

31. USE VACANT SPACE!

Vienna is growing, yet spaces for housing, culture, education, social services, and business remain vacant. Utilising vacant properties is therefore an urgent need of the moment – not just in Vienna.

The greatest contribution to climate protection can be achieved by reusing existing buildings, rather than constructing new ones. There are a few clear reasons for this. When a building is vacant, a standard practice is to build a new one – preferably on the outskirts of the city. This not only seals green spaces and generates significant CO2 emissions, but also involves higher costs in several ways. Firstly, new construction is more expensive than utilising existing buildings, partly because infrastructure lines and public transportation must be extended to new areas. Secondly, the infrastructure in the existing city is expensive to maintain but is underused. These are double costs that the public bears, which also drives up rent prices – not just for housing but also for non-residential uses. When buildings remain vacant, public spaces suffer: they degrade and become less safe.

Thus, utilising vacant properties is not only an important contribution to climate protection, but it also saves costs, making it a lever for efficient public spending policy. Utilising vacant properties in residential buildings extends the range of offers in the housing market and lowers rent prices. Using vacant properties on ground floors makes public spaces more liveable and safer. Using vacant properties in commercial buildings increases the amount of cultural, social, and small business activity – a key contribution to making a city liveable and productive.

Vienna

Vacant properties are an issue of great public interest. While around half of Austria's federal states have recently implemented a number of measures to record and utilise vacant properties, the politicians and city administration of Vienna have been avoiding the issue for years.

Since 1990, triggered by Austria's EU membership in 1995 and the EU's eastern enlargement in 2004, the population of Vienna has grown by around half a million, reaching a two-million milestone. The Vienna city administration responded with extensive urban expansion projects. Around 260,000 apartments have been built in Vienna since 1990, most of them as subsidised housing with affordable rent rates. At the same time, rent prices in Vienna, especially in recent years, have risen sharply – by 11% in 2024 alone.

Vacant properties are not systematically kept track of in Vienna, but estimates suggest that in the housing sector alone, around 10% of properties are vacant, equating to over 100,000 empty apartments –

an enormous potential to continue ensuring affordable housing in Vienna. At the same time, Vienna also has a great need for affordable spaces for cultural groups, social institutions, civil society initiatives, educational projects, small businesses, and start-ups. All of these would greatly benefit from being able to use vacant properties in ground-floor areas and commercial buildings.

Against this backdrop, it is all the more surprising that the politicians and city administration of Vienna have not seriously addressed the issue of registering and utilising vacant properties. Moreover, Vienna has not yet made use of the option to levy a vacancy tax, introduced in 2024. The financial damage to the public from this is considerable and grows every day.

Use vacant space!

In response to this unsatisfactory situation in Vienna, in the autumn of 2024, an alliance of architectural institutions in Vienna – among them IG Architektur – organised a three-part discussion series titled 'Use vacant space! Opportunities for utilising vacant properties in Vienna'. The events attracted significant media and public attention and initiated discussions of specific measures for recording and utilising vacant properties in Vienna. Numerous political experts, people working in the city administration, project and real estate development, spatial planning, urban development, architecture, research, advocacy, homeless assistance, cultural work, and vacancy management were involved in the discussions and contributed to the creation of a list of demands.

This list of demands now includes a series of specific measures to unlock the potential of vacant properties in Vienna. The proposed measures range from a definition of vacancy, which is still pending in Vienna, to methods for recording and reporting vacant properties, as well as a range of push- and pull-measures for vacancy activation. Specific measures are also detailed for housing, ground-floor areas, and commercial buildings.

Not least, the list of demands demonstrates that the use of vacant properties can be politically positively framed: as a path to an affordable, inclusive, and sustainable city – and not just in Vienna.

