Alexis Brandt, Jiaoyang Sun	32
Parco su corde Ekaterina Tepliakova, Fengfei Wang	36
Excursion to Verona Aimee Neff B.Sc.	40

On Track(s) for the Future

Landscape Architecture and Transformation in Verona

In 2009 the Chair of Landscape Architecture and Transformation (LAT) was founded at the Technical University of Munich (TUM) in order to explore in research and teaching new interdisciplinary planning and design strategies in landscape architecture, solving complex environmental problems in the Anthropocene were no standard solutions exist.

The focus of our teaching at TUM is the design studio work with international students, tackling real planning problems in interdisciplinary projects. We take both the creative invention as well as the sound analysis of complex design theories and methods very seriously. The well-crafted text, the clearly formulated critique, the viable hypothesis, the comprehensible narrative and in-depth discussions are of great value as verbal design tools in current teaching alongside visual tools such as sketches, models, drawings, photographs or video. We not only feel responsible for providing a sound theoretical basis in landscape architecture, but also for the good education of young scientists. Well-founded theoretical know-how is of decisive importance for the sustainability of a practice-oriented profession such as landscape architecture.

To work on the transformation of the former freight railway yard at the south of the train station of Verona Porta Nuova was an excellent opportunity for the Chair of Landscape Architecture and Transformation to confront young master students of landscape architecture with a real complex design challenge. The students were asked not only to think about existing and new green spaces in this area, carefully connected to the open space system of the city and its region but they were encouraged to present ideas for new building areas on the site, perfectly positioned between the main train station and the renowned Fiera Verona ground. For landscape architects today, landscape is no longer a phenomenon that is exclusively shaped by nature. In our times, landscape architecture is much

more in line with the view of John Brinckerhoff Jackson, one of the founding fathers of American Landscape Studies, who stated: "A Landscape is not a natural feature of the environment but a synthetic space, a man-made system of spaces superimposed on the face of the land, functioning and evolving not according to natural laws but to serve a community". Therefore, a city is just a special type of landscape and landscape architects feel called upon and legitimized to create visions for the built and the unbuilt environment as a totality.

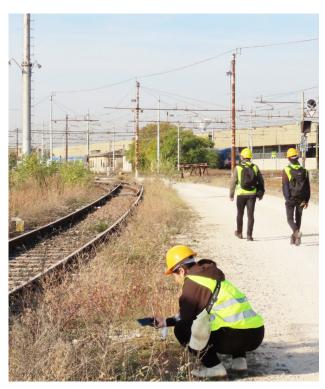
Our students are very well aware of the fact that the global climate change is an extremely serious challenge when creating new living environments, especially in the urban context and they worked very hard to find a good balance in their projects between the ecological, social and economic requirements. It is most fascinating to see in this documentation, how the young generation envisions the future image of the city of Verona, not only shaped by historical important monuments and features but also by newly transformed areas making this time-honoured city fit for the future.

I am very thankful, for the excellent work that my assistant M.Sc. Antonia Koukouvelou invested in the careful organisation, management and coaching of this challenging design project and I am pleased, that the whole LAT team at the chair backed her efforts. I would also like to express my deep personal gratitude to the colleagues who supported us perfectly in Verona, amongst them Professor Lorenzo Migliorati from the University of Verona, Gianluca Lanfranchi from the University of Bologna and Roberto Carollo, architect at Comune di Verona and their partners. The actual, monetarily unquantifiable return of such cooperation lies in the knowledge gain and in the education of

a new generation of highly qualified planners, designers and researchers. This is in the best sense of the word the creation of true value in a science institution, it is about fulfilling a social mission and making a sustainable investment in our future.

I am looking forward to the development of Verona, a city in constant transformation, kept on track(s) for the future.

Prof. Dr. Udo Weilacher



Site visit to the former freight yard, Porta Nuova

¹ Jackson, John Brinckerhoff: Discovering the Vernacular Landscape. New Haven/ London 1984; p. 8

An authentic fortified town

Project studies on the transformation of the former freight yard Porta Nuova

The city of Verona expands around the river Adige at the foot of the Lessini mountains northeast of the Italian peninsula in the region of Veneto. It has almost a quarter of a million inhabitants and is the largest city of the province of Verona.

Verona dates back to the 1st century BC and flourished particularly during the 13th and 14th century under the Scaliger family and as part of the Republic of Venice. Even though the city endured damage from the First and Second World War, it preserved many monuments and antiquities. Nowadays Verona is an important UNESCO heritage due to its authenticity of its fortification. Additionally, Verona's broad artistic, architecture, and literature scene has made it a popular tourist destination.

The master project site, the area of the former freight yard Porta Nuova, is situated south west of the historical city centre, below the second largest train stop in Verona, Porta Nuova. For a while, the area has been 'waiting' for its transformation. Now, the Comune of Verona (municipality of Verona) and the FS Group (Ferrovie dello Stato Italiane Group = Italian railway company group) are looking for new ideas to reuse and transform the site. The city is ready to welcome a new open, public space, where the culture of Verona will be exposed and evolved.

The master studio of the winter semester 2021-2022 was built around this context and aimed to propose strategies for transforming the former freight yard Porta Nuova. Each student's strategic planning took into account the demographic, economic, climatic, and ecological factors and focused on the challenge of climate change.

M.Sc. Antonia Koukouvelou



Drone photo of the former freight yard, Porta Nuova



Drone photo of Porta Nuova; East view

Freight Yard Porta Nuova

INDUSTRY AND SOCIAL IMPACTS

Due to its fertile soil and reclaimed land in the south. Verona has been since medieval times a city focused mainly on agriculture. With the rising of industries and its strategic position though, the Veronese shifted their main occupation to manufacturing activities such as cotton mills (Cotonificio) and foundries (Fonderia). This change brought Verona from a 'fordist' reality to a city of mediation. The city entered late the industrial phase and only around '70s-'80s were the first strong industrial developments visible. Verona's industries are still focused on agriculture and form some of the most important European centres in agro-industrial productions and services (industries such as: Melegatti, Paluani, Mondadori). In the '90s the airport of Verona was inaugurated and linked the city to other international centres which brought more industrial connections across Europe (freight village Quadrante Europa). Today Verona focuses on the enhancement of cultural and historical heritage and sustains a big industrial and mobility network.

