

13. PUBLIC SPACE AND THE DEMAND FOR JUSTICE IN USE

Vienna has been one of the most liveable cities in the world for decades. In fact, the quality of life in our city is extraordinarily high. Over the decades, responsible politicians, the authorities of the city, and the people living and working here have succeeded in maintaining or improving this standard.

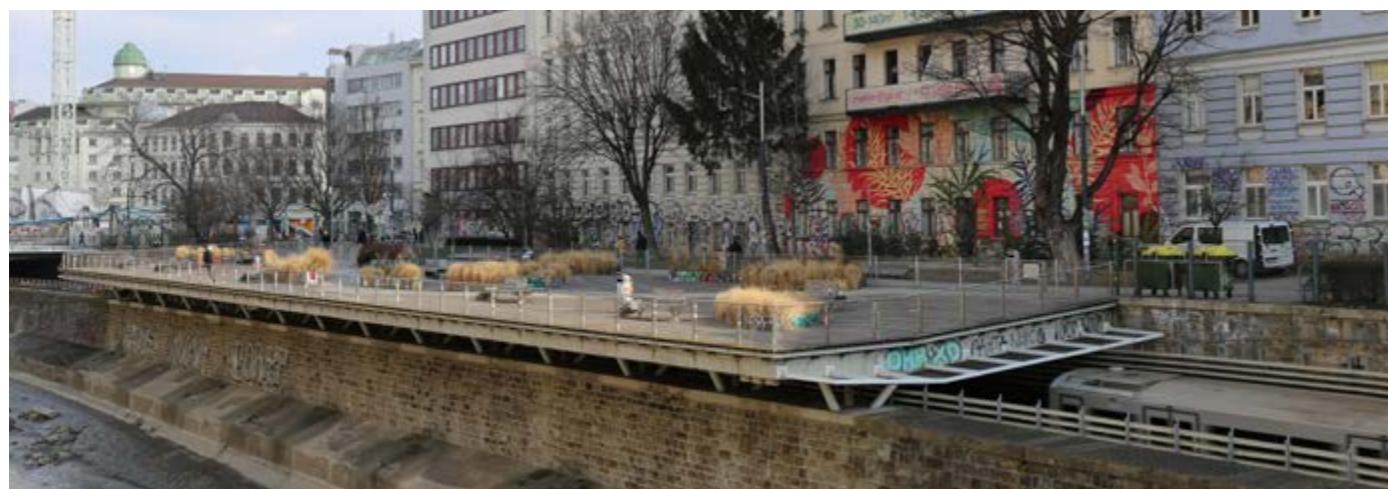
In particular, climatic changes are forcing us in Vienna to think about the city as a functioning community. Unlike in previous decades, many people in the city have become aware that there is still a lot to do to develop a climate-friendly city in which the quality of life remains high. In particular, this applies to the public space in which we move and relax, and where social life takes place. Since the COVID-19 pandemic, we have begun appreciating the value of high-quality open spaces more. It should be added at this point that this space is accessible to all residents and can be found in all areas of the city: the city centre, the suburbs, and also the commercial and industrial zones on the outskirts. A reinterpretation of the usage scenarios of public space in a growing and constantly densified city must be our first goal.

As in almost all cities of the world, public space is still dominated by motorised individual traffic, both moving and idle. Consequently, this is the first starting point for a sensible adaptation. In some parts of the city, work is being done on the expansion of the public transport and bicycle path network, roads are being transformed into meeting zones, car parking spaces are being reduced in favour of various functions located in the street space, like beer gardens and parklets. Most importantly, many streets acquire tall, shady trees or flower and shrub islands, which appear in the place of previously sealed areas. This shows that there is a fundamental consensus on the importance of these measures.



(37) School forecourt in Vienna: No through traffic, greenery, and furniture. Streets in front of schools are increasingly being closed, creating safe meeting places.

But is all this enough? It will depend on the will of those responsible and the innovative power and ideas from outside. This is where a relatively young entity in Vienna comes into play – civil society. It is increasingly involved in the ongoing processes of this city in a wide variety of ways: privately, as associations or as NGOs. Civil society is the driving force for well-founded, democratically planned transformations throughout the city. For example, as a result of these initiatives, streets in front of schools and kindergartens in Vienna are increasingly being closed to through traffic, and the school forecourts are becoming well-designed, vegetation-filled, lively



(38) Wiental Terrace 1: The lack of open spaces in densely built districts requires unconventional solutions.



(39) Wiental Terrace 2: Simply furnished, with wooden flooring, creating an attractive design.

'THE USE OF PUBLIC SPACE MUST BE MORE EQUITABLY SHARED IN THE FUTURE FOR THE BENEFIT OF ALL THE PEOPLE LIVING AND WORKING THERE. A DIVERSE USE OF SPACE DEFINES LIFE IN A BIG CITY.'

outdoor areas that large numbers of people can enjoy every day. This approach is now to be extended to other public institutions such as government buildings, universities, medical facilities, etc.

In some densely built-up districts with little open and green space, innovative solutions, unimaginable in the past, have been found and implemented. For example, entire bridges over the Vienna river between the 5th and 6th districts were closed to traffic, and green islands were created on them. Not far away, cantilevered, furnished platforms were built over the subway line and the Vienna River to offer the many residents of these districts additional open spaces.

These examples show that a lot is possible with political and private commitment. In the sense of a sustainable approach, it is necessary to use available funds in a coordinated and targeted manner.

In some cases, this positive development is counteracted by the insistence on outdated transport policy plans, which prevent an immediate transition to climate-friendly urban development, especially in the outskirts (e.g. Stadtstrasse Wien).

It is regrettable that in Vienna it is not (yet) possible to realise this necessary transformation on a more radical scale and in architecturally adequate implementation, like in Barcelona, Copenhagen, many Scandinavian cities, as well as London and Paris. In this respect, Vienna is a conservative city, shaped by its historical heritage. High-cost and innovative solutions often fail at the planning stage.



(40) The Neville Bridge over the Wien River is closed to motorised individual traffic.

Lukas Schumacher

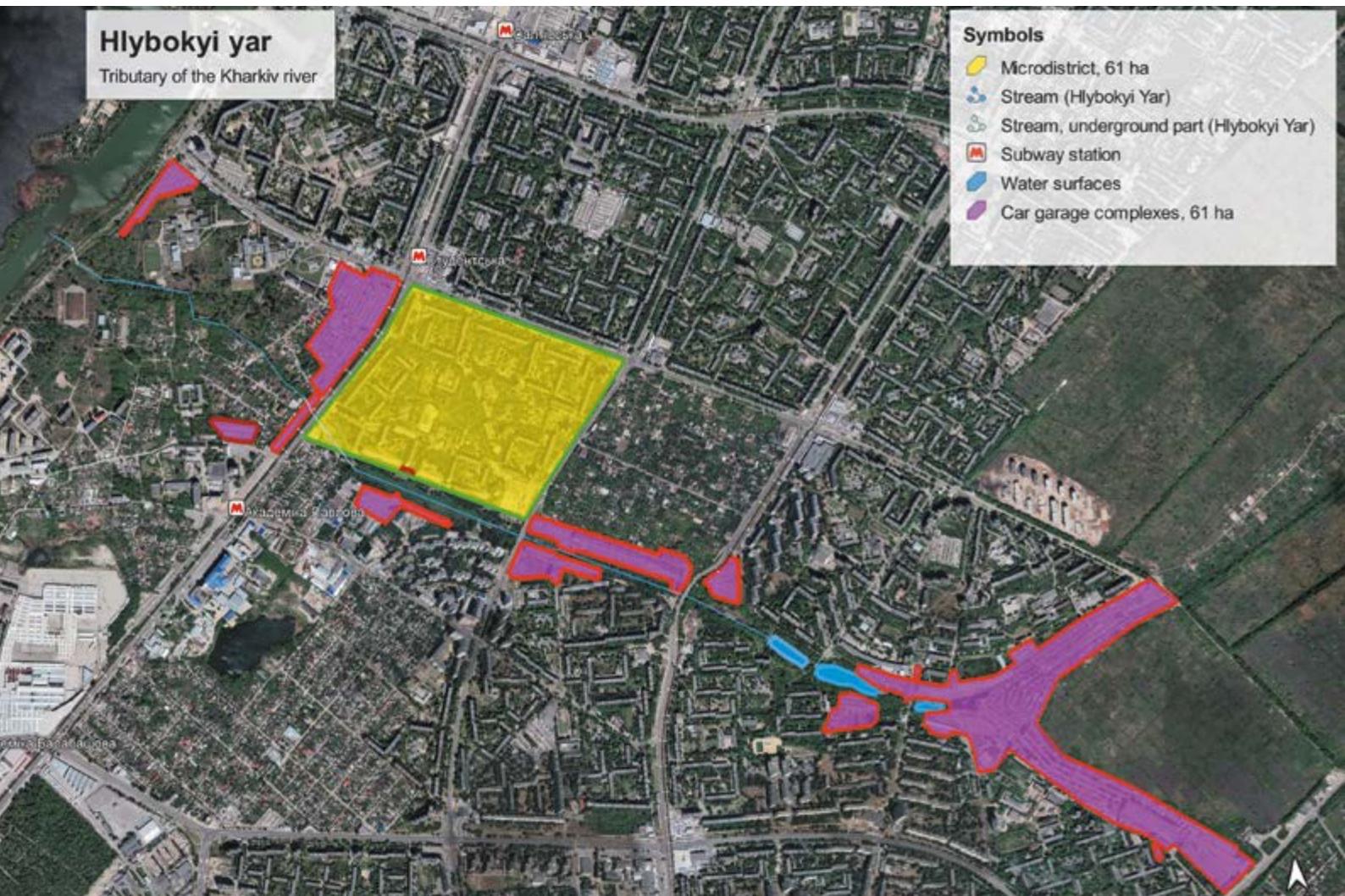
architect in Vienna and board member of IG Architektur

