

URBION – URBAN REVITALIZATION OF THE VIENNA GÜRTEL

The city-wide revitalization proposed new urbanistic uses and potentials to trigger functional improvements, spurring an image transformation of the previously derelict zone.



Fig. 1 Aerial photo shows the URBION zone along Gürtel, top right: location of the Gürtel in Vienna

1. Project History

1.1 The Gürtel Boulevard in the late 19th century

The Gürtel thoroughfare dates from the last third of the 19th century, when Vienna was a growing metropolis. The inner and outer city walls were dismantled and replaced by two concentric boulevards: the Ringstrasse, (the inner circle of the old city dominated by the court, the aristocracy, church and haute bourgeoisie) and the Gürtel (the outer around the middle-class, business, proletarian world of suburbia). The Ringstrasse was primarily a vehicle for demonstrations of status and power while the Gürtel served housing and traffic purposes.



Fig.2 The inner and outer city walls of Vienna at the end of the 18th century

The physical structure of Vienna's main traffic arteries follow a radial-concentric organisation, similar to other European cities with a medieval urban nucleus. Over time, individual axes

evolved as links between the city and its environs. In 1893, Otto Wagner developed this structure into an urban expansion concept for Vienna. In this, he principally differentiated between the functionalities of the main radial thoroughfares and the tangential roads.



Fig. 3 The Stadtbahn viaduct was built in the center of the Gürtel Boulevard from 1893 -1898 and was constructed to support heavy loads, e.g. trains with steam powered locomotives.

From its inception, the Vienna Stadtbahn railway line along the Gürtel was conceived as a key player in the high volume traffic.¹ It was built between 1893 and 1898, almost entirely as an elevated railway. The Vienna Stadtbahn was planned and executed by the Imperial and Royal State Railways, which opted for a massive masonry viaduct for the Gürtel and Otto Wagner was later commissioned with the aesthetic concept for the Stadtbahn. From the very beginning, the planners of the Stadtbahn wanted the arches below the line to be used for different purposes and referred to the “lease of viaduct arches“. Otto Wagner designed façades to close the arch apertures to create usable space for small businesses. By means of one horizontal partition and two vertical supports, he structured the arches into six sections. Due to the varied topography which the Gürtel traverses while encircling the city, the height of the Stadtbahn arches fluctuates between single and triple levels. Thus, Wagner’s façades were flexible. All of Wagner’s facade designs are characterized by a high degree of visual transparency, i.e. a maximum of window and display space and a minimum of support elements.



Fig. 4 Shops and restaurants as active uses underneath the Stadtbahn viaduct in 1900



Fig. 5 After World War II, from 1950 until 1995, many of the arches were vacant and fell into disrepair. Former green space was paved over to accommodate the growing number of cars.

1.2 The decay of the Gürtel Boulevard post World War II

Originally, the arches housed active uses such as various shops and restaurants. After World War II, however, many of the original facades had been destroyed and were replaced with masonry walls. The change from transparent to closed frontages had far reaching consequences that exceeded mere aesthetics: a visual and physical barrier had been created between the inner and outer districts.

The situation was aggravated by the inactive uses behind the opaque walls within the structure, storage and repair shops. Life began to leave the Gürtel. Shops soon closed and the few storage businesses utilizing the structure did not help populate the declining area.

In the 1950s and 1960s, the popularity of automobile traffic led to an enormous increase of cars travelling on Vienna's streets. The formerly tree-lined Gürtel Boulevard had reached capacity. Green space was reduced for the sake of street widening, asphalt replaced grass and soon the viaduct had become an isolated island in the center of an eight lane inner city highway. The increase in car traffic led to the further decay of the area: the building stock fell in disrepair and a red light-district spread along the Gürtel street and the connecting roads. The negative image of the whole Gürtel neighborhood led to further erosion and devaluation of the area and the adjacent properties. Negative press in numerous articles criticizing the traffic nightmare, environmental pollution and the social degradation of the red light district, was lamented. The Gürtel area was given up as a "hopeless" case.



Fig. 6 Some of the vacant arches were even boarded up. The side lanes were used for illegal parking.