TRANSPORTATION: TRAIN STATIONS

The first train station of Verona, 'Porta Vescovo', was built in 1849 and was mainly used for passenger transportation, to repair wagons and carriages, and to produce steam boilers.² In 1852 the bridge over the west side of the city centre was built and allowed to access the right bank of the river Adige. Due to this change, a new, smaller station was built under the name 'Porta Nuova'.

The second train station of Verona, 'Porta Nuova', started as a small hub, but slowly transformed into an important cross-junction station in Italy, because it facilitated, among others, the connection between the Brenner Railway and Milan-Venice Railway. When Verona became part of the Kingdom of Italy

in 1877, the demand on transportation was high which forced Porta Nuova to become the new main station of the city.

During the World War II, the railway station was heavily destroyed and most of the buildings were ruined, but the city quickly rebuilt it.³ In addition, the introduction of electric and diesel locomotives in 1960 forced the older railway yards to shift activities towards repairing electric locomotives and transport of goods. The station has become one of Italy's most strategic transport nodes, as identified by the Trans-European Transport Network (TEN-T).⁴ Nowadays, the station goes under construction again to accommodate the new Milano-Verona and Verona-Venice high speed railway connection.⁵

IDENTITY AND ECONOMY

The identity of Verona is strongly attached to its urban context and shows a historical vocation to commerce and mediation. Its strategic position between important highways and its cultural heritage, such as the Valpolicella region, created a strong economic, social and cultural pillar for the region's development.

Industrial production, export of goods and agro-industrial products, marble production, and tourism are the most important economic resources of the region.⁶ For the city itself, tourism is a great economic force which keeps on growing due to multiple

- 3 cf. Grandi Stazioni Rail ed.: "Verona P. Nuova" in: https://www.grandistazioni.it/content/grandiStazioni/it/le-nostre-stazioni/verona-p--nuova.html (05.05.2022)
- 4 Verona2040: Scenari Strategici per lo Sviluppo di Verona e del suo Territorio", 3/3/2021, Confindustria Verona, ANCE Verona, CRESME (07.10.2021)
- 5 RFI ed.: "nuovo sistema di accesibilità e spazi pubblici annessi" in: RIQUAL-IFICAZIONE SCALO VERONA PORTA NUOVA. Contributo Gruppo FS al Tavolo Tecnico/2020. p.4
- 6 cf. Camera di Commercio Industria Artigianato Agricoltura Verona ed.: Ecomomica Veronese: Edizione 2020. Verona 2020, pp. 7

tourist and cultural events.7

On one hand, the fast growing road-infrastructure and industrial expansion benefit the mobility of citizens, on the other hand, this development negatively affects the green public spaces and divides the city spatially. The citizens of Verona are longing for parks and public spaces and want to see these transportation barriers slowly disappear.

MORPHOLOGY

Verona lies in the Po Valley which is the most extensive plain in Italy. It is characterised by many urban centres, industrial settlements and intensive farming activities. The valley is located between the Alpine range and the Apennines. The city of Verona lies in a mixed layer of fluvial and alluvial fans from the

7 cf. Camera di Commercio Industria Artigianato Agricoltura Verona ed.: Il Turismo a Verona: Edizione 2020. Verona 2020, p.5



Verona's position in the Trans-European Transport Network





² cf. Wikiwand ed.: "Stazione di Verona Porta Vescovo" in: https://www.wiki-wand.com/it/Stazione_di_Verona_Porta_Vescovo (05.05.2022).

Holocene Floodplain and the Late Pleistocene bajada unit.8 The Adige (or Etsch in German) is the main river that flows through the Po Valley and is the second longest river in Italy. It flows south for 410 kilometres and at the height of Calliano drains 12,200 cubic kilometres into the Adriatic Sea. Climate change and the rise of temperature affected the Alpine glacier' formations, which until today cause changes in the surface and volume of the river.9

Since the 19th century, the Adige has undergone major modifications to its course due to strong canalisation, such as its connection to Garda Lake through the Mori-Torbole Tunnel, which resulted into many changes of its morphology and biology. These changes were aiming at land reclamation and flood controls and most of them took place after the disastrous flood event in 1882. Hydropower reservoirs and dams changed the dynamics of the river and continue to influence the sedimentation and deposits of soil along its banks.

DEMOGRAPHICS

Verona is 'aging' according to the latest statistics¹⁰. The peripheral cities of Verona face nowadays the most significant negative numbers of young population in comparison to older population. In 2019, Verona counted 259,608 inhabitants: 12.2% young people, 25.4% aged, 14.7% foreigners. Each year the city counts less young people and the ratio of births to deaths is negative.¹¹

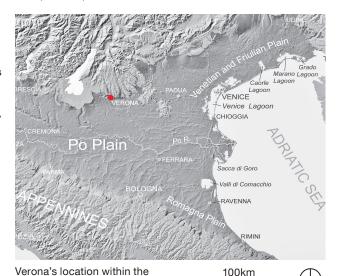
- 8 Castaldini, Doriano, et al.: "Geomorphology of the central Po Plain, Northern Italy" in: Journal of Maps. magazine Volume 15/2019, p. 780
- 9 Scorpio, Vittoria, Simone Zen, Walter Bertoldi, Nicola Surian, Marco Mastronunzio, Elena Dai Prá, Guido Zolezzi, and Francesco Comiti, 'Channelization of a Large Alpine River: What Is Left of Its Original Morphodynamics?', 2017, p. 1045
- 10 Verona2040: Scenari Strategici per lo Sviluppo di Verona e del suo Territorio", 3/3/2021, Confindustria Verona, ANCE Verona, CRESME (07.10.2021)
- 11 CRESME 2020 (as footnote 4)