KHARKIV

TRANSPORT AND CHANGE

VIENNA

14. THE ROAD AND ITS UNTAPPED POTENTIAL



(41) Map of Hlyboky Yar Stream, Saltivskyi district, Kharkiv

'THE RECKLESS DECISIONS OF URBAN PLANNERS IN THE PAST HAVE LED TO THE PROBLEMS WE FACE TODAY!'

'Hot bunk' is a term that literally translates from English as a 'hot bed'. It came from the maritime sphere, when three sailors working different shifts need to share one bed. The city is a submarine, where efficient use of space matters. Of course, no one suggests that citizens share their own beds with anyone, but this model can be useful in solving parking issues.

For example, let's take the area along the Hlyboky Yar stream, which runs through the Saltivskyi district of Kharkiv. In Soviet times, areas unsuitable for construction were allocated for garage cooperatives. This watercourse has not escaped this fate. Today, the area occupied by the garages along the stream is 61 hectares and can accommodate up to 25,000 cars. This is equal to the area of an entire microdistrict.

The reckless decisions of urban planners in the past have led to the problems we face today.

- Loss of areas with a distinctive relief that could be used for recreation of the district residents;
- Significant environmental impact, with garage areas located close to the stream, which affects water quality and impairs the supply of surface water to rivers;
- The city authorities partially abdicate their

responsibility for the development of urban transport, allowing for large areas to be occupied with box-type garages. Kharkiv's urban transport, namely the rail transport, which is the backbone of our city's transport system, is going through difficult times: the trains and carriages are worn out; the quality of the rail network is poor, etc. According to research by the NGO 'Vision Zero', the average speed of a tram in our city is 14.1 km/h, while it should be 15-20 km/h according to the standards.

- The remoteness of these areas from residential buildings makes it difficult to use garages on a daily basis, which may force people to use other parking spaces, e.g. near their houses;

- Such planning completely excludes the use of these areas according to the 'hot bunk' principle (one space for several cars), and encourages the development of the opposite scenario, where more than one space is needed for one car;

- The quality of the surrounding areas deteriorates, making them less suitable for visiting and making it difficult for pedestrians to get around.

Each garage box has an owner, so when the city finally needs these areas, the decisions will be extremely difficult and will be postponed until the last minute.

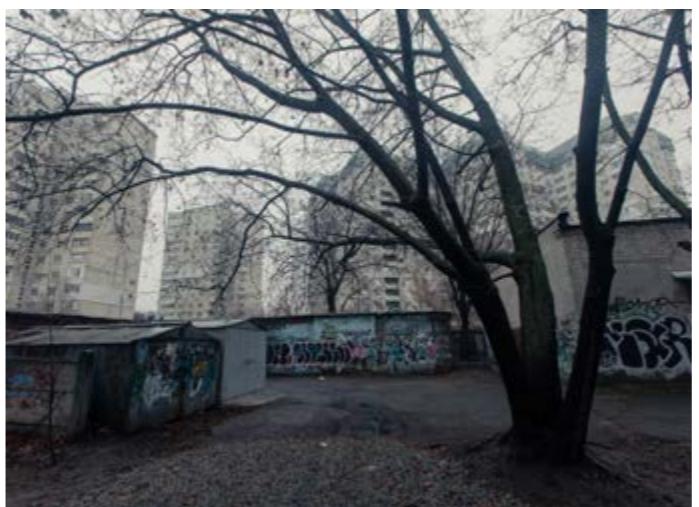
Parking continues to be a problem and is often solved at the expense of green spaces, pedestrian or recreational areas. Cars are increasingly occupying the space which pedestrians should be able to use.

Unlike mistakes made by professionals in other areas, the mistakes of urban planners are extremely difficult to resolve.

Is there a way out of this?

The development of urban transport and cycling infrastructure is an effective solution that can influence the current situation and encourage us to build a city with a flourishing natural environment.

The second measure is investing in the construction of multi-level car parks instead of the oversaturated housing market. By doing so, the principles of cost-effectiveness and environmental awareness will be followed.



(42) Garages in Saltivskyi district, Kharkiv, 2021

Ihor Razbeyko
architect, masterplan architect in Kharkiv

15. THE 15-MINUTE CITY: RETURNING TO THE CONCEPT OF NEIGHBOURHOOD

Current and future issues such as climate change and the associated question of the continued habitability of cities as well as shifts in the social structure or the political landscape are major challenges for both individual and collective well-being and freedom.

These challenges will have to be addressed and decided to a considerable extent in cities and the surrounding conurbations, not only because the majority of humanity lives in urban contexts – cities are also particularly crucial for a number of other reasons:

The effect of increasing weather extremes is particularly pronounced in urban areas, with higher temperatures than in the countryside due to the Urban Heat Island effect and natural disasters such as heavy rainfall or drought that bring urban infrastructure like the sewer systems to its knees due to the lack of unsealed surfaces for natural drainage.

The amount of traffic generated in our cities leads to high amounts of CO₂ emissions and congestion of urban streets to the point of gridlock, the subsequent improvement in the capacity of the road network encourages urban sprawl, which increases sealing of soils and makes the dependency on private cars even greater. These circumstances also result in a lifestyle where social ties weaken – children are not able to go to school on foot, older people can not easily go to the store, people who work do not usually spend much time in their neighbourhoods – leading to a phenomenon often referred to as the loneliness epidemic.

'RELOCALIZATION AND RE-DENSIFICATION ARE THE ESSENTIAL GUIDING CONCEPTS FOR FUTURE-ORIENTED AND SUSTAINABLE CITIES AND METROPOLITAN REGIONS.'

So far there has always been an unwavering belief, that technical innovations would solve all these problems and the ones that will arise in the future, but that may no longer hold true: Even though scientists and engineers have been equipped with unprecedented resources in recent decades to solve these challenges through innovation, there seem to be no immediate solutions that can address all the problems mentioned above. For example cars that are powered by new fuels or even drive themselves need the same amount of space and pose the same threats to pedestrians.

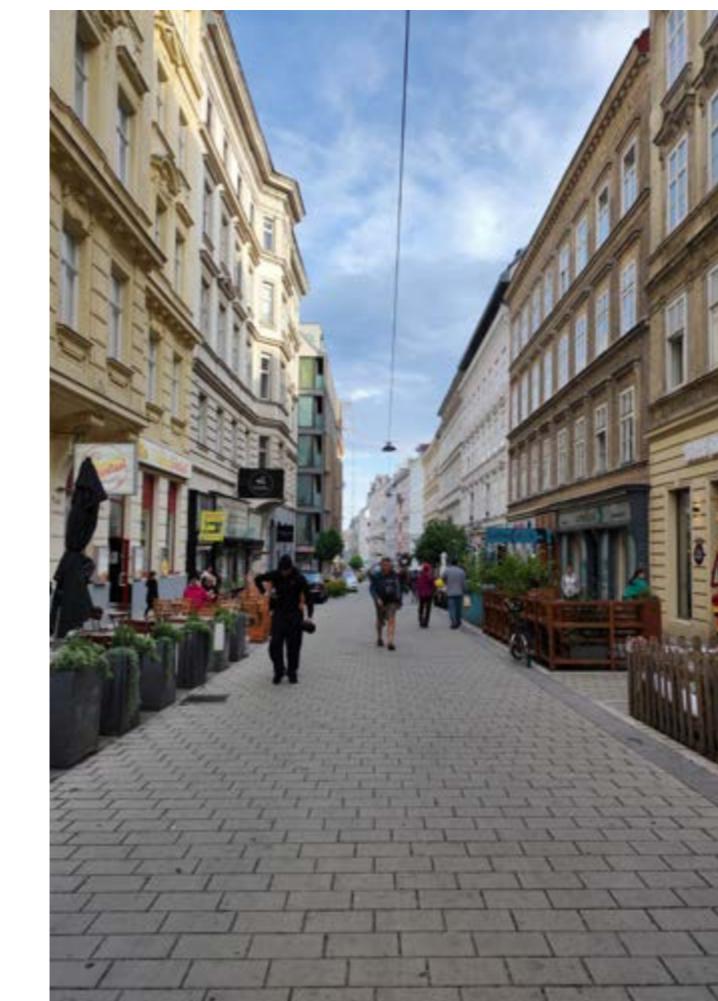
It is therefore appropriate to take a look into a different direction. Apart from a vague hope that future technical developments and innovations could solve all those problems, there is one solution that is both reliable and practical and it does not lie in the high-tech sector, but in low-tech to no-tech approaches – in the return to already known and proven methods: Whether or not there will ever be a new fuel that can significantly reduce CO₂ emissions from motorised private transport, the general reduction of motorised traffic can. However, this necessitates a fundamental change in how we utilise, organise, and conceptualise cities. Thus, instead of connecting the uses via traffic, as intended by the functionalist approach to city planning (introduced by CIAM in the 1940s) that has dominated urban planning until today, functions have to be introduced right where they are needed.