1.3 Situation at the beginning of the URBION project in 1995

With over 85,000 vehicles/day, the Vienna Gürtel forms the transportation backbone for an area extending six kilometers with ten municipal districts bordering its busy lanes. Looking at Vienna's current demographic distribution, another possible concept for the western Gürtel emerges. Although the core urban structure of the city is organised along radial-concentric lines, the highest residential density is in the western Gürtel neighbourhoods. Accordingly, the Gürtel could function as a new linear urban "centre" that features a high-performance means of transport, i.e. the Stadtbahn. Instead, the neglected western Gürtel assumes the unfavourable traits common to the urban periphery or an access/exit highway: dilapidated buildings, high traffic density, few retail shops or commercial and industrial sites. Thus, the western Gürtel finds itself in the paradoxical situation of an inner-city fringe. A situation that only becomes more clear when we regard the Stadtbahn viaduct, not as a connecting (as in Wagner's concept), but rather as a separating element.

The explosiveness of this problem is palpable if one examines the failing neighbourhood development and stunted commercial dynamics. What is happening in the western Gürtel areas is in fact a form of commercial blight, exacerbated by increasing motorisation. This is compounded by a decline of the demographic structure – "social blight" -, which ultimately ends in the social decay of the neighbourhoods concerned.

1.4 The main objectives of the URBION project

After numerous and inconclusive planning projects in the 1980s that had proposed expensive infrastructure investments, i.e. tunnels and road reconstruction projects, the City decided against these plans and searched for a novel and more sensitive approach with a different focus. As a consequence, Silja Tillner, who had specialized on similar projects in Los Angeles, was commissioned by the planning department to develop a Gürtel urban design study. The city planners realized that measures taken on the basis of long-term and cost-intensive so-called "hard" location factors, i.e. improving the urban infrastructure, are only one facet. However, measures taken on the basis of so-called "soft" location factors are also important. This refers to the results of Tillner's study in 1994 which included a strategy of image transposition and visual improvement of the Gürtel by means of small-scale, urbanistically active functions in the fields of culture and entertainment. The importance of "soft" public-space rehabilitation in areas menaced by commercial and social blight has for years been a successful approach in U.S. cities, where neighbourhood decline resulted in massive security problems. Having acknowledged this, the direction given by the client, the City of Vienna, was to concentrate the planning and urban design on these "soft" factors.

2. The URBION Gürtel Concept

In 1994 the City of Vienna applied for EU grants from the community initiative, URBAN, which was set up to aid the improvement of living conditions in problem zones in major European cities. The "1994 Gürtel Urban Design Study" was included in the application.

In 1995 EU grants from the community initiative, URBAN, for the City of Vienna funding mechanism, "URBAN-Wien Gürtel Plus", were approved. As an area with high levels of unemployment, poverty and poor housing conditions the urban districts on either side of the Gürtel, were registered as a "problem urban area". The City of Vienna presented an improvement concept which complied with the principles of "sustainability" and "private-public partnership" and included a total of 60 projects and initiatives to improve the building fabric, attract new small businesses, promote cultural initiatives, social advice centres and improvements to the infrastructure. Silja Tillner was responsible for the URBION component.