ENVIRONMENT

The air quality in the region of Veneto is diminishing every year and the city of Verona is affected by elevated levels of air pollutants including nitrogen dioxide and fine particle matter. 12 The municipality is planning to implement more green spaces in its general master plan and the former freight yard in Porta Nuova provides a great opportunity for that. The upcoming plan for the freight yard, as decided by the Comune di Verona, should devote a minimum of 50% to green space.13

12 cf. Tomasi, Marika, et al.: "Verona Adapt. Modelling as a Planning Instrument: Applying a Climate-Responsive Approach in Verona, Italy" in: Sustainability. magazine 12/2021; p. 11

13 https://www.comitatoveronasud.it/non-un-metro-di-meno-perche-tutta-lareadellex-scalo-merci-ferroviario-deve-essere-convertita-in-un-grande-parco-alloscalo/ (20.09.2021)



Po Plain in northern Italy







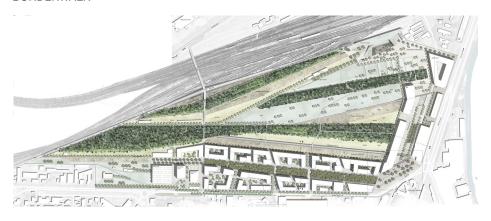
PROJECT OVERVIEW

Eight projects for the transformation of Porta Nuova

EXPECT THE UNEXPECTED



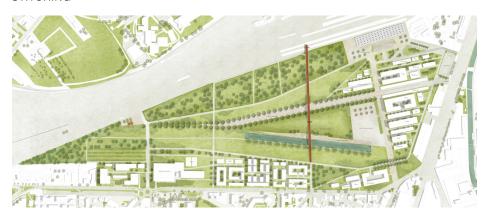
BORDERWALK



PORTA PRATI



STITCHING



OPPOSITES ATTRACT



FRAME



CATALYST TO THE CITY



PARCO SU CORDE



100m



EXPECT THE UNEXPECTED

Aimee Louise Simone Neff, Vincent Wenk

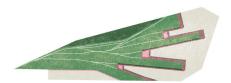
In a city where every square meter is under pressure to perform, a single masterplan may solve today's problems in Verona Sud, yet it presents the city with the impossible challenge to fulfil all interests, meet demands and respond to future challenges. Contrasting the otherwise highly built and dense cultural city centre, the former freight yard offers the one unique opportunity for Verona to develop a new key urban component of Verona that is able to respond to its current and future social, economic and ecological challenges.

To moderate this complexity, the project proposes the theoretical concept of a landscape palimpsest. The site is understood as a written landscape that continuously changes over time. By carefully studying the landscape, hidden layers can be rediscovered and new layers can be integrated. The landscape is able to respond spatially and programmatically to the evolving needs of the neighbourhood and the city.

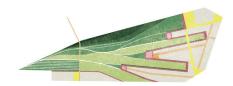
The design proposes an evolving and adjustable, scenario-driven development. To guide the process of adding new layers to the landscape, a structuralist approach was chosen, as the theory takes existing structures very seriously. The overall design intends to capture and highlight the open quality of the site by following the horizontal movement of the train tracks. Additionally, the plan shows the strong underlying spatial structure, which is composed of plateaus, promenades and the bumper blocks. These create the strong edge between the built landscape and the park landscape. New layers, which should respond to Verona's most urgent challenges, can be written onto the site. The in-between areas on the plateaus are open and can – in a metaphorical sense – be written, overwritten, or scratched away and rewritten.



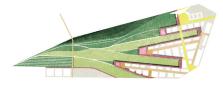
Green or Grey?



Placing bumper blocks



Placing bumper blocks



Write, overwrite, rewrite

Design concept



Masterplan (original scale 1:1000 on DIN A0)





Perspective: The city edge





Plan (original scale 1:200 on DIN A0)



Perspective: The city garden



Section C-C (original scale 1:200 on DIN A0)

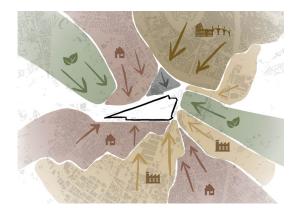
PORTA PRATI

Lea Andrea Aicher, Theresa Zierer

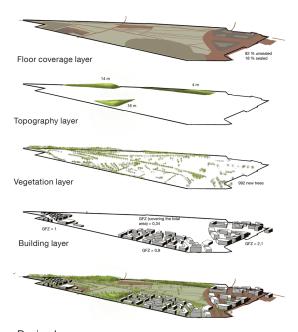
In addition to climatic issues, social aspects of daily use, multifunctional usability, economic aspects and a future-oriented redesign, the project addresses the question to what extent the former freight yard can be thought of as a public component of Verona's urban fabric. The brownfield site has great potential to be developed into a social centre within the city, yet it is exposed to a variety of pressures from the surrounding area and currently lies as a delineating foreign body in the cityscape. By consciously responding – or not responding – to pressures from the surroundings, a resilient, permanently stable urban space is created.

The new public open space contributes to the social and ecological integration of the site into the historic dense urban fabric of Verona. The multi-functional park connects the separate neighbourhoods and thus functions as a new, centrally located, important meeting place. The newly created space assumes an important function for exercise, recreation and leisure. In addition, new residential as well as commercially used quarters are integrated. The micro and urban climate is improved by introducing a climate-adapted design.