Fabian Wallmüller

architect in Vienna and board member of IG Architektur



(82) Vacancy in residential buildings



(83) Vacancy at ground floor level



(84) Vacancy in commercial properties

'UTILISING VACANT PROPERTIES IS NOT ONLY AN IMPORTANT CONTRIBUTION TO CLIMATE PROTECTION, BUT IT ALSO SAVES COSTS, MAKING IT A LEVER FOR EFFICIENT PUBLIC SPENDING POLICY.'

32. WHERE CAN PEOPLE STILL LIVE?

Since the beginning of Ukraine's independence, Kharkiv has unlocked its potential as a city not only of science and heavy engineering, but also as a centre of light industry and trade. Its convenient geographical location, as it seemed at the time, made it a popular destination for people from Donetsk, Luhansk, Poltava regions, the Republic of Crimea, as well as from Belgorod and Kursk regions of Russia. Residents of these regions came to Kharkiv to enjoy walking in well-groomed parks, spending time in the city's many cafes, and shopping. The money that Kharkiv residents earned needed to be safely stored. Since there was no stock market in Ukraine, the city residents started investing in new buildings.

At the end of 2021, there was 22 m² of housing for every Kharkiv resident.

During the 3 years of the full-scale invasion, about four thousand high-rise buildings were damaged. But by damaged, we mean any kind of destruction, including broken windows. The extent of the damage is a subject for manipulation by both the city authorities and contractors. The number of irreparably damaged buildings is perhaps several dozen. However, this is not critical, as the population has significantly decreased by 600-800 thousand, according to various estimates, compared to pre-war numbers.

Moreover, a lot of housing was built in the pre-war years. People who had the opportunity to invest in apartments did so, often with the intention to rent them out. At that time, there were about 300,000 students in Kharkiv, most of whom rented accommodation. Today, there is no such influx of people wishing to study in Kharkiv. Therefore, the secondary housing market is an effective way to solve problems for people whose homes were destroyed or damaged.

As the assessment of housing values and losses is not transparent, we need to look at a more economically and environmentally sound solution,

as well as the feasibility of restoring 70-year-old panelised high-rise buildings with outdated planning solutions, lack of ramps and facilities for the disabled and a precarious location (very close to the border with unpredictable Russia, if we are talking about the hardest-hit Saltivka district).

Another issue is that some residents want to rebuild their own homes in the same Saltivka neighbourhood because they grew up there, their children grew up there and they want to return there. Here, we need to consider each case separately. Not having the status of an 'architectural monument' doesn't mean that the building in question is unnecessary or does not represent the community.

To sum up, despite 3 years of large-scale aggression and the fact that Kharkiv is a frontline city, we have a place to live. The more pressing problem is where to work.

*Saltivka is the largest residential area in Kharkiv and Ukraine. Before the full-scale invasion, the district's population was over 400,000.

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

'DESPITE 3 YEARS OF LARGE-SCALE AGGRESSION AND THE FACT THAT KHARKIV IS A FRONTLINE CITY, WE HAVE A PLACE TO LIVE. THE MORE PRESSING PROBLEM IS WHERE TO WORK.'

(85) Most office and industrial facilities have been destroyed. Companies and organisations have been relocated. Kharkiv Regional State Administration, 2024



33. RETHINKING SPECULATIONS

The ideal city is a utopian idea of a perfect society. Architecture gives it form, while life within it gives it meaning. But what remains when life never takes place, and empty structures of speculative projections begin to decay before the eyes of the people? Who is responsible for this? Who should take care of these buildings?

Speculation is the expectation of a specific event or state in the future without a solid foundation regarding how it will unfold. It is a conclusion about something without secure knowledge. It is unscientific and risky. It is unusual in an age when every step seems to be secured, and yet it still happens. It is addictive, driving the speculator through emotional highs and lows, and is unfair. It has made some people rich while driving others to ruin. It doesn't move with consistency, but it does so with haste. In architecture, speculation often manifests itself in large buildings. Speculators love architecture because it allows them to materialise the premature outcome before the eyes of their investors: a monumental tower that is supposed to permanently shape the cityscape and generate space (image 1); a shiny shopping paradise meant to boost the economy and

give the city centre its final touch (image 2); a new university building as a symbol of innovation and science for the country (image 3). Constructing such buildings seems to be a quick and lucrative way to give speculation a sense of purpose – until everything changes...