Relocalization and re-densification are the essential guiding concepts for future-oriented and sustainable cities and metropolitan regions. When searching for design strategies that follow these principles, one quickly arrives at the concept of the 15-minute City – a term introduced by Professor Carlos Moreno in his role as advisor to the Mayor of Paris, Anne Hidalgo. It encompasses one simple rule: all residents need to be able to access their day-to-day needs within a 15 minute journey on foot or by bicycle. Daily needs are hereby categorised as functions that are necessary in modern life such as housing, work, food, healthcare, education, and culture and leisure. As the distances to be travelled

are short, everyday high-speed individual transport is no longer necessary. The modes of transport intended in this model like walking, biking and public transport are more space efficient than

private cars, therefore the streets are not only used for traffic any longer – it is now possible to linger, exchange and play – making streets an integral space where urban life can thrive. Since the streets are not only traffic arteries but also function as public spaces, they enable neighbourhood cohesion and facilitate democratic participation. The resulting decentralised organisation of the city also makes it more resilient to all kinds of unforeseen events – whether these are natural disasters or political changes.

If this concept of mixed uses and short distances sounds very familiar, that is because it is: historic towns, the ones that are praised for their spatial and functional qualities and are popular with tourists because they are walkable, are organised according to the same principles. This model is therefore not so much a reimagining of, but a return to the concept of neighbourhood. However, these historic cities were often retrofitted to conform to the ideal of the car-oriented city since the middle of the 20th century. The extent to which this transformation took place now dictates how easily it can be reversed. Cities such as Vienna, which have undergone only few radical structural changes in their consolidated areas, are still appropriate to creating a pedestrian-friendly urban centre. However, even here, suburban



(43) Instead of parking spaces for cars, sidewalk cafés shape the streetscape.



(44) Benches and greenery for shading are part of the redesign of streets.

and peri-urban areas that have been developed only after widespread motorisation, lack the necessary connectivity in the street network, dense building structures, population density, and lively ground floor zone that is needed for the 15-minute city. Since these areas make up a very large proportion of the total area of today's cities, the development of a concept that enables the conversion of those areas into walkable neighbourhoods that provide their residents with everything they need from a day to day basis is therefore one of the most important challenges to overcome to create sustainable cities.

Susanne Tobisch

researcher at the Vienna University of Technology and board member of IG Architektur

16. ENVIRONMENTALLY FRIENDLY PUBLIC TRANSPORT



(45) Restoration of tram tracks in Myronositska Street, Kharkiv. December 2023

In 2001, Kharkiv had 17 (now 11) tram and 30 (now 29) trolleybus routes, 4 (now 2) passenger tram and 3 (now 2) trolleybus depots. Since the beginning of the 21st century, instead of modernising the tram network, the municipality has dismantled most of the tram lines in the central part of the city and widened the roadways for cars. This dismantling was carried out even during the brutal shelling by the Russian army in May 2022. And all this happened despite protests, without public discussion and approval, even without the adoption and publication of relevant decisions by the city council.

The tram line in Vesnina Street in Kharkiv was dismantled by the municipality in May 2022 to widen the road for cars. At the time, Russian troops were still so close to Kharkiv that they were even shelling the city with artillery. Under such circumstances, there was no opportunity to organise a public discussion, which is mandatory for such a radical reconstruction of an important street with changes to the city Master Plan. For many people, the violation of Kharkiv's Master Plan was obvious, as this urban planning document foresees the preservation

and further operation of the tram line on this street.

It was the actions of municipal officials contrary to the Kharkiv Master Plan that outraged both the expert community and the public. As a result, a group of active citizens self-organised and adopted the name 'For the Tram in Vesnina Street'. This community filed a lawsuit. The court saga lasted almost a year and ended in a decision in favour of the defenders of the environmentally friendly tram.

However, the municipality wanted to appeal the decision. The Administrative Court of Appeal upheld the conclusion of the first instance court: to declare the decision of the mayor's office to dismantle the tram line in Vesnina Street in Kharkiv unlawful and contrary to the city's Master Plan. So, in the summer of 2024, the community 'For the Tram in Vesnina Street' won against the Kharkiv City Council in the Court of Appeal. The decision of the city council to terminate the tram line was finally recognised as illegal.

Now, the community 'For the Tram in Vesnina Street' plans to demand that the Kharkiv City Council return the tram line to its original location.

These and other unscientific management decisions have led to a decrease in density and disruption of the tram network. It also reduced the ability to quickly redirect trams from one line to another when there is a need for it.

The decline in the number of Kharkiv residents and the demand for passenger transport due to military threats calls into question plans for further construction of new metro stations. In these circumstances, it would be logical to focus on the development of tram and trolleybus routes.

The operation of trolleybuses with an extended autonomous range has proven to be a positive practice. This made it possible for the electric transport to reach remote areas of Kharkiv without trolleybus wires and to bypass the sections of the route damaged by the Russian shelling.

Artem Sosipatrov
transport engineer, based in Kharkiv

'SINCE THE BEGINNING OF THE 21ST CENTURY, INSTEAD OF MODERNISING THE TRAM NETWORK, THE MUNICIPALITY HAS DISMANTLED MOST OF THE TRAM LINES IN THE CITY CENTRE AND WIDENED THE ROAD FOR CARS.'



(46) Trams decorated for the Christmas season, Kharkiv, 2024

17. SPATIAL DEVELOPMENT AND INFRASTRUCTURE IN VIENNA

The development of the transport infrastructure and the urban development of Vienna go hand in hand, as the first foundations of settlements date back to a Roman military camp along the Limes road following the Danube river around 100 A.C. But it was not before Vienna became a royal seat, that the city became important. Industrialisation guided urban growth for almost a hundred years before the appearance of new urban planning principles characterising the latest city developments.

Industrialisation and rapid city growth

The original defence wall was cleared away only in 1857, to give way for the construction of the ring boulevard (1865) with its important public buildings (University, Museum, Opera, and others). By selling the properties of the newly zoned plots, the emperor obtained the money to finance the boulevard and the accompanying public buildings, so this urban project can be seen as a first PPP model.

At the end of the 19th century, Vienna was growing rapidly, reaching almost two million inhabitants. This resulted in an uncoordinated growth of factories, often followed by the construction of dense tenements for the workers outside the city perimeter. The urban growth followed the arterial roads and, more importantly, the expanding star-shaped railway network. Eight different terminal stations along the outer fortification line connected the city with all the major towns of the Austrian empire and the surrounding countries in order to meet the nation's demand for material and labour force. This situation lead to another big infrastructural transformation, the construction of the 'Stadtbahn' (1898 by Otto Wagner), which connected most terminus stations and allowed better mobility for goods and workers within the city. During this period, the city administration tried to keep control over the city growth with the first building plan (1866), the zoning plan (1883) and the projected regulation plan (1894), resulting in establishing a regulation office,

the first form of urban planning department. But the preparation of the plans could never catch up with the actual development, so a system of partial development plans was established. This approach characterises Vienna's urban planning system to this day. Interestingly, a concept for the protection of the open spaces surrounding Vienna, the so-called forest and meadow belt, was adopted in 1905.

Red Vienna housing developments

Reacting to the housing shortage after the first world war, the municipality launched a huge housing development programme, which became known as the Red Vienna. In contrast to the idea for an overall urban development plan, the city followed an approach of using easily accessible plots spread all around the city near industrial areas, and the tram system to support the 'working class' modes of transportation: walking, cycling and public transport.

Functional separation after the WW2

After the Second World War (1950-1970s), the concept of the car-based city was introduced in Vienna. Following the guidelines of functional separation, new mono-functional housing estates were built at the edge of the city combined with a new motorway system. This resulted in a rapid growth of commuting by car in Vienna. A major planning concept for the whole city was introduced in 1962 by Roland Rainer. Even though this plan promoted densification along major mobility axes, it followed a car-centred approach by converting tram lines into bus lines and introducing a highly functional city layout. Nonetheless, the city development at that time focused on big iconic projects such as the regulation of the Danube river (Danube island), the motorway system, the UNO-city, general hospitals, and the planning of the metro network.