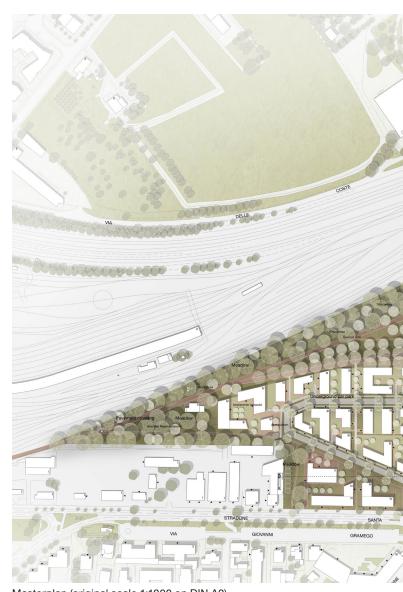
Pressure equalization is achieved by making the edges of the brownfield site accessible and strongly interconnected with the surrounding area. By responding appropriately to a wide range of pressures acting on the area, a smooth transition to the surroundings is created. Development pressure is addressed by introducing new neighbourhoods. Wooded areas and the use of natural materials contribute to the preservation of the present wind corridor, which will lead to long-term climatic improvements. Finally, social value is added by creating a large recreational space in Verona's urban network, which strengthens the integration of public uses and seamlessly combines them across property boundaries.



Pressure analysis



Design layers



Masterplan (original scale 1:1000 on DIN A0)





Perspective: Berm with view over Porta Prati Park and the Alps



Izon

Personal

Robins

Provided

Robins

Provided

Robins

Provided

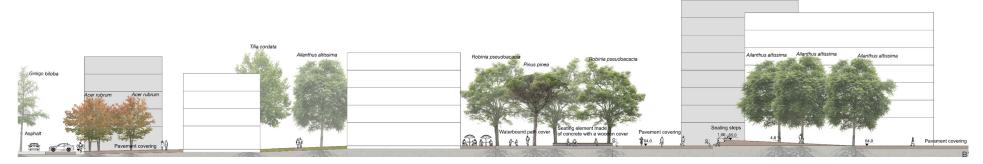
Robins

Provided

Robins

Plan (original scale 1:200 on DIN A0)

Perspective: Southern Arrival Plaza



Section B-B (original scale 1:200 on DIN A0)

BORDERWALK

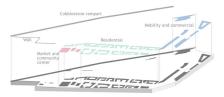
Anna Volkholz, Annalena Dietel

The aim of the project is to transform the derelict former freight yard into a public, ecologically and climatically future-proof part of Verona's urban structure. The site must fulfil its role as a green connection, which is a critical step to create a large, coherent greenspace. The landscape park must have a high ecological value, yet still fulfil its role as a recreational space for people. To achieve this goal – and to create a valuable and stable green space in the long term – a strong urban planning framework is developed for the site.

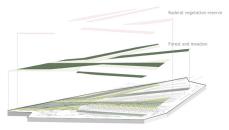
The greenspace is contrasted by a dense building frame that acts both as protector and mediator between the different parts of the city and the park. By strongly separating the land-scape park from the urban framework, the qualities of both spaces are concentrated and used more effectively.

Two design tools were developed, the first being "amplify" to reinforce and stabilize existing structures, and the second being "add", which refers to the addition of new structures. The two stabilising systems are the structural framework of the freight yard and the disused tracks that fan through the project area. The "add" tool turns the site into a logistical link.

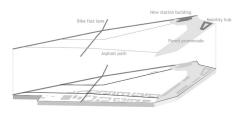
In developing these spaces, there is a strong methodological focus on keeping current stabilizing structures of the railway yard and ensuring that they are legible in future planning. These structures include the railway lines themselves, and the way that they function and distribute through the site, as well as the spontaneous vegetation within them. Additionally, a built border surrounds the project site. Lastly, the freight yard is transformed from a spatial barrier into a connector, both logistically as well as socially and ecologically. Only by combining all these factors can the former railway yard become a valuable, diverse and stable part of the city structure of Verona.



Amplify: Built border



Amplify: Tracking shapes



Add: Logistical connection

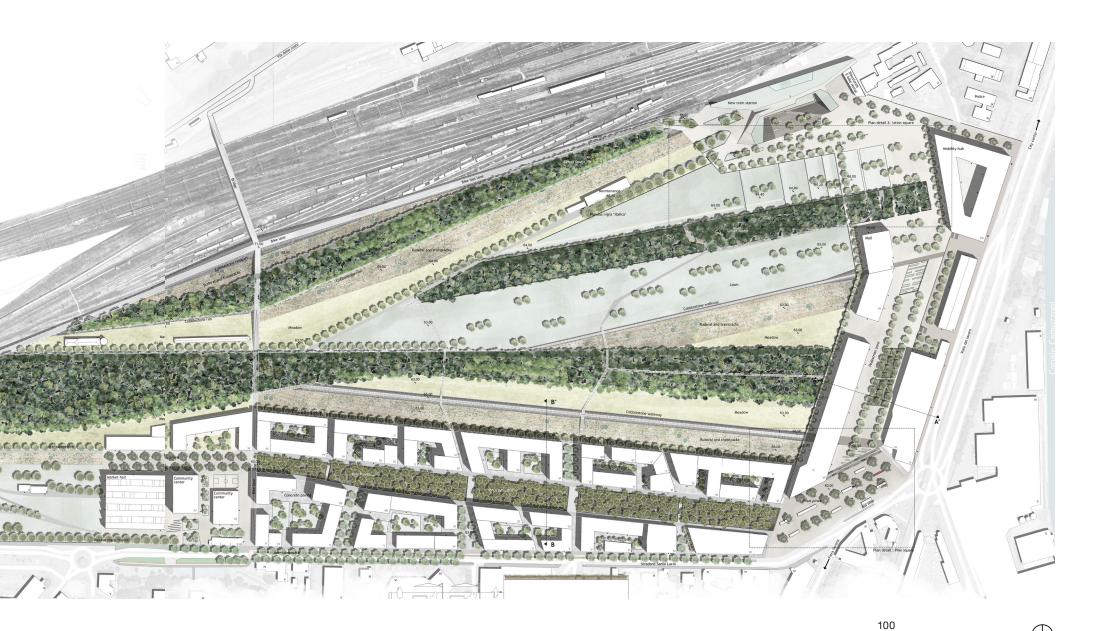


Add: Ecological and climate connection

Design Method: Between the lines



Masterplan (original scale 1:1000 on DIN A0)