The conversations in the Ping-Pong Dialogues are not so much about bold future visions. They are about the present, the state of two cities, shaped by contrasts like war and prosperity, normality and exception, and the shared goal of a good life in a productive city. It is about the tasks we face as city residents in Kharkiv and Vienna, with the understanding that we cannot afford to demolish and rebuild. We need to look more closely and better understand the spatial and social connections.

'Speculare' means to 'observe' or 'spy' in Latin. It's an important method of architecturally sustainable planning. Architect Eileen Gray lived at the construction site of her project in southern France for months to observe the process and intervene when needed. Local knowledge seems to be one of the most valuable parameters for future planning. Observation requires time and precision. It happens

in the moment. It does not look to the future, but describes the present. Observation has no outcome, but gains insights that serve as the basis for future action.

Can observation be established as the foundation for future planning methods? As a new form of 'site-specific productive speculation', it would be grounded in attentive observation and immediate action, guided by a series of key questions: What do we really need right now? Can a vacant apartment building in the city centre be converted into a dormitory for families? Can a decaying house become a retirement home? How good is the building structure? What bothers me about the existing building? Is the construction of a new building the right approach to develop the site? Can the site grow? Is there room for nature? What further investment is needed to make the structure liveable? Is it possible to use the building right away, without making any changes to it? Do I need a construction company, or can I do it myself? Would this collective action be an act of strengthening our fragile democracy and of supporting the sustainable coexistence in a productive city?

By reinterpreting speculation and shifting the focus from short-term profit to sustainable, socially responsible and environmentally conscious planning, a new form of urban development, drawing from real observation and the needs of the community, could emerge. It could help create a city that is not determined by the abstract desires of investors, but by the actual needs of its residents.

Let's rethink speculation!



(88) Image 3. The university building completed in 1982 is to be demolished in order to build a new university building on the same site. This outdated and resource-wasting concept is being fought against by professional and civil society initiatives.



(86) Image 1. The APA press centre, built in 1968, has been empty since 2005 due to poor accessibility. After being sold twice, the building was prepared for demolition.



(87) Image 2. The Leiner department store, dating from 1895 to 2021, is being demolished for the construction of an 'innovative traditional shopping centre'. It is still uncertain what will happen to the unfinished shell following the insolvency of the real estate company Signa.

'LOCAL KNOWLEDGE SEEMS TO BE ONE OF THE MOST VALUABLE PARAMETERS FOR FUTURE PLANNING.'

Lisi Zeininger

senior lecturer at the Vienna University of Technology



KHARKIV

SCHOOL AND EDUCATION

VIENNA

34. SCHOOL COMMUNITIES AND THEIR NEED FOR SECURITY

Basic school education is an important aspect of every child's life, as it not only provides knowledge but also helps to develop social skills and build relationships with peers. However, in the context of the war in Ukraine, particularly in Kharkiv, communities face particular challenges in ensuring the safety of students and teachers.

Since the start of the full-scale aggression on February 24, 2022, thousands of schools have been destroyed in Ukraine. As of early 2023, according to the Ministry of Education and Science of Ukraine, approximately 2,400 educational institutions were affected by the fighting, of which 700 were heavily damaged or completely destroyed. Kharkiv, which has become one of the epicentres of the war, has had the most direct consequences for the educational infrastructure. There are not many fully intact educational institutions left, which creates a critical situation for local communities.

Security is a critical element for school communities. Therefore, the functioning of the educational process in Kharkiv has to be adapted to the realities of war. The majority of students study online, but 40% continue to attend classes offline in approved safe spaces. To ensure the physical safety of children in Kharkiv, classrooms have been set up at six metro stations. This demonstrates an innovative approach to solving the problem of learning in a war environment.