'INSTEAD OF AN OVERALL SPATIAL STRATEGY, THE CITY EXPANSION WAS STEERED TOWARDS INNER CITY BROWNFIELD SITES, IN COORDINATION WITH THE ONGOING EXPANSION OF THE METRO SYSTEM.'

The introduction of soft urban planning

The eighties marked a shift in the planning principles, as Vienna faced a declining population due to its location as a dead-end city at the 'Iron Curtain'. Hence, the municipality shifted the focus to the improvement of the existing housing stock, the extension of the public transport network and established new urban planning instruments such as the urban development plan (STEP 84), city development commission (STEK) and participatory tools, which are still the main factors influencing the contemporary urban planning. Also, it further developed the idea of the green belt to the northeast combined with green wedges reaching into the urban fabric.

A new urban growth

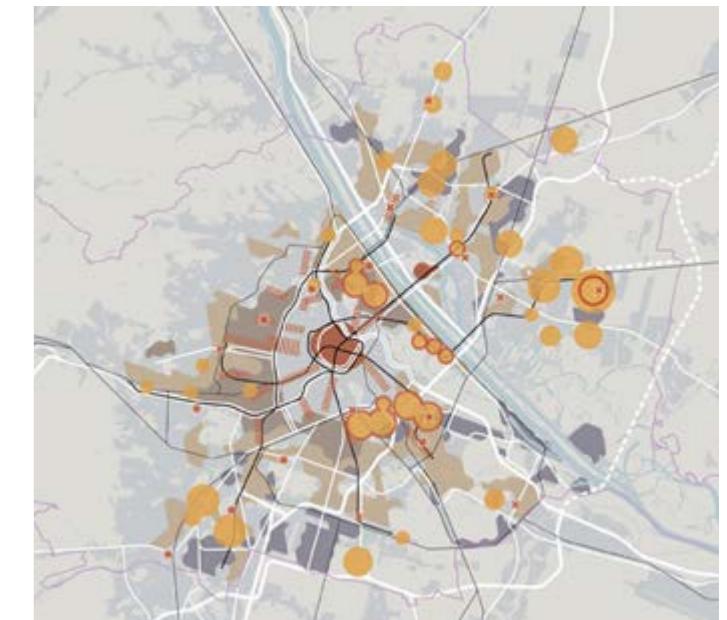
With the fall of the Eastern Block and the Yugoslavian war in the 1990s, the city recorded a strong population growth, resulting in an adaptation of the urban development plan. It proposed densification projects along the strong mobility axes, especially in the city areas left of the Danube, and evolving the green belt into a regional structural concept (STEP 94). Unfortunately, the housing department and the private development sector did not always play along and still continued their projects in the cheaper peripheral zones around the city (peri-urbanisation).

City management instead of big planning

In the course of the industrial change and the extension of the EU, Vienna established its position as an important hub between East and West around the beginning of the Millennium. The revised urban development plan (STEP 05) took the internationalisation and neoliberal management tendencies into account and was transformed into a more strategic development framework. Instead of an overall spatial strategy, the city expansion was steered towards inner city brownfield sites, in coordination with the ongoing expansion of the metro system. The focus on specific urban mixed-use developments followed the idea of a re-urbanisation of Vienna as a polycentric city, while allowing different stakeholder constellations and processes per project area. Unfortunately, the focus on the new development resulted in neglecting the existing urban fabric.

Consolidation of the city development approach

As the population growth continued, Vienna proceeded with the expansion of the public transport network in close coordination with the



(47) Urban Development Plan 2025: Instead of an overall development plan, the focus is now on new priority areas (yellow circles) and strengthening existing linear urban centers to guide the city's growth.

urban development sites (STEP25). This lead to a divergence between the existing road network and the new extensions of the rail-based public transport system, thus enhancing the settlement patchwork in outer areas of Vienna.

As climate change adaptations and sustainable city planning are becoming more and more important, the tendency for the next phase of urban development lies in the transformation of the typically tree-free streets of the existing urban fabric and implementing sustainability criteria, such as guidelines for re-using buildings instead of constructing new ones. Slowly, Vienna is also implementing cycling paths, but due the federalist administration structure, reaching the level of a city-wide network is a long process. Further green steps have been put in practice like a testing phase for traffic-calmed neighbourhoods (Supergrätzl) or the adoption of a green network along major streets for the whole city (Leitbild Grünräume).

As the transformation of brownfield sites is reaching its end, the focus for city development is now shifting towards the urbanisation of agricultural land. Even though new metro lines are planned, and a green and open space concept applies to large parts of the remaining undeveloped land, the extension of motorways and continuous urban sprawl in the metropolitan region are continuing.

These patterns now reveal the upcoming challenges of balancing adaptation to climate change and a housing crisis in a liveable city for everyone.

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KHARKIV

SOCIETY AND LIFESTYLE

VIENNA

18. THE RISE OF CIVIL SOCIETY AND ACTIVISM



'THE EXAMPLE OF CIVIL SOCIETY'S SUCCESS ON THE MAIDAN GAVE A POWERFUL IMPETUS, THE IMPACT OF WHICH IS STILL BEING FELT TODAY.'

Activism in architecture and urbanism in Kharkiv was largely inspired by the events of the Revolution of Dignity in 2014*. That year and the following year, three initiative groups registered NGOs (Critical Thinking, Urban Reforms, Urban Forms Centre) to be able to represent the interests of their communities officially. Dialogues and discussions took place outdoors in the freezing cold air during that year's winter protests that could last for hours. Networking became more intense, continuing in coffee shops and offices and resulting in joint projects. The choice of the European and democratic vectors of development by the protesters inspired tactical urbanism, participatory practices, public discussions on city development, professional forums, anti-building protests, and other grassroots projects.

The example of civil society's success on the Maidan gave a powerful impetus, the impact of which is still felt today. Kharkiv, as a border city that managed to avoid enemy invasion at the time, had the opportunity to develop. The professional community, in addition to the tasks of developing the city, also faced the challenges of working with internally displaced persons who had lost their homes and were moving from the occupied territories of the neighbouring Donetsk and Luhansk regions.

The full-scale invasion of 2022 also mobilised society, but also had significant devastating consequences. Today, the war continues, and both Kharkiv and Kharkiv region have been constant targets of shelling for over three years. As a result, a significant number of Kharkiv residents left the city, and some public figures mobilised and joined the army, while organisations involved in the development

of architecture and urbanism mostly stopped their activities in the city. Some architects started new organisations to support the military, such as the NGO 'Through The war'**. Thus, the spreading of hostilities into the city not only destroys its fabric, but also breaks the network of people. Despite the emergence of new ties and associations in response to the large-scale threat, the activities of civil society organisations have been significantly weakened and require security and long-term recovery. What gives hope in these circumstances is that people on the ground remain united, the military resistance to the enemy continues, and the civic movement for the development of the city continues, despite being weakened.

*The Revolution of Dignity in 2014 (also known as Maidan, Euromaidan) was a wave of protests by Ukrainian citizens against the policies of Viktor Yanukovych and the government of Mykola Azarov, which resulted in fundamental political and social changes. The Revolution of Dignity launched a process of transformation of the political scene, as well as a series of social and cultural transformations, becoming one of the main stages of Ukrainian state-building.

**The NGO 'Through The War' was established in 2022 in Kharkiv. Its main activity is to help the Armed Forces of Ukraine, as well as an important project called Velyka Rodyna – a shelter for the elderly in Kharkiv.

Bohdan Volynskyi

architect, founder of 'dash! design school', public figure, writer. He is currently serving in the Armed Forces of Ukraine

(48) Protests in Kharkiv during the Revolution of Dignity, 2014

19. VIENNA ON THE WAY TO A METROPOLIS RETHINKING THE CITY AND REGION

Vienna stands at the threshold of becoming a metropolis. As a major city of European significance, it is part of a dynamic urban-regional development that extends beyond administrative boundaries. The functional interconnection with its surroundings, such as Lower Austria and Burgenland, as well as cities like Bratislava and Wiener Neustadt, underscores the necessity of an integrated planning approach to address challenges like climate change, land consumption, and social cohesion.

MetroLab focuses exactly on this. We consider the development of metropolises to be a design process that places sustainable growth, resilient urban landscapes, and participatory planning tools at its core. The traditional divide between city and the countryside is gradually being replaced by a polycentric network, where mobility, settlement development, adaptation to climate change, and social and economic synergies must be considered, regardless of the location.

MetroLab tells the story of the future of the metropolis.

Since 2018, MetroLab has been developing concepts and methods to establish metropolitan planning as an interdisciplinary and forward-thinking process, particularly with a focus on the Vienna metropolitan region. The published works discuss the development of the metropolis of Vienna and propose solutions to the challenges of our time.