Perspective: Borderwalk

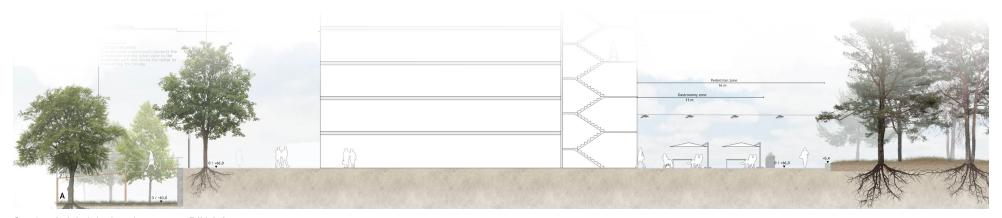




Plan (original scale 1:200 on DIN A0)



Perspective: Pine Square



Section A-A (original scale 1:200 on DIN A0)

STITCHING

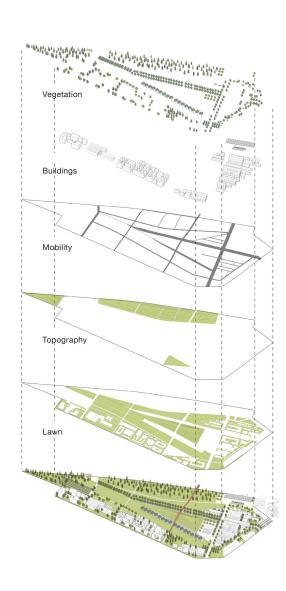
Jialing Zhang, Yinuo Chen

The former freight yard is strategically located in Verona, yet separates the southern neighbourhoods from the historic centre. Due to the presence of the former freight yard, Verona Sud is cut off from the historic city centre. The residents' quality of life here is compromised by the high density of buildings and the lack of public green facilities. The abandonment of the freight yard has hampered the development of Verona Sud.

By stitching the former freight yard together with the surrounding urban areas to the North and South, the site is reintegrated into the urban fabric. The central challenge is to extend the economic structure of Verona, which is highly concentrated in the city centre, to the south of the city while providing a green environment. Additionally, by providing multi-functional activities the site will enhance the well-being of its users the site will be further stitched into its surroundings.

By developing a city park in a strategic urban location, a sequence of multiple design spaces can be shaped: The railway tracks are retained to preserve the site's identity, and with the application of a variety of design techniques, the park offers multiple sensory experiences for its users. The dense commercial area, the open multifunctional activity area, the undulating bridge, the transformed rail space, the natural waterfront space, the space on the bridge that satisfies the "prospect and refuge" mentality, and the undulating topography together form a complete landscape structure within the site.

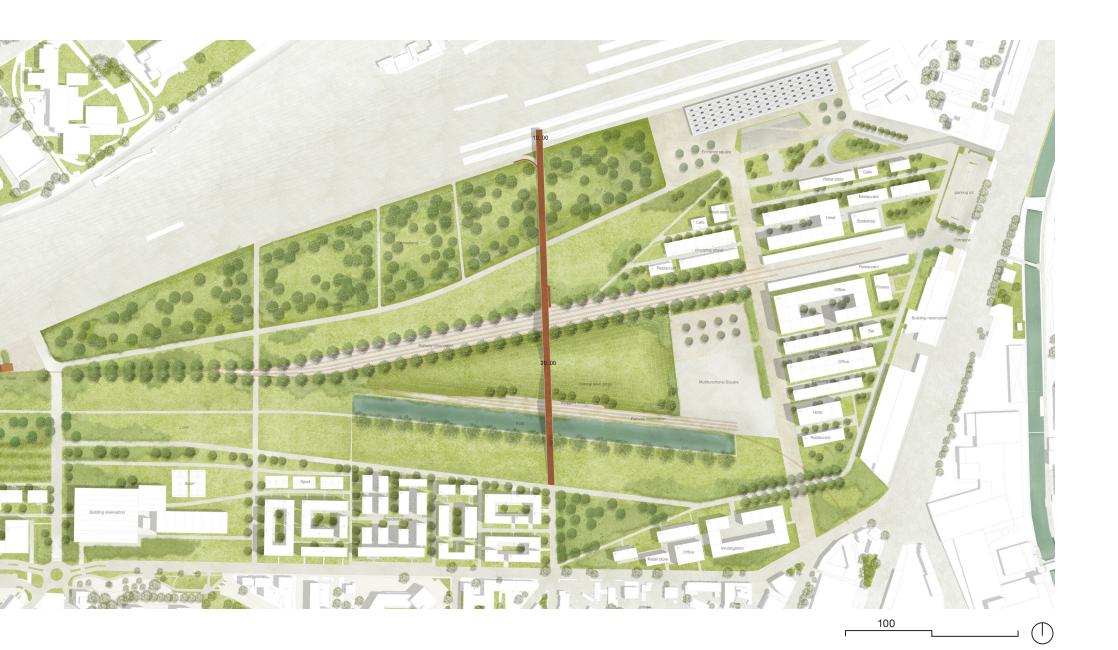
The site should fulfil its role of stitching the urban fabric by providing ample spatial typologies and increasing its permeability. If the site can act as a highly porous medium, all elements will be able to enter the site very freely and without any hindrance. The absorption and discharge processes will allow the site to stitch itself to its surroundings.



Design Layers



Masterplan (original scale 1:1000 on DIN A0)





Perspective: Porta Nuova Square





Plan (original scale 1:200 on DIN A0)



Perspective: The Bridge



Section B-B (original scale 1:200 on DIN A0)

OPPOSITES ATTRACT

Daniel Wolfram, Lena Zintl.