The creation of Ukraine's first underground school, which can accommodate 900 children, is another example of how school communities on the ground are responding to the need for security. These educational facilities not only provide education, but also serve as shelters during air raids. This is extremely important, as it can take enemy rockets as little as 40 seconds to reach the city.

In addition, specialised courses focusing on safety have become an important part of the educational process. In particular, land mine risk education, first aid, and emergency behaviour have become an integral part of the curriculum.

As a result, school communities in Kharkiv are trying to adapt to the challenges of war, supporting each other in difficult times. Education in a conflict situation becomes not only a means of acquiring knowledge, but also an important element in providing psychological support and social connections. In this way, schools remain a light of hope for children and their families, providing a resource for recovery and development in the future. Security, as an integral part of the educational process, is of particular importance in an environment where life and learning are constantly under threat.

Kharkiv's metro had been primarily the city's main transport artery until February 24, 2022 – a familiar, convenient, and fast way to get around. But in the first days of the full-scale invasion, its role changed dramatically: stations and train cars became a refuge for tens of thousands of residents. Some people lived there for months (until the summer of 2023), setting up sleeping areas on the granite floors and inside stationary train cars, organising small kitchens and makeshift playgrounds. Volunteers began delivering food, medicine, hygiene supplies, and toys for children. Doctors provided care, people celebrated holidays, supported each other, and children even attended online classes. Kharkiv's metro became a city beneath the city.

It was surreal to see how the trains that once carried passengers from one district to another now stood motionless, serving as homes. Tracks, once meant for fast-moving trains, became walkways for those trying to reach the railway station or navigate the city safely during shelling. For some, the metro became a permanent home; others descended only at night or during air raid alerts. For Kharkiv, it transformed from a symbol of mobility into a symbol of survival – a space once meant for movement became a place of waiting and hope.

Ruslan Misiunia

journalist, based in Kharkiv

'KHARKIV, WHICH HAS BECOME ONE OF THE EPICENTRES OF THE WAR, HAS HAD THE MOST DIRECT CONSEQUENCES FOR THE EDUCATIONAL INFRASTRUCTURE.'



(89) Destroyed 47 High School in Pavlovo Pole, Kharkiv, August 2022



(90) Levada metro station, Kharkiv, 2022



(91) Underground school in Kharkiv, 2024



(92) Palats Sportu metro station, Kharkiv, 2022



(93) Traktorniy Zavod metro station, Kharkiv, 2022

35. EDUCATION AND KNOWLEDGE FOR ALL: 120 YEARS OF ADULT EDUCATION CENTRES IN VIENNA

Volkshochschule Ottakring, still active today, opened in 1905 as the first evening adult education centre on the European continent in a suburb of Vienna.

Towards the end of the 19th century, rapid industrialisation left its mark on Vienna's equally rapidly densifying suburbs. A growing workforce streamed in from rural areas of the Danube Monarchy in search of work and food. Extreme overcrowding, precarious living conditions and a lack of education slowed down the economic upswing of the emerging production methods.

Improving the situation through education and training became a progressive concern of the liberal bourgeoisie together with the labour movement, which was rejected and obstructed by the feudal political establishment. Private donors from industry and commerce made it possible for 'people's palaces' to be erected – buildings for the working class citizens, who had no or very limited access to education.

120 years later, the building in Ottakring is an important centre for adult education. The building was extensively renovated and rebuilt between 2021 and 2024. In keeping with the tradition, newcomers and those interested in the opportunities offered by the city are supported with further education and training courses. The VHS Ottakring focuses on youth education. Offers for second-chance education and dealing with multilingualism are important contributions to the success of social equality and more equal opportunities.

The importance of adult education centres is developing into an essential educational component of the city policy, beyond the statutory compulsory school mandate. Offers are being developed for a city that is growing dynamically due to immigration. New arrivals and interested parties from all backgrounds and educational levels are catered for. In the spirit of the original idea of 'education and knowledge for all' and stemming from the tradition of 'people's palaces', offers and communication opportunities for coping with everyday life in a constantly growing and densifying metropolis are being developed.