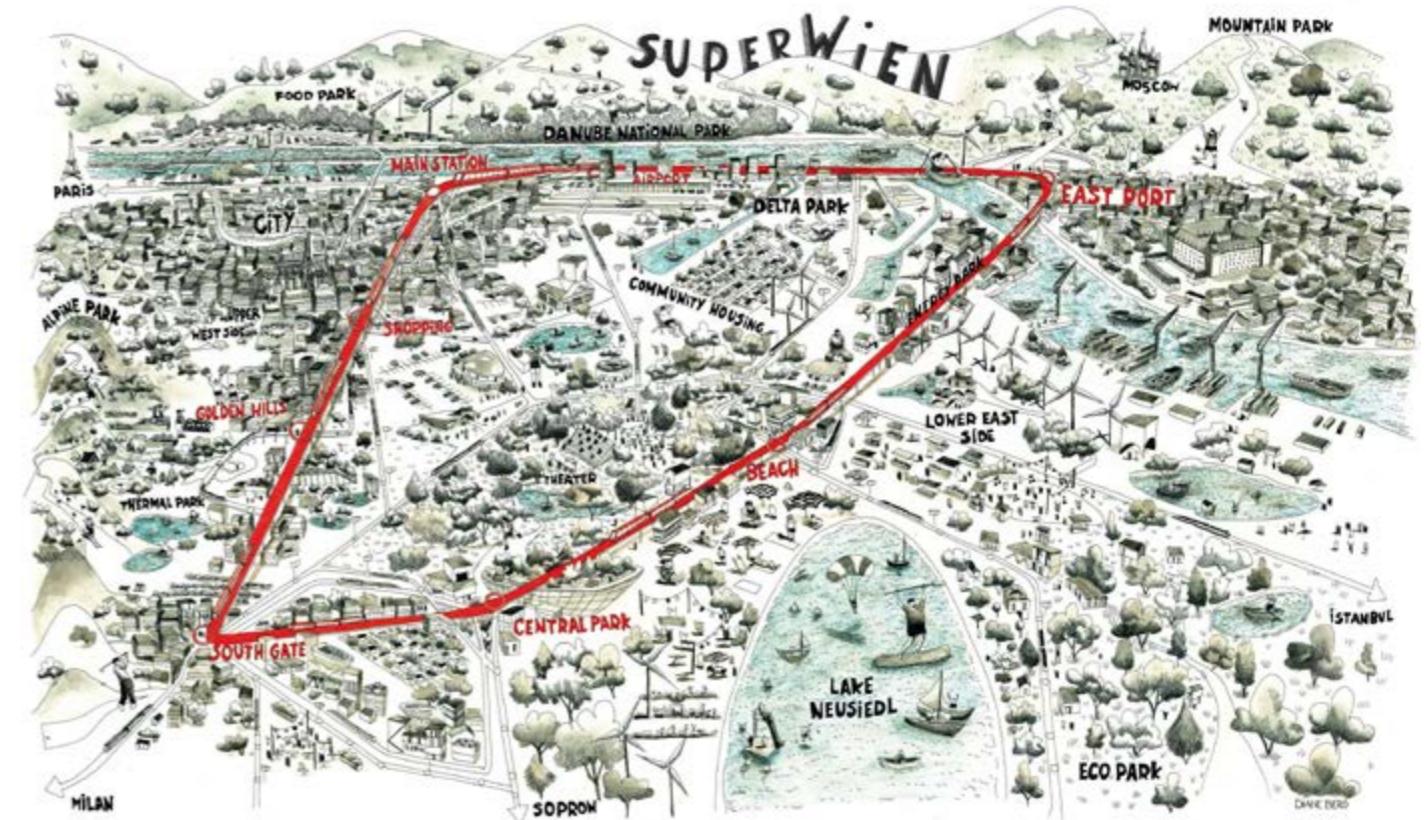
The publication *SuperWien Metropole – A New Capital for Europe* (2018, Folio Verlag, Vienna) presents a visionary perspective for the Vienna-Wiener Neustadt-Bratislava metropolitan region and

discusses the bold idea of a new European capital. It focuses on cross-regional networking that leverages both economic and infrastructural synergies. The aim is to overcome traditional city boundaries and create a metropolitan region that can serve as a model for future-oriented urban development. By creating new visions, the expansion of planning thought beyond existing (city) boundaries is promoted. MetroLab examines how a polycentric metropolitan region can be shaped to become a high-quality living space that offers economic and social benefits, and what role this region can play in a changing Europe.

Metropolises are generally faced with governance challenges, for which there are no simple solutions. The publication *MetroLab – Metropolitan Design as a New Discipline* (2023, Jovis Verlag Berlin) views metropolitan development not only as a technical or planning challenge but as an interdisciplinary, societal, and communicative endeavour. This publication presents methods and tools for building dialogue, placing metropolitan planning with innovative processes at the heart of public awareness, and initiating a broad debate. To this end, various dialogue formats, such as the International Forum for Metropolitan Planning, have been developed to involve stakeholders from politics, civil society, planning, and business, and to create a community where multipliers from different disciplines exchange ideas on the development of the metropolitan region and are encouraged to take action.

In MetroLab's work, mobility plays a central role as a driver of cross-boundary development.

'THE TRADITIONAL DIVIDE BETWEEN CITY AND THE COUNTRYSIDE IS GRADUALLY BEING REPLACED BY A POLYCENTRIC NETWORK, WHERE MOBILITY, SETTLEMENT DEVELOPMENT ADAPTATION TO CLIMATE CHANGE, AND SOCIAL AND ECONOMIC SYNERGIES MUST BE CONSIDERED, REGARDLESS OF THE LOCATION.'



(49) Visionary image of the Superwien Metropole

Growing commuter traffic requires an intelligent connection between the city and the surrounding areas, as well as efficient and climate-friendly management of this traffic. At the same time, there is a need to direct settlement development strategically, in order to enable smart densification, while minimising land consumption and urban sprawl. The increasing demand for affordable housing, social infrastructure, and jobs calls for joint, sustainable solutions.

However, climate change and its impact on people make collaboration across administrative boundaries essential. The publication *Mapping the Zero Carbon City Region* (2025, Jovis Verlag Berlin) focuses on the urgent challenge of transforming into a climate-neutral metropolitan region. With the *Emerging Phenomena Atlas*, it presents data-based analyses of emissions and urban energy flows in the Vienna metropolitan region and links them with

specific actions and innovative mapping tools. Based on this, development scenarios such as the 30-Minute Proximity Territories or Favouring Density and Restricting Land Consumption have been developed, and pathways to the Zero Carbon City Region have been outlined, aiming to present solutions for a Zero Carbon metropolitan region and to transform and guide planning processes in a long-term and sustainable manner.

Lena Diete

Stefan Mayr architect in Vienna, founder of Superwien Urbanism

20. THE COMPLEX COEXISTENCE OF INITIATIVES AND INSTITUTIONS

Although civic initiatives were an important developmental moment, most of them ended or significantly reduced their activities after the first few years of operation. The approach of the city authorities remained hierarchical and worked only from the top down. Grassroots initiatives failed to establish a dialogue to promote city policies or implement individual projects. A court case in which local NGOs defended the community's right to participate in decision-making in a lawsuit against the Kharkiv City Council further complicated this relationship. Supported mainly by foreign funds and a few national ones, local communities have not achieved a stable sustainable form and have not developed into institutions. Kharkiv has no powerful architectural union, no museum of architecture, no city development planning organisation that interacts with the professional community. And the invasion of 2022 severed many contacts and divided the members of such communities and organisations geographically.

In the sphere of urban planning, expectations of victory and reconstruction have emerged, drawing the public attention away from solving old problems. And as 2024 has shown, the myth of large investments and projects that will radically change cities is in no hurry to come true. Instead, the war has not created new opportunities but weakened old positions. Cities continue to face the problem of cultural heritage being destroyed by both Russian missiles and the ambitions of local businesses. There are growing challenges related to the inclusiveness of spaces due to the growing number of veterans. And the society still relies on weakened social structures and believes in a big leap instead of going back to the start and building a sustainable foundation in the form of institutions.