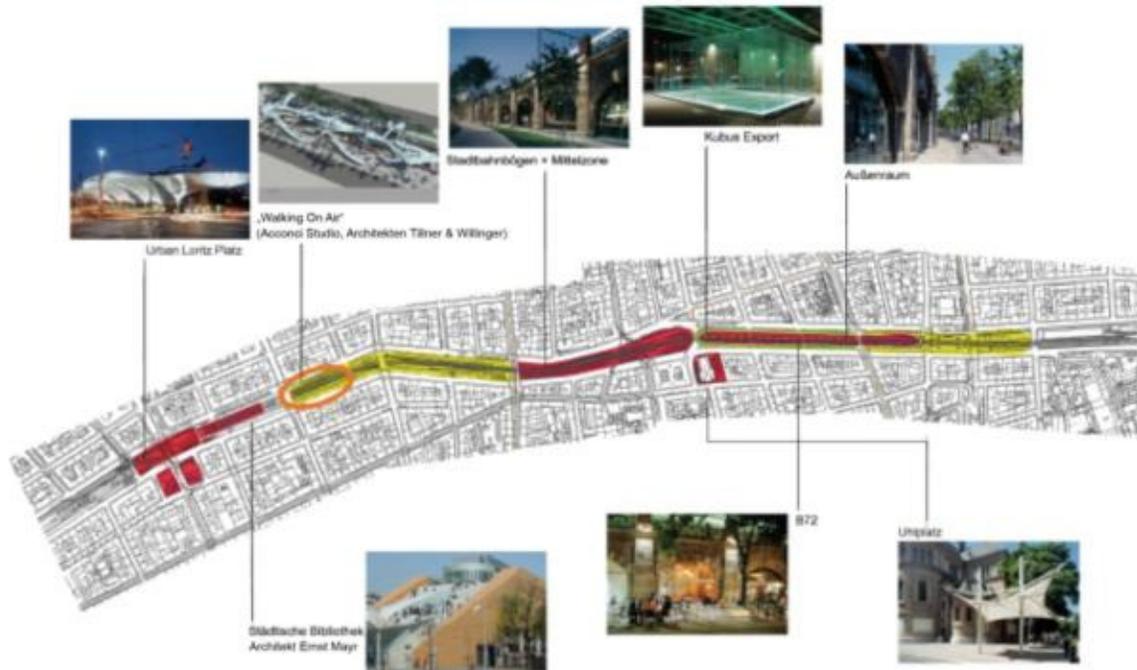


Fig. 7 Part 1 of the map of the URBION zone along the Gürtel, the different areas of intervention are highlighted, red areas show high priority implementation 1997-2000, orange and yellow followed later.

The planning of "URBAN-Wien was conducted along four axes of priority: One dealt with improving professional qualifications and job training, another with measures for the cultural, social and work integration of migrant milieus. URBION ("URBan InterventIOn Gürtel West") represented one of these axes and focused on the redesign of the Westgürtel by means of urban interventions. The fourth was the accompanying monitoring function, which organized exchanges with other European cities and established the necessary public image for the project.

At the core of the URBION Gürtel concept by architect Silja Tillner was not only the question of how to deal with the architectural heritage of Otto Wagner but above all, how to address the forced co-existence of public space and high traffic loads. By opening the Gürtel median strip and endowing it with a transparent design and connective architecture, the area re-emerged as a space that once again links the outer and inner Gürtel; an area that no longer functions as a barrier, but rather as a meeting-place.

An "image transposition" strategy was undertaken to counteract prevalent negative psychological associations of the Gürtel. Fundamental to this strategy was the general improvement of the Gürtel median strip and in particular, populating the "Stadtbahn" arches with cultural and entertainment facilities, restaurants and pubs. The Gürtel Study developed a comprehensive set of measures for a new, low-cost design of the median strip that would respect existing structures and could be implemented in consecutive phases.

The redesign of the Gürtel's median strip and the improvement of public space by attracting small-scale urban functions to the Stadtbahn arches is a suitable measure to revive other neighbourhoods menaced by social decay. In this way, URBION can be seen as an experimental test case, whose success can be replicated in other troubled communities throughout Europe. Moreover, it is in keeping with the original purpose of the zones outside the former "Linienwall", or outer city limits, which in the past housed cultural facilities and restaurants. This *genius loci* is today re-interpreted and revived in a novel context.