In its own development and renovation programme up to 2030, the City of Vienna is allowing for more space resources of the adult education centres and bringing them up to date, both structurally and organisationally. A sustainable, resource-conserving approach to the existing building fabric is part of these efforts.

Gerhard Huber

architect in Vienna, co-founder of Rataplan Architektur



(94) Volkshochschule Ottakring' in Vienna, 1905. At that time, it was called 'Volksheim'.



(95) The reading room of the adult education centre.

Thomas Laimer

director of VHS Ottakring and VHS Alsergrung
Währing Döbling, Vienna



(96) 'Volkshochschule Ottakring' in Vienna today. It was the first adult education centre in Europe.

**'IN THE SPIRIT OF THE ORIGINAL IDEA OF
'EDUCATION AND KNOWLEDGE FOR ALL'
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KHARKIV

FUTURE PROSPECTS

VIENNA

36. SPECULATIONS, INVESTMENTS, AND RUINS

Over the past decade, Kharkiv has been actively developed, but not like it was in the Soviet Union. Residential buildings were built quickly, without taking into account the capabilities of engineering networks, transport links, and socially necessary structures such as kindergartens, schools, and hospitals. Over the years, not a single school or kindergarten had been built. The developers were closely affiliated with the city authorities. In 2020, there were 20 square metres per capita of newly-built housing. The companies that were able to obtain and develop plots in protected park areas, the 'green lungs' of Kharkiv, caused the biggest harm. So far, no one has been punished for such criminal development.

Construction also continued in the historic centre, often without any height restrictions and without taking into account the additional pressure this created on old, worn-out utilities. The city was gradually approaching a collapse in terms of transport network and communal utilities. However, the cash that flowed from the sale of apartments stimulated this senseless movement. On the other hand, Kharkiv residents viewed investing in newly-built housing as a way to preserve their savings, as there were no stock markets or other alternatives for saving money in Ukraine. Only the full-scale invasion stopped this trend. For three years now, not a single construction site has been in operation. There are no developers willing to invest; neither is there anyone willing to buy. People have either left or don't have the money. It's not such an attractive form of investment anymore, because previously all available housing was rented by more than 300,000 students studying in our city.

This situation prompted the developers to look for other options. Every developer has a construction company that now has nothing to do, the equipment is stuck, and people need to be paid. So they need something to keep them busy.

'Let's not spend our own money, but the money assigned for reconstruction,' became their common thinking. They started promoting rebuilding competitions, with the pretext of caring about people from Pivnichna Saltivka (Northern Saltivka) district, some of whom were left homeless.

But the reality is that the city is half-empty. If you look at it in the evening, there are areas (especially centrally located ones) where only a few windows are lit up in the whole street.

There are many more pre-owned and newly-built apartments than there are people who have lost their homes.

Is it really necessary to repair panelised high-rises that were not high-quality housing even 70 years ago and feature no inclusive solutions at all? Why not spend the money on buying readily available apartments for the people who have lost their homes due to the war, reconstructing the existing utility networks, and implementing sustainable energy solutions?

As always, the answer is on the surface: corruption, populism, and the search for quick and easy solutions.

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

**'IS IT REALLY NECESSARY TO REPAIR
PANELISED HIGH-RISES THAT WERE NOT
HIGH-QUALITY HOUSING 70 YEARS AGO
AND FEATURE NO INCLUSIVE SOLUTIONS
AT ALL?'**



(97) A new residential community built in the middle of KhTZ district before the full-scale invasion at the cost of cutting down a green area, Kharkiv, 2021

37. WHAT IS THE FUTURE OF URBAN DEVELOPMENT IN VIENNA?

Vienna, a European metropolis with relatively moderate growth in recent decades, faces enormous challenges. The global rise in temperatures due to the increase in CO2 levels requires a shift in many areas of urban daily life. The era of unreflective city development, rooted in capitalism, has come to an end. The goal of all measures must be to plan them in a way that life and coexistence within this urban structure can be organised in a balanced and socially just manner.