(50) Presentation of the project 'About Neighbourhoods' by the NGO 'Critical Thinking' and 'dash! design school' to the Consul General of Germany Tanja Beyer. School 140, Saltivka district, Kharkiv, 2021



(51) 'Micro-district Future' festival by the NGO 'Critical Thinking' in Saltivka district. Kharkiv, 2015

An example is the development project for one of the neighbourhoods of Saltivka, which has become a subject of speculation today, as much of the housing in the area was destroyed by the Russians in early 2022, and photos of the destruction of panel houses have gone viral. In 2015, the NGO 'Krytychnye Myslennya' (Critical Thinking), with the support of the Heinrich Boell Foundation, organised the 'Мікрорайон Future' ('Micro-district Future') festival here, which united the local community, stimulated a discussion on rethinking common spaces, and resulted in the restoration of a summer cinema made of small wooden structures. Unfortunately, the district and city administrations and local businesses chose not to participate and the project did not develop. Later in 2021, the same team, together with the children's architectural school 'dash!', returned to the area with the project 'Pro sysidstva' ('About Neighbourhoods'), which focused on schools as a potential institutional player in residential areas. In this case, it was the cooperation with an institution that was supposed to ensure sustainability. However, after the successful implementation of the first phase, the full-scale invasion began, making it impossible to continue the project. Instead, the discussion is focused on rebuilding the destroyed buildings, avoiding both the problems that had existed here long before the destruction and the solutions to those problems. It is the creation of sustainable institutions that will ensure the preservation and layering of knowledge that is necessary for the evolutionary and sustainable development of the city.

Bohdan Volynskyi

architect, founder of 'dash! design school', public figure, writer. He is currently serving in the Armed Forces of Ukraine



(52) Local children helping to assemble wooden structures for the stage. 'Micro-district Future' festival in Saltivka district. Kharkiv, 2015



(53) 'Micro-district Future' festival by the NGO 'Critical Thinking' in Saltivka district. Kharkiv, 2015

'THE SOCIETY STILL RELIES ON WEAKENED SOCIAL STRUCTURES AND BELIEVES IN A BIG LEAP INSTEAD OF GOING BACK TO THE BEGINNING AND BUILDING A SUSTAINABLE FOUNDATION IN THE FORM OF INSTITUTIONS.'

21. THE NEW NEIGHBOURHOOD

In Vienna, more than 200,000 people live in municipal housing, including around 80,000 senior citizens. Vienna's municipal buildings of the interwar period and, to a lesser extent, those of the reconstruction after the Second World War and the era of the 'economic miracle', have shaped the coexistence of the residents with a set of social rules marked by solidarity. However, this century-old system has ceased to exist. In view of an ageing society, many existing housing structures are not geared towards current needs. By 2030, the proportion of over 65-year-olds in Vienna will increase by 25%, with many preferring to spend their twilight years at home, rather than in a care facility. Is our urban housing vision prepared for this? Age-appropriate, barrier-free and socially integrated forms of housing are becoming increasingly important. But what is it like to live in these spaces? How can living together with my neighbours next door be brought into a new relationship in order to feel at home in a neighbourhood?

The significance of the neighbourhood has changed over time. In rural village structures, it was a central component of social structures, which the industrialisation of the 19th century transformed into new forms of expression. We now live classless and free, supposedly responsible only for ourselves. In today's individualised society, unlike group affiliation, neighbourhoods are often of little relevance to young people – it is only in old age that the need for stable, local networks and familiar spaces grows. Since the late 1990s, the concept of neighbourhood has been experiencing a renaissance in cities. The social anthropologist Eveline Althaus speaks of a 'revival of the neighbourhood', which can be seen as a response to the alienation caused by globalisation and individualisation. Older people often perceive local networks as more valuable than global connections.

These needs require new approaches in urban development and urban housing. The current development of intergenerational and assisted living offers models to meet the need for social networking and age-appropriate living arrangements. In Vienna, there are already projects that implement

these concepts to promote social cohesion in urban neighbourhoods. Pilot projects are being developed not only in central urban districts, but also in Vienna's large urban districts on the other side of the Danube and in the south, towards the edge of the city. This is an area of Vienna that has been undergoing enormous urban expansion for decades. Here, in quieter, less densely populated districts, the experimental model of new inclusive forms of housing is picking up speed.

The first intergenerational 'living machines' were built in the 1970s. Alterlaa is the showcase project for successful implementation in Vienna. Developed according to the principle of stacked single-family houses with terraces, plant troughs and loggias, three high-rise blocks (up to 92 meters high) with well-equipped infrastructure and 3,000 residential units were created. The quality of living in this large complex has been empirically monitored over decades and a high level of residential satisfaction and neighbourhood culture among the residents has been proven. In contrast, Am Schöpfwerk, located within sight, a large housing estate developed almost simultaneously according to the dense settlement type with high-quality architecture, made the headlines as a slummy negative example. It was only after the connection to the subway network and a neighbourhood cultural relaunch that the imbalance was remedied.

The increasing diversification of society places new demands on neighbourhood coexistence. Intercultural housing attempts to find answers to the large migrant background of the urban population with new spatial structures and interaction concepts. In a pluralistic environment, innovative forms of coexistence are increasingly in demand.

Gabriele Morkunaite

architecture student at the Vienna University of Technology

'IN TODAY'S INDIVIDUALISED SOCIETY, UNLIKE GROUP AFFILIATION, NEIGHBOURHOODS ARE OFTEN OF LITTLE RELEVANCE TO YOUNG PEOPLE – IT IS ONLY IN OLD AGE THAT THE NEED FOR STABLE, LOCAL NETWORKS AND FAMILIAR SPACES GROWS.'



(54) New neighbourhood, environment as an incubator in public space



(55) Wohnpark-Alterlaa, high-rise residential building featuring single-family apartments with terraces



(56) Intercultural living at the former Nordbahnhof site

KHARKIV

WORK AND PRODUCTION

VIENNA

22. THE TRANSFORMATION OF BROWNFIELD SITES

In the 20th century, Kharkiv developed as an industrial city. But in the 1990s, it became clear that Soviet industrial monsters, designed for cheap energy, could not be used in a post-industrial economy. The first years of Ukraine's independence saw massive bankruptcies and devastation of enterprises. Even those that survived used their potential at 10-20%. Thus, in a city with a population of 1.8 million, huge unused areas appeared. This meant that new ways to use these areas had to be discovered. Also, in the first days of the full-scale invasion, the Kharkiv Aviation Plant, the FED machine-building plant, the tank repair plant, the car repair plant, National Science Centre, and Kharkiv Institute of Physics and Technology were destroyed. It remains to be seen whether it is appropriate to rebuild them in close proximity to such a dangerous neighbour. The situation is complicated by the fact that they all have different forms of ownership and there must be political will to bring such areas into common use.

We have a lot of research ahead of us to figure out what we want to fill the unused urban areas with.

For example, the Machine-Building Plant at 75/77 Kontorska Street has a 20-hectare territory and is a descendant of a foundry founded in 1870. It is currently used as warehouses and rental premises. At the same time, it is located on the most picturesque old street of Kharkiv. It has the potential to become a landscape and industrial park, especially since it is located next to the Central Railway Station and Poltavsky Shlyakh, a major transport artery. Another advantage is the Lopan River with a tributary of the Kharkiv River, which can be accessed from the most remote areas - Oleksiivka, Saltivka, and the KhTZ (Kharkiv Tractor Plant) area.

Moreover, this area borders on Karpivskyi Garden and has every chance of becoming a powerful recreational magnet of a city scale in the future. Especially if we can fill the old workshops with new functions - workshops for residents, research laboratories for pupils and students, educational spaces, and concert venues.

It seems that the future development of the city, its green framework, artistic and cultural life lies in the repurposing of such areas.

Olha Kleitman

co-founder and lead architect of 'SBM Studio' in Kharkiv, head of the NGO 'Through The War', member of the Union of Architects of Ukraine

'THE FUTURE DEVELOPMENT OF THE CITY, ITS GREEN FRAMEWORK, ARTISTIC AND CULTURAL LIFE LIES IN THE REPURPOSING OF BROWNFIELD SITES.'



(57) Turboatom plant, Kharkiv



(58) FED Machine-Building Plant, Kharkiv

23. STRUCTURAL OPENNESS

Abandoning fossil energy sources is inevitable. But how can our everyday life be shaped in post-fossil conditions?

Certain clues to this can be found when we look at the pre-industrial, pre-fossil world – the stages of human history when solar energy, in the form of biomass or wind energy, had to be used to meet people's needs.

In pre-industrial cultures, agriculturally usable land was the critical basis of life, and therefore a resource of the highest value. The cultural landscape, shaped by agriculture, pasture, and forestry, was generally an energy-efficient construction optimised for maximum productivity. The spatial organisation aimed to minimise the transportation consuming a lot of energy (and thus being costly). This architectural and spatial construction included components of all sizes, from the topographical structure of the cultural landscape, to field and settlement forms, types of houses and farms, and even typical everyday objects.

Current flaws in development, such as land degradation, urban sprawl, and excessive land sealing are possible today only because fossil energy sources can be accessed cheaply and relatively easily.

In terms of efficiency of the use of land and

space, the house and farm types of the pre-industrial world were highly versatile spatial resources that could be used around the clock and throughout the year – in both urban and rural areas. They were living spaces where everything later referred to as 'living', 'working', or 'leisure' in industrial societies could take place.