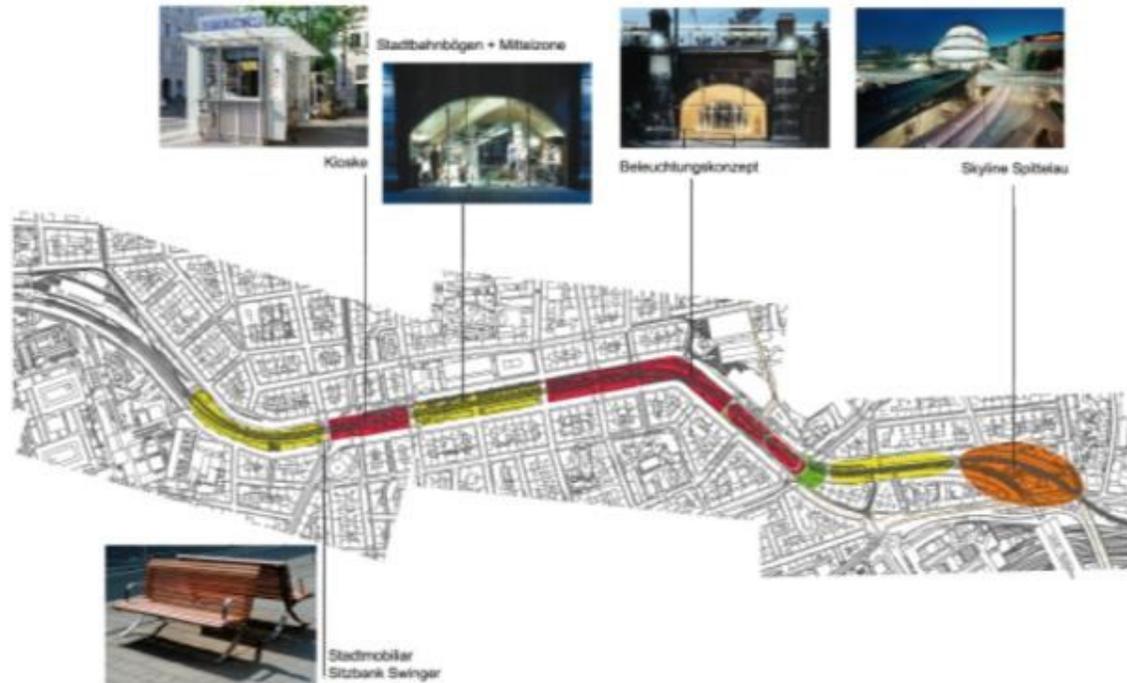


Fig. 8 Map of the URBION zone along the Gürtel, the different areas of intervention are highlighted, red areas were of high priority and implemented 1997-2000, orange followed later.

Briefly, the URBION project aims at transforming the western Gürtel from a barrier into a permeable and active structure that integrates and finally completes Otto Wagner's concept of the transportation artery that "absorbs probable but as yet unknown developments". The western Gürtel would be an open space that leaves room for self-organizing processes capable of independently mastering its own future integration into the greater Vienna fabric and counteract stagnation problems.

2.1 The URBION concept embraced the following strategies ²:

- **Preserving qualities:** The green potential of the central zone was to be preserved, rehabilitated and enlarged, since it both contributes to the cityscape and influences the local micro-climate. Due to its solid, balanced design, openness to a wide variety of uses, flexibility and function as the carrier of a major public transport system for the city, the world-famous architecture of the Stadtbahn did not only call for the rehabilitation of the dilapidated façades but also for their architectural re-interpretation.
- **Tapping potentials:** While the traffic noise along the Gürtel poses a problem for many local residents, this area offers an ideal environment for projects located in the fields of youth culture and new trends in music, particularly in connection with the excellent public transport links to and from the former Stadtbahn arches. Only part of these brick vaults is effectively used. Due to their spatial potential and excellent location factor with maximum advertising impact (every day, between 50,000 and 150,000 persons drive by in their cars), the former Stadtbahn arches are extraordinarily well suited as a catalyst to transform the image of the western Gürtel.
- **Eliminating deficits:** Functional defects of the area between the arches and the Gürtel traffic lanes hamper the improvement of this zone. For example, in addition to insufficient lighting of the pedestrian paths and cycling tracks, the use of substantial parts of this zone as partly illegal parking lots massively impedes its rehabilitation.

2.2 Redesign of the Gürtel Open Space – Planning Strategies and Implementation

Redesign of the Gürtel median strip: In certain sections of the Gürtel median strip, public space was redesigned to create attractive open spaces for the residents of the adjacent districts, many of them immigrants. Another goal was to safeguard suitable frame conditions for the commercial success of the numerous private investors in the Stadtbahn arches. Primary objectives for the redesign of these Gürtel sections included both improved pedestrian paths and cycling tracks, additional possibilities to cross the Gürtel and the wish to create attractive open-air zones (e.g. street cafés). A continuous promenade, intensively greened, was established along the Stadtbahn arches by eliminating the side-lane and prohibiting the parking spaces.