It is essential to analyse the city climate situation and to draw fact-based conclusions from it. Vienna has relatively good air quality, partly due to the geographic features, such as the Wien Valley and the Vienna Woods in the west of the city, as well as the Danube Valley. In 1905, a visionary and crucial decision was made. The so-called forest and meadow belt along the transition from the city to the Vienna Woods was legally designated as a recreational area and air reservoir for Vienna. In 1995, the protection category of the green belt was extended to the urban expansion areas in the northeast (Transdanubia). Due to the climate crisis, an update and expansion of the protected zone is urgently needed. As a result of the ongoing influx into the city (currently about 2.2 million inhabitants), urban expansion areas are being designated, and inner-city non-functional industrial areas are being converted (including former and existing areas of the Austrian Federal Railways). A comprehensive strategy is essential due to the enormous, immediate investment pressure.

Another approach concerns the existing building structure of the city. Vienna has a clear inner-city structure with the 'Ring' (Ring Road) around the centre, the 1st district, and districts 2-9 within the 'Gürtel' (Beltway). This central part of the city is a very

densely built-up area, but it keeps getting denser, especially because of extra floors added to existing buildings. At the same time, there is a considerable amount of unused space. This contradiction between densification and vacancy is increasingly paid attention to by the responsible authorities – the vacancy rate is now to be surveyed empirically, as there seems to be significant potential in the existing stock. The so-called suburban areas currently appear to be most resistant to further densification, as the existing structures are not too dense. However, there is also a lack of necessary recreational areas and multifunctional public spaces.

In the entire urban structure described here, most of the construction measures in the future will have to be carried out in the form of adapting the existing buildings. Otherwise, the ambitious goals of CO2 reduction will not be achievable. Conceptually, this means an enormous effort, and the efficient implementation will be all the more difficult if legal and economic frameworks are not set in line with the above-described socio-political approaches. In the future, civil society will have to take on greater responsibility, define clear demands, develop projects, and engage in discussions with politics and administration.

A particularly 'contested' and exciting place in the urban structure is the wastelands (locally known as «Gstätt»)). Unplanned, often diverse in use by people of all ages and backgrounds, they are often small, fine biotopes in the city. They are the oases absolutely worthy of preservation for the people of this city!

No wasteland, but definitely a remarkable place, is the Naschmarkt, the market of the Viennese (who dislike any changes). In fact, it is now being

'THE PREVIOUS EXPERIENCES SHOW THAT NOT ENOUGH HAS BEEN DONE AND MORE RADICAL METHODS WILL BE NECESSARY.'

redesigned, despite various attempts by civil society to impose changes from the top down. The market area, the farmers' market and the flea market on Saturdays have undergone minor changes over the decades, but it has remained a biotope of diversity, known worldwide. Responsible urban planning would respect these special places and refuse to hand them over to investors.