Following the development of industrialisation, Fordism, and functionalism, the architectural and spatial structures – at all levels of the scale – lost this versatility and their broad spectrum of uses. Everyday life was divided into specific functions, and each function was assigned its own spatial allocation and time frame. It is now a history-proven fact that this strategy, which aims for function-specific and short-term optimisations, is in no way resource-efficient, sustainable, or resilient. It also neglects the fact that functional aspects are changing more and more quickly, and the offering of rigid, functionally and formally specialised structures cannot keep up with this pace of change.

With regard to sustainable and resilient spatial development, the question arises of how to deal with fundamentally opposing requirements.

On the one hand, there is the correct assumption that laboriously constructed buildings and public spaces should have the longest possible



(60) Opportunity space instead of building waste. A former department store is transformed by SmartVol architects into a place where manufacturing companies, offices, and restaurants take up residence.

'THUS, WE WILL NEED ARCHITECTURAL AND SPATIAL STRUCTURES THAT ARE CHARACTERISED BY THE KEY QUALITY OF 'STRUCTURAL OPENNESS', WHICH CAN BE 'CAPABLE OF LEARNING' ('ADAPTIVE') AND DEVELOP LONG-TERM, INDIVIDUAL 'BIOGRAPHIES'.'



(59) New Landgutviertel in Vienna

lifespan. On the other hand, there is the challenge of continuously meeting ever-changing usage and appropriation demands without constantly needing to demolish and replace the existing structures with new ones.

One could also phrase this question differently: how can we deal with the existing structures today, or how can we build anew when necessary, in such a way that the likelihood is increased that these structures are usable in the foreseeable future? How do we ensure that they become valuable, long-lasting, diversely usable, and aesthetically attractive heritage for future generations?

It is obvious that this can only be achieved through a consistent overcoming of deterministic and functionalist planning paradigms. As in the pre-industrial world, we will need a significant amount of spatial resources in the future that may not be optimal for any single function, but will be sufficiently suitable for many functions – perhaps even those we cannot yet foresee – and that, when necessary, could be corrected with minimal effort and developed further.

Thus, we will need architectural and spatial structures that are characterised by the key quality of 'structural openness', which can be 'capable of learning' ('adaptive') and develop long-term, individual 'biographies'. Such usage-open structures, which may be adapted to the specific and robust conditions of a location, will also make it possible to reorganise the processes of our everyday life more efficiently in terms of space, minimising paths and transport, and being able to change the ways the facility is used on a short notice.

In this way, buildings and spaces will be used more efficiently and more intensely, generating the urban vitality which has largely been lost in functionally shaped structures.

Erich Raith
architect, urbanist, university teacher in Vienna

24. PRODUCTIVITY IN TIMES OF WAR



(61) 'Animal Rescue Kharkiv', a shelter, where volunteers bring rescued animals from the frontline.

The beginning of the full-scale war in Ukraine in 2022 radically changed the lives of Ukrainian society, particularly in the spheres of work and productivity. Constant stress, high levels of uncertainty, and a lack of security guarantees have become key factors complicating the maintenance of stable efficiency. According to a study by Gradus Research, conducted within the framework of the All-Ukrainian Mental Health Program, 77% of Ukrainians have recently experienced stress. This fact underscores the need to find ways to minimise the negative psychological and emotional impact on productivity. This raises the question: how can one adapt to new conditions and maintain efficiency at work?

A particularly interesting and somewhat unexpected phenomenon is the increase in productivity levels across various sectors. This can be explained by the necessity to distance oneself from the surrounding uncertainty and focus one's attention on socially beneficial activities. Since February 2022, civil society has consolidated in an effort to help itself and those around it. The steep increase in volunteer activity is one of the key indicators of this process.

In just the first four months after the beginning of the full-scale invasion, the number of volunteers in the country increased fivefold. Kharkiv, as the largest Ukrainian frontline city, was no exception. From the very first hours, city residents gathered around improvised aid centres, distributing humanitarian assistance, providing emotional support, weaving camouflage nets, and collecting resources for the Ukrainian Defence Forces.

Particular attention should be given to supporting the most vulnerable categories: the elderly, people with disabilities, and animals. For instance, in 2022, volunteers from NGO 'Through The War' launched the 'Velyka Rodyna' (Big Family)

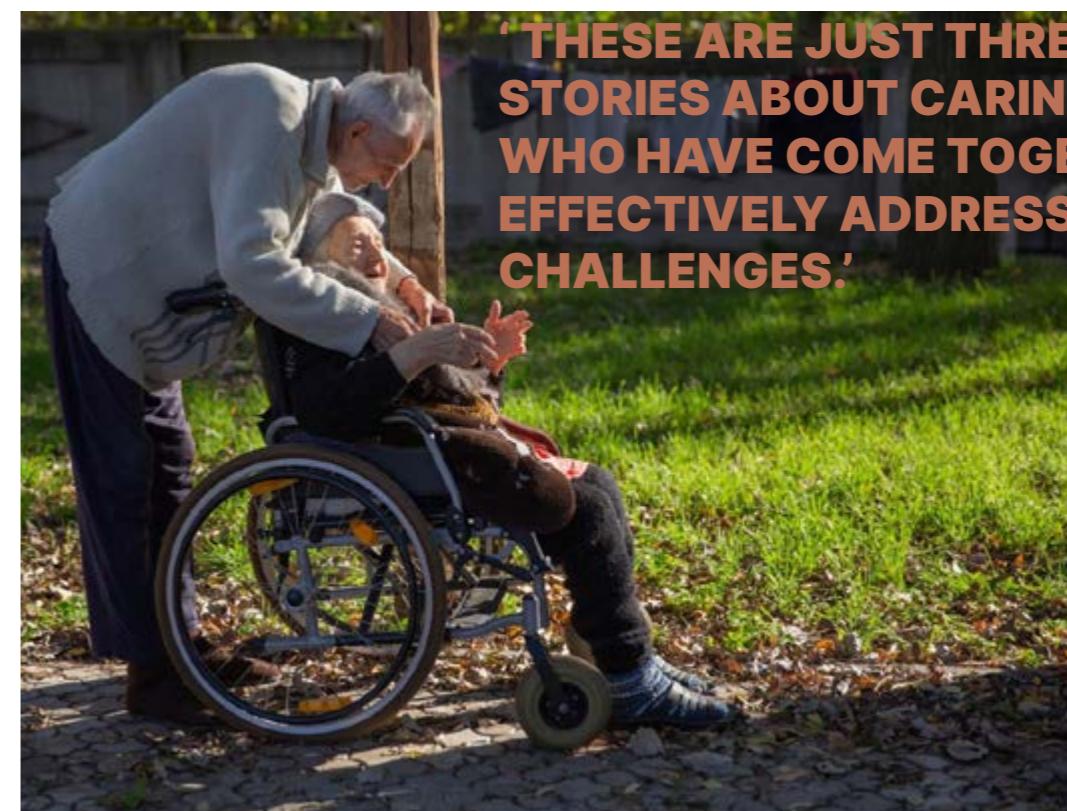
project – a shelter for elderly people, most of whom were abandoned in their homes and could rely solely on external assistance. The organisation's volunteers provide their residents not only with housing but also with food, medical care, and psychological support. Currently, the shelter permanently houses more than 60 people from the Kharkiv, Donetsk, and Luhansk regions. The project's plans include creating additional spaces for those who require long-term care, as well as expanding humanitarian assistance to those unable to evacuate.

'Animal Rescue Kharkiv' is a project by a group of Kharkiv volunteers engaged in evacuating, treating, and caring for animals from de-occupied and frontline regions of Ukraine. They were among the last volunteers to continue working near Bakhmut and Avdiivka, and after the Russians blew up the Kakhovka Hydroelectric Power Plant, they conducted evacuation missions from the flooded areas of the Kherson region. The organisation cares for hundreds of rescued animals, providing them with temporary shelter, veterinary care, and assistance in finding new families. Additionally, the team actively collaborates with international animal protection organisations, attracting resources and support for their activities, as well as arranging animal adoptions both in Ukraine and abroad.

The 'Rose on the Hand' NGO is a search and rescue organisation established in 2021 to assist in the search for missing persons in the forests and water bodies of the Kharkiv region. Since the beginning of the full-scale invasion, the team has been evacuating civilians from dangerous and frontline areas of Kharkiv and the surrounding regions. Thanks to their efforts, thousands of people have been able to leave combat zones, find temporary housing, and receive humanitarian assistance. Volunteers not only transport people to safety but also help them adapt to new locations, working in cooperation with local communities and charitable foundations.

These are just three stories of compassionate individuals who have united to address common challenges. Thus, in difficult times, Ukrainian society demonstrates incredible unity and a high level of productivity aimed at helping those who need it most. The volunteer movement has become not just a response to the challenges of war but also a symbol of resilience, humanity, and indomitability.

Ruslan Misiunia
journalist, based in Kharkiv



(62) 'Velyka Rodyna', a shelter for the elderly, created by the NGO 'Through The War' in Kharkiv in 2022.