The development of the high-speed train line, which will strengthen the connection from Italy to the rest of Europe, is predicted to increase the mass tourism, causing problematically high pressure on the historic centre of Verona. The lack of space in the city centre and the high concentration of tourist-attracting infrastructures in this area, as well as the increasing number of tourists are the main problems the city will face in the future. The old town will not be able to withstand the increasing touristic pressures, as there is no more space to compensate these demands. Verona is mainly known for its cultural heritage and rich history. However, in terms of innovation and progress, there are immense deficiencies.

The concept "opposites attract" deals with the following challenges: the growing pressure on the old town, which is caused by the high-speed train line and railway yard that act as a barrier between Verona Sud and the city centre, as well as the lack of innovation in Verona. The tourist tension in Verona can only be distributed by creating an antithesis to the historic city centre that retains the industrial character and logic of the planning area while preparing space for innovation, as well as through a direct connection. The direct connection is needed to overcome the barrier in form of a track bed. The potential of the railway typologies on site are used to achieve this goal.

The former freight yard should retain the industrial character and freight-logic while providing space for innovation and creating a direct connection. The potential of the railway typologies on site are used to achieve this goal. Additionally, the direct connection to the north is established through the "Linea Alta", a nine-meter-high structure that activates a new level for the park's public outdoor space. The structure not only directly connects the train station with the park and the exhibition centre via the large track bed, but primarily provides access to the roofscape of the buildings, which consists of restaurants, gardens, and research areas, and connects them all.



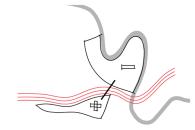
Status quo



Problem



Aim



Method



Masterplan (original scale 1:1000 on DIN A0)





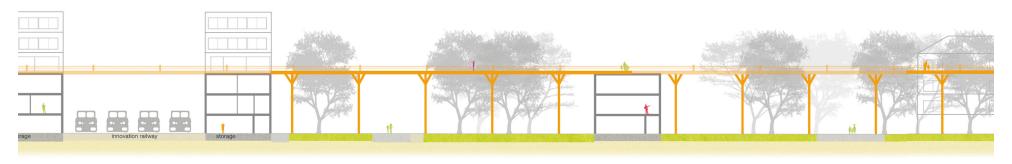
Perspective: Linea Alta



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Plan (original scale 1:200 on DIN A0)

Perspective: Next stop: Innovation!



Section A-A (original scale 1:200 on DIN A0)

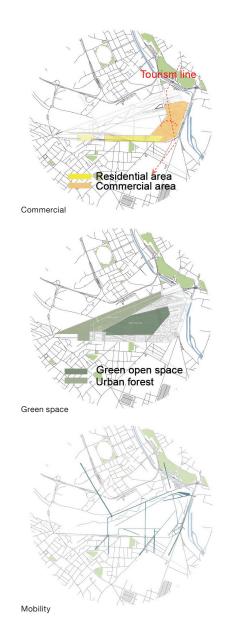
CATALYST TO THE CITY

Kun Yan, Wuyue Chen

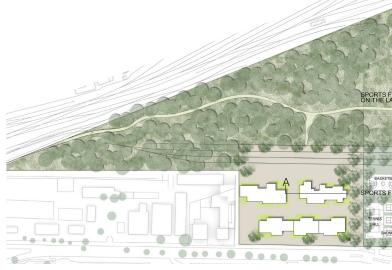
The derelict former freight yard, which has been isolated from the city, is of strategic importance to link the historic city centre with Verona Sud. The mismatch between the holistic development and the core location of the site can only be eliminated if the site is given it the identity of a catalyst through the creation of a mixed-use development with an open structure.

The derelict former freight yard, which has been isolated from the city, is of strategic importance to link the historic city centre with Verona Sud. The site has the potential to act as a catalyst for the urban planning and development of Verona Sud and needs to be developed in such a way that its isolation is eliminated and it is integrated into the city's open space system. The project proposes a simple, viable and versatile structure based on the theory of structuralism to integrate the former freight yard into the urban fabric of Verona. The overall structure of the design remains stable, while the spaces within are flexible and adaptable to different uses.

The site is defined by a mixed-use public space with social, economic and ecological functions, allowing it to play its role as a catalyst for the development of Verona Sud, which connects the North and South of the city. The concept of a catalyst, which involves a chemical reaction, is applied to the site and allows for the site to gradually develop. Social, economic and political functions allow for reactions to take place, which drive the urban development and engage with the periphery. The existing railway structures are reused and integrated into the design, creating a high-quality open space. The industrial traces can evoke a sense of belonging and generate historical identities. The aim of the project is to create an interconnected landscape space for people and connect this space to its surroundings and the existing urban landscape.



Spatial Structure



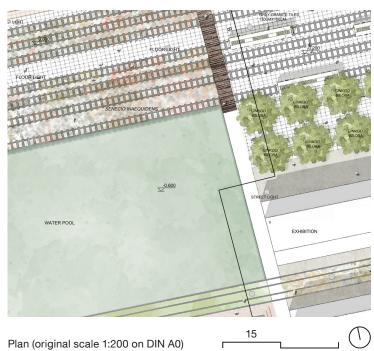
Masterplan (original scale 1:1000 on DIN A0)



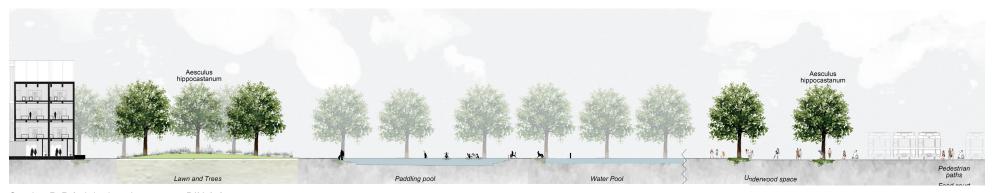


Perspective: Meeting Centre at Central Railway Park





Perspective: Food Court at Central Railway Park



Section B-B (original scale 1:200 on DIN A0)