Traffic: The improvement of pedestrian and bicycle traffic was achieved by providing continuous paths on the median strip along the Stadtbahn arches as well as more possibilities to cross the Gürtel.

Landscape: The improvement of the tree stock by planting new trees and introducing a new automatic irrigation system; enlargement and rehabilitation of green spaces accompanied by a reduction of hard, non-permeable surfaces.

Design: An attenuation of the barrier effect of the Gürtel was a major goal. All newly leased Stadtbahn arches were to be opened up and provided with uniformly glazed façades. All Gürtel bridges formerly closed with storage space were to be opened up. A coherent and unifying “look” of the Gürtel median strip was to be achieved by means of a continuous lighting system, newly glazed Stadtbahn arch façades, the installation and design of kiosks as well as urban furniture (benches, railings, billboards, trellis for climbing plants, waste container screen).

Activities: Temporary markets, neighbourhood parties, concerts, movie and theatre performances were recommended as temporary measures. Permanent activities were triggered by attracting restaurants, bars, cultural and recreational facilities to the Stadtbahn, individual installations and artworks in public spaces.

2.2 URBION - Utilisation Concept for Stadtbahn Arches

To counteract the marginalized nature of the Gürtel, the new open-space design of the Stadtbahn arches and businesses strove to increase utilization, thus populating the area to garner a degree of social control. The concept strove to transform the Gürtel’s forgotten arches into a lively avenue of cultural and entertainment venues; where the city’s youth could enjoy music clubs and a progressive nightlife, while residential districts were relieved from noise related disturbances. The arch tenants both appreciated the unique atmosphere of the old brick vaults of the viaduct, while at the same time wished to take part in the interesting new development and image creation for a hitherto faceless area.



Fig.9 Newly renovated arches with transparent glass facades accommodate a popular bicycle store



Fig.10 A music club and bar locates in a renovated arch.

2.3 Façade Concept for Stadtbahn Arches

When the construction of the Stadtbahn viaduct was completed in the early 20th century, the arches below the elevated train line were left open. It was only in the course of time, when the city grew to reach and engulf the Gürtel, that they were closed off and leased to entrepreneurs. Only a few of the original façades have been preserved intact. In the past decades of neglect, many arches below the elevated train line were either bricked over or disfigured with billboards. This tendency destroyed the former transparency of the historical timber/glass portals and consequently intensified the physical barrier between the divided inner and outer districts.

The new design approach is to trigger a positive urbanistic change while promoting the degree of visibility and social control of the adjoining pedestrian paths, thus increasing both the use of the area and the feeling of safety experienced by locals and visitors.

A minimal steel structure and a uniform, spot-fixed glazing system achieves the desired level of transparency. The structural elements – two supports and one horizontal beam – reflect the design principles of the original façade: in keeping with Otto Wagner's tripartite concept, the supports are situated below the keystone of each arch while the horizontal beam runs below the intersection of arch curve and vertical pillar. A flexible modular system was developed for doors, window vents and signboards, so that tenants may combine specific elements according to their needs.

2.4 Lighting Concept

Stadtbahn arches: The lighting strategy's goal was the overall improvement of pedestrian and cyclist traffic. Unobtrusive during the day, spotlights are discreetly mounted directly on the arches. Otto Wagner's original architecture is even more striking at night as the Stadtbahn structure becomes in a sense, a carrier of light. Both the pedestrian paths and cycling zones are sufficiently illuminated to make the median strip a safe and welcoming zone on the nocturnal Gürtel.

Gürtel bridges: Mounted on the back walls of the abutments, lateral spotlights illuminate the bridge zones. Spot lighting the bridge pillars further accentuates the Stadtbahn viaduct during the evening. The lighting details emphasize the architectural significance of the Stadtbahn bridges as prominent gates to the inner city rather than mere functional overpasses.



Fig.11 Illuminated arches and median with well lit pedestrian and bicycle paths. In the background the church towers at the Uhplatz serve as an orientation landmark.