'THESE ARE JUST THREE OF MANY STORIES ABOUT CARING PEOPLE WHO HAVE COME TOGETHER TO EFFECTIVELY ADDRESS COMMON CHALLENGES.'

25. A PLACE WORTH ITS WEIGHT IN GOLD

Deindustrialisation, which is being presented in the media as a new phenomenon suddenly descending upon us, has actually been a reality for quite some time. My personal interest in this subject came about through a particular experience. A while ago, I tried to buy an antibiotic and learnt that it was currently out of stock due to production difficulties in India. It was only then that I realised that a large portion of pharmaceutical production had already moved out of Europe, making us dependent on third parties in this sector. Even before the pandemic, this strategy seemed questionable to me.

My response was to delve deeper into the topic of industry, using the city of Vienna as an example, which led 2019 to a documentary film 'A Place Worth Its Weight in Gold'.

The documentary paints a portrait of Simmering, a district in the southeastern part of Vienna. Once a typical working-class neighbourhood, the number of industrial and commercial enterprises has been steadily declining since the 1990s, being replaced by mono-functional residential buildings and space-intensive retail.

'A natural development – we live in a post-industrial time,' is the explanation often given, one that has thus far been little questioned. Meanwhile, the remaining businesses complain about the lack of



(63) Film still from the film 'A Place Worth Its Weight in Gold'

space and unfulfilled expansion aspirations. Young entrepreneurs often struggle to find affordable production sites in the city. And businesses that have been in the same location for centuries are now facing complaints from neighbours about noise, traffic, or odours for the first time.

The film 'A Place Worth Its Weight in Gold' explores the underlying causes of this development and concludes that the rapidly rising land prices in Vienna, which are both a consequence and a driving force of speculation, are fuelling the displacement of so-called 'low-cost' uses, thereby endangering the city's economic and social balance.

At the same time, urban planners dream of a mixed city, where industrial areas would be open for residential use, following the model of pre-modern cities, in which work and housing went hand in hand. But how can the land values of residential and industrial use within a plot or a block be separated? International examples show it's impossible. On the contrary, mixing these uses only accelerates deindustrialisation.

So, who benefits from this?

Karoline Mayer

curator, photographer, and filmmaker, based in Vienna

'YOUNG ENTREPRENEURS OFTEN STRUGGLE TO FIND AFFORDABLE PRODUCTION SITES IN THE CITY.'



(64) Film still from the film 'A Place Worth Its Weight in Gold'



(65) Film still from the film 'A Place Worth Its Weight in Gold'

KHARKIV

NATURE AND GREEN SPACE

VIENNA

26. THE LOSS OF URBAN GREENERY

Before the collapse of the Soviet Union, Kharkiv was a very green city. State programmes included the creation of tree-filled boulevards and parks, as well as greening the existing urban areas. Three educational institutions trained urban landscape specialists.

From about 2000 to the present day, Kharkiv has been regularly losing vast green areas within the city. The green framework was also gradually lost. In a fairly short period of time, the city's three main boulevards, which allowed people to get from residential areas to the historic centre on foot or by bicycle, were turned into multi-lane motorways.

Large parts of the city parks and gardens were lost to chaotic commercial development. A particularly stunning example of the loss of green space is the reconstruction of the zoo in the city centre (2016-2021), where 200-year-old oaks were destroyed on the area of 5 hectares, and most of the territory is now covered with waterproof surfaces.

At the same time, a huge amount of money is spent on the so-called 'greening'. This includes giant flower beds with annuals, lawns, and expensive topiary plants. This occurs even now – during the war – and requires immediate rethinking.

During the industrialisation, many industrial areas were located along Kharkiv's 4 rivers. Now, in the post-industrial era, some of them are not in use, some have been destroyed as a result of the Russian aggression. They are abandoned, depressing and impede pedestrian and bicycle traffic along the banks, making it impossible to create a single green framework for the city.

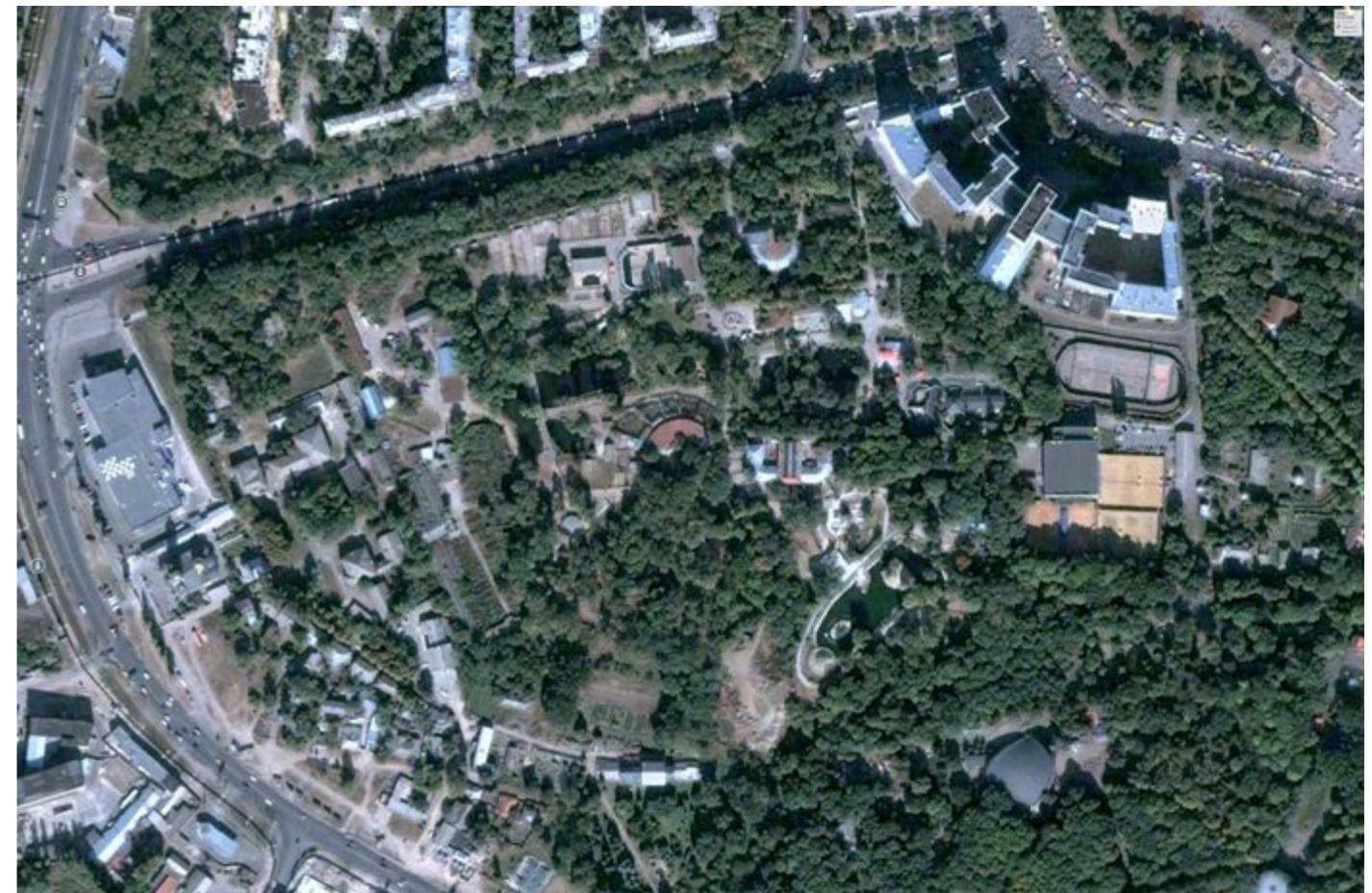
In recent years, coniferous plantations have also suffered a lot of damage from pests. The losses are estimated at around 10 hectares.

To sum up, due to the past industrial development, the climate becoming drier, pests and the lack of green thinking among the city authorities and relevant departments, we are losing green areas every year and turning into a hot, asphalted, dusty desert with giant colourful flowerbeds. It seems that green thinking needs to be nurtured from childhood, because adults in power and many citizens take the loss of green spaces rather lightly, believing that this natural resource is unlimited.

Olha Kleitman

co-founder and lead architect of 'SBM Studio' in Kharkiv, head of the NGO 'Through The War', member of the Union of Architects of Ukraine

'IT SEEMS THAT GREEN THINKING NEEDS TO BE NURTURED FROM CHILDHOOD, BECAUSE ADULTS IN POWER AND MANY CITIZENS TAKE THE LOSS OF GREEN SPACES RATHER LIGHTLY, BELIEVING THAT THIS NATURAL RESOURCE IS UNLIMITED.'



(66) Google Earth image of the Kharkiv Zoo territory in 2005



(67) Kharkiv Zoo territory after the reconstruction, 2022