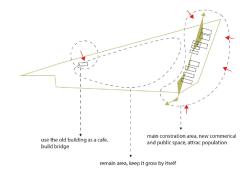
FRAME

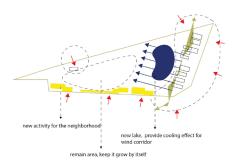
Adam Hloušek, Alexis Brandt, Jiaoyang Sun

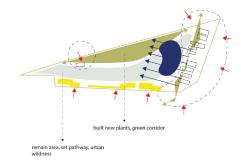
The former Porta Nuova freight yard has been sitting vacant for the past 20 years and has disconnected the North and South of Verona. Connectivity is the main issue facing the site and it can be divided into three dimensions: ecological, economic, and social. To a resident who may pass daily or a tourist exploring, the freight yard appears as a walled-off fortress wasting away inside. Inside the walls, however, nature has had free reign over the last 20 years and has reclaimed the site. This natural reclamation creates an interesting problem; how can the site be reconnected to the city of Verona while maintaining the existing effort nature has made to claim the site as its own?

The objective of the design scheme is to stimulate the vitality of the area by creating highly accessible public spaces system of interconnected and influential but dynamic urban green spaces. The main concepts of the design scheme can be summarized in two site architecture principles: framework and layers.

The FRAME-concept connects Verona with its urban wilderness by placing emphasis on preservation as the central focus of the site. A portion of the existing rail lines will be preserved along with the existing vegetation. Raised platforms allow users to experience the naturally reclaimed rails without disturbing the vegetation. Throughout the rail lines will be spaces for outdoor art and history exhibitions. This space is framed by an 8-meter-wide path that can be used by multiple modes of transportation. Along the northern edge, a new type of wilderness will be created via a hiking mound that will have clear views to the Alps and over the Porta Nuova train station. Additionally, the site is connected with the northern part of the city by installing a pedestrian bridge to the west, tunnel connections through the new rail station, and new bus stops. With the increased tourism that is expected from the high-speed rail, economic viability is created by creating an active urban edge to the East and South of the site.







Method: Recovering connectivity



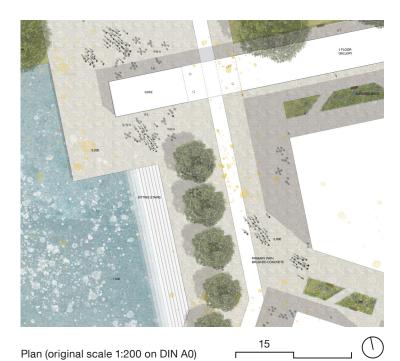
Masterplan (original scale 1:1000 on DIN A0)





Perspective: The Frame





Perspective: Promenade



Section B-B (original scale 1:200 on DIN A0)

PARCO SU CORDE

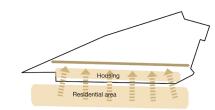
Ekaterina Tepliakova, Fengfei Wang

Verona is a city of rich historical heritage value. Any change to the former freight yard Porta Nuova will be linked to the urban fabric and will inevitably affect the dynamic relationship between the city centre in the North and the residential area in the South. The main challenge is that the site itself acts as a giant dividing line that separates these two parts of the city.

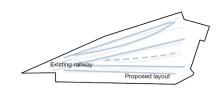
The differences in the infrastructure, economic and industrial development between the historic city centre and Verona Sud are obvious. At the same time, the site has been abandoned for a long time, cutting off the connection with the surrounding areas and becoming an empty vacuum in the city. Therefore, the aim of the project is to redesign the internal spaces of the site in such a way that these are able to compensate for the lack of urban social use in Verona Sud. The project aims to improve the internal infrastructure of the site and to connect to the surrounding urban areas.

The design includes an axis that connects North and South to the Porta Nuova train station and the residential area to the South, providing public access and ensuring the possibility of public participation and interaction with the central part of the site, which is a large public park. A basic structure of the site allows for the programming of the various areas. A strip of housing connects the site to the southern neighbourhood, making it less alienated from its surroundings.

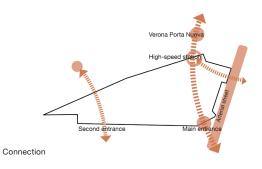
Additionally, the presence of public buildings meets the daily needs of the surrounding residents and reduces the gap with the economic development of the central part of Verona. The use of sustainable plants allows for the improvement of the microclimate and the urban heat island effect. The historical memory of the former freight yard is preserved by transforming railroad facilities, tracks, locomotives and other objects into small structures or resting platforms.

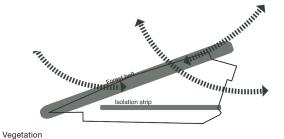


Housing



Structure





Design Elements



Masterplan (original scale 1:1000 on DIN A0)





Perspective: Square outside the Cultural Building





Plan (original scale 1:200 on DIN A0)



Perspective: View over Parco su corde



Section A-A (original scale 1:200 on DIN A0)

Excursion to Verona

Within the context of the master studio, professor Udo Weilacher and his assistant Antonia Koukouvelou organised a site visit to the former freight yard in Verona with a group of 17 master students. After arriving at Verona Porta Nuova, the group set off on a tour of the city. The students each prepared short presentations on Verona's most prominent public spaces, castles and gardens. The group started at the 15th century renaissance garden Giardino Giusti. Thereafter, they made their way towards the hilltop church Santuario della Madonna di Lourde, stopping at Piazza Isolo and Piazzale Castel San Pietro on the way. In the evening, the group reached the historic city centre, experiencing the hustle and bustle around Piazza Brà, the Arena di Verona and Piazza Erbe. The students were able to gain a good overview of the whole of Verona.