2.5 Uhplatz

By closing a secondary street to traffic, Uhplatz square was transformed from a humble traffic intersection into an active space for cultural events and city markets. The grand St. Seraphikus church, which is illuminated at night, presides over the square. Its presence heightens the square's cultural importance and serves as an orientation landmark for the entire western Gürtel. One end of the square is sheltered from Gürtel traffic by a generous plant trellis, as the opposite end is accentuated by an airy canopy that shelters space for potential concerts, exhibitions, etc.

2.6 Urban Furniture

Park bench for the Gürtel

The new "Swinger" park bench was developed for the Gürtel. Its attractive and dynamic shape reflects the new spirit of the median strip while retaining a high level of comfort due to an ergonomically crafted shape.



Fig.12 The newly designed open spaces with a second row of trees and enlarged green space

2.7 Kiosk Concept

Transparency and luminosity were of primary importance in the design of the new kiosks. As a result, transparent glass cubes were designed for commercial and informational purposes. Optimum kiosk locations were selected to satisfy both urbanistic requirements and monument protection. In the station areas, for instance, important lines of vision were preserved. At the same time, the kiosks also contribute to a bright and lively atmosphere, especially at night by setting new accents as “glowing cubes”.

3 Urban Loritz Platz

Due to shortcomings relating to function and design, Urban-Loritz-Platz – a potentially top-grade public transport node – was unable to fully meet the requirements. Passengers changing from one means of transport to another were forced to cover long distances on anything-but attractive paths, without protection against inclement weather. The Urban Loritz Platz on the Gürtel is a centrally located public space and a major public transportation hub, where several street cars and subways connect. Transforming the formerly unappealing and entangled traffic hub into an attractive, contemporary urban space, the new design for the Urban Loritz Platz heralds the revitalization of the entire Gürtel region. The design reorganized the traffic patterns of streetcars, cyclists and pedestrians to achieve a clearly ordered public space. A light and airy steel structure with a membrane roof shelters the main paths and waiting areas. The overarching cover not only protects the square from the elements, but also emphasizes a sense of general unity and urban orientation. At night the entirety is illuminated by indirect light, reflected off the translucent membrane.



Fig.13 Urban Loritz Platz at night, covered with a membrane roof.

4 OFFICE BUILDING SKYLINE SPITTELAU

Hovering above the now-obsolete Heiligenstadt railway line and following the curve of its track, Skyline Spittelau ensures the cultural preservation of Vienna's historic viaducts while signaling the area's rejuvenation.



Fig.13 Aerial view of Skyline Spittelau on top of the former railway line

Skyline Spittelau stands as the northernmost bastion of Architekten Tillner & Willinger's URBION project, Vienna's revitalization of the Gürtel (ring road), injecting new life into a previously maligned urban barrier. Situated at the splitting of the city's elevated railway, the challenging site is wedged between the former Heiligenstadt track and the active Spittelau Line. The project demanded a creative solution that was simultaneously accessible to the general public as well as attractive to both the residents of the adjacent districts and daily commuters. The new four-storey element is clearly distinguished from the massive arches beneath it, creating an exciting dialogue between the old and the new. The structural system chosen utilizes floor slabs that can span the width of the building without intermediate columns, thus avoiding downstand beams in the office areas or obtrusive columns competing with the arches. The office building's glass surfaces curve to join each other at a conical point, serving as a fresh symbol for the district's revitalization. Enclosing the space between Otto Wagner's historic viaducts, Skyline Spittelau creates a new urban destination for the district. The monumental arches endow the courtyard with a distinctive character, while also sheltering the public space from the heavy traffic and noise of the Gürtel. By transforming the boarded-up space beneath the railway's arches into bustling commercial establishments, the project creates a new lively social space at the foot of the structure's main entrance. The arches' glass facades and careful detailing contribute to the project's unique architectural appearance and reflect the sensitive handling of the historic building fabric.



Fig.13 Nocturnal view of the office building Skyline Spittelau

Silja Tillner, Architect and Urban Designer in Vienna, Austria

¹Veigl, Christa, 1999, „Geschichte - Stadtentwicklung - Architektur. In: Stadtraum Gürtel. Vienna. Ed. Christa Veigl,

² Urban Planning Vienna, 2000, "Vienna URBION - Urban Intervention - The State of the Art"

³ Lynch, Kevin, 1960 "The Image of the City