On the second day, the students visited the 48ha large former freight yard. In the morning, the responsible engineer of the freight yard (Ing. Demian), gave a tour around the site and ex-

plained its current state. In the afternoon, the students walked freely around the site and analysed it.

On the third day, the students took part in a series of lectures held at the University of Verona, which were organised by Prof. Lorenzo Migliorati and Gianluca Lanfranchi. The architect of the Comune of Verona, Roberto Carollo, contributed by presenting the future development plans of the city. Thereafter, the students walked around Golosine, the neighbourhood to the South of the former freight yard. In the evening the students and supervisors were invited to a traditional Veronese dinner at Osteria ai Osei Verona.

The students spent more than four hours on site to study and record its specific elements. Topographical differences, vegetation types, noise level, wind direction and intensity, signs of pollution signs and materials were some of the observations the students made. Once they had returned to Freising, Germa-

ny, they analysed their findings and conducted other desk-top studies on the demography, history, geology and economy of Verona and the site. Once the students had returned to their campus in Freising, Germany, they presented their results to each other in the studio.

SITE VISIT: "INVENTIVE ANALYSIS"

The students were tasked to explore the site using the inventive analysis – a method formulated by the French artist and landscape architect, Bernard Lassus. ¹⁴ The method contrasts traditional analysis method and allows a designer to make a bodily-experience of a place from a completely new and unique perspective without prejudgement, bias and a specific search for information.

With the help of simple, made-up rules the goal of the inventive analysis was to go on a discovery-expedition and explore the unknown freight yard. Some students explored the site on folding chairs, others by lying on the ground, hanging in hammocks or playing soccer. The experiences may or may not have had a significant influence the students' approaches to the design task. Their perceptions and experiences of the site created new knowledge and shaped their relationship and understanding of the project area. Being intentionally unproductive drew attention to places and details that would otherwise been left unnoticed. The students found it challenging to describe how their experiences influenced their design process, yet they agreed that vague feelings and tendencies remain, something unmeasurable, a unique bodily experience.

Aimee Neff (student)

14 cf. Lassus, Bernard: The Landscape Approach: Inventive Analysis/1989. Philadelphia 1989, p.57



View from the Giardino Giusti



The students received a short on-site lecture on renaissance gardens by professor Weilacher



Students exploring the site using their inventive analysis method



Arrival on the site of the former freight yard



Exploring the site as a group



Industrial ruins on site

Final presentation of "Movimento Indefinito" in Freising together with Roberto Carollo and Gianluca Lanfranchi







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- Cover Image, Panoramic view over Verona taken on the hilltop church Santuario della Madonna di Lourde, Photo: Antonia Koukouvelou
- P. 2, Site visit to the former freight yard, Porta Nuova, Photo: Vincent Wenk
- P. 3, (top) Drone Photo of Verona Porta Nuova; East-view, Drone-photo: Udo Weilacher
- P. 3, (bottom) Drone photo of the former freight yard, Porta Nuova, Drone-photo:

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- P. 4, European Interchange location, edited by authors, retrieved from: Comune di Verona - Ufficio Stampa e Web (2021). "Progetto Central Park. Sindaco Sboarina, vicesindaco Zanotto, assessore Segala." in: https://www. youtube.com/watch?v=_5-b2-c5rhk (03.03.2022)
- P. 5, (left) Fontana, Alessandro: "Introduction to the thematic issue: Alluvial geo-

- morphology in Italy" in: Géomorphologie : relief, processus, environnement: Issue 18/2012. pp. 123-130
- P. 5, (right) Areal image of the former freight yard, Porta Nuova, Verona in relation to the surrounding landscape, © Google Earth 2021
- P. 40, (bottom, left) View from the Giardino Giusti, Photo: Antonia Koukouvelou
- P. 40, (bottom, middle) The students received a short on-site lecture on renaissance gardens by Prof. Dr. Weilacher, Photo: Antonia Koukouvelou
- P. 41, (top, left) Students exploring the site using their inventive analysis method, Photo: Antonia Koukouvelou
- P. 41, (bottom, left and top, right) Arrival on the site of the former freight yard, Photo:
 Antonia Koukouvelou
- P. 41, (bottom, right), Industrial ruins on site, Photo: Antonia Koukouvelou
- P. 43, Final presentation of "Movimento Indefinito" in Freising together with Roberto Carollo and Gianluca Lanfranchi, Photos: Lynn Hennies

All materials which are not named here belong to the authors. The texts in each chapter are written by Aimee Neff, based on the work of the respective groups.







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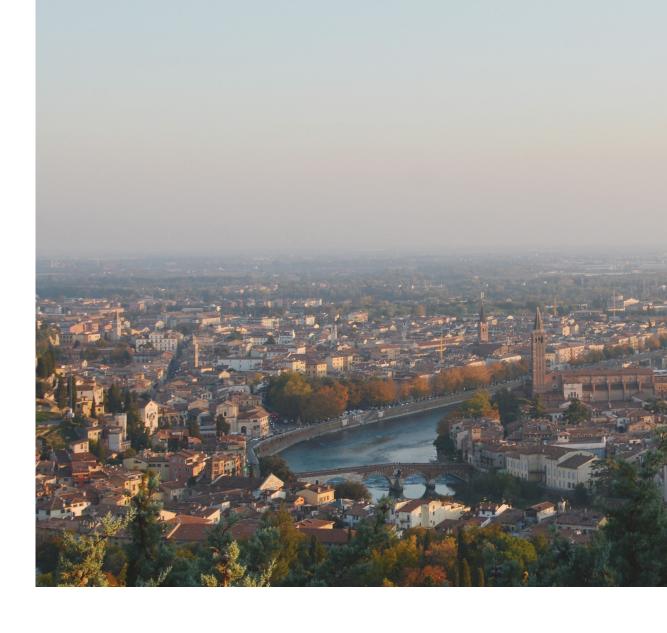
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