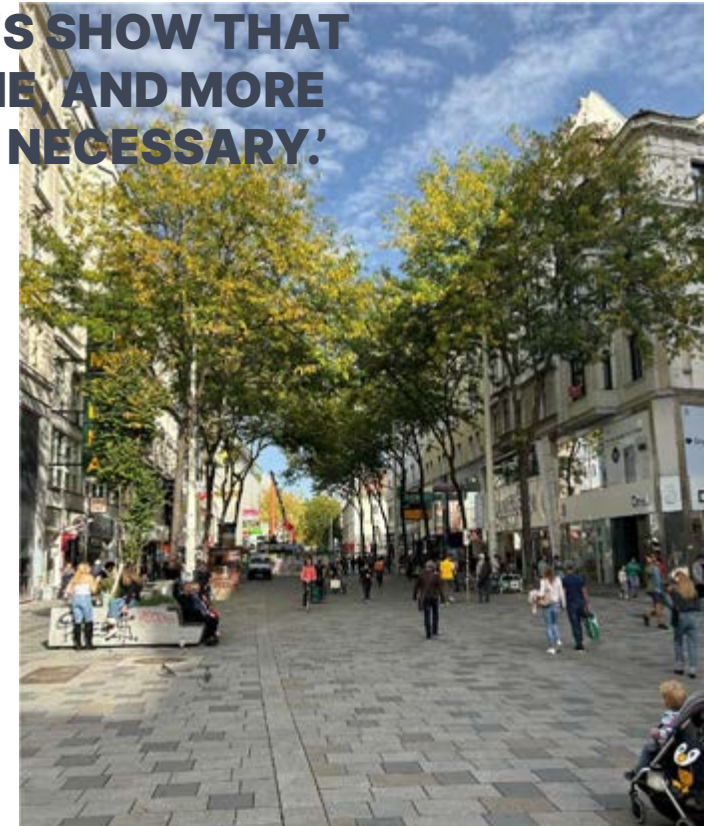
Vienna has one of the best-developed and well-maintained public transportation networks in the world. At the same time, Vienna has a massive problem with motorised individual traffic. Other cities, such as Paris, London, and Scandinavian cities, went through a more radical shift in the past, particularly focusing on cycling in the inner-city area. The basic prerequisite for this necessary transformation is therefore the reduction of individual traffic. In recent years, responsible political figures have discussed various initiatives, and some have been implemented. A citywide speed limit of 30 km/h reduces fine dust and noise pollution and increases traffic safety. Through parking space management across the city, together with large parking garages at major transport nodes on the outskirts, access to the city is regulated. Entire streets are being calmed, adapted as meeting or pedestrian zones, and bike lanes are steadily being expanded, often designated as bike streets. Outdoor dining areas built during the pandemic instead of parking spaces can now be operated all-year-round, and so-called parklets expand sidewalks into the street area, offering more public space for various activities. Lastly, the public space, which was previously primarily left to motorised traffic, is being redefined through consistent planting of trees and creating green islands.

However, the previous experiences show that not enough has been done, and more radical methods will be necessary. Many of the above-mentioned measures directly resulted from locally engaged residents who brought proposals to the city and saw them through.

It is absolutely necessary to recognise the impending climate collapse with all its already noticeable impacts in the city (flooding in fall 2024, heat records, etc.) as a turning point and an opportunity to develop. Participatory dialogues with all affected citizens and institutions are ultimately the prerequisite for developing urban future-oriented visions so that everyone can participate in the open city (Richard Sennett).

Lukas Schumacher

architect in Vienna and board member of IG Architektur



(100) 'Mariahilfer Street', the largest inner-city shopping street in Vienna is being turned into a 'Begegnungszone' (encounter zone), where vehicle access is limited and driving is only allowed at walking speed. Cyclists must adhere to a 10 km/h speed limit, and pedestrians are the privileged road users here.



(101) In a thoughtful grid system, side alleys are closed to through traffic and defined as encounter zones. This allows for the creation of comfortable outdoor seating areas (gastgärten) in the street.



(98) Public space is also a platform for artistic interventions, such as this one by Donald Judd in Vienna. Temporary installations are increasingly being given space, in order to encourage engagement in a space that is free of consumerism.



(99) Entire street sections in Vienna are being repurposed as so-called bicycle streets, giving priority to cycling traffic. Temporarily, these streets are also being used for farmers' markets on weekdays in more and more districts.

38. WHAT DOES THE FUTURE HOLD FOR KHARKIV?

Kharkiv, one of the largest industrial and cultural centres of Ukraine, is at the epicentre of serious challenges due to the war. The destruction of infrastructure, the decline in population and the mobilisation of the working-age population have changed the city's economic landscape. However, despite these difficulties, Kharkiv has consistently shown signs of resilience. Local businesses are adapting to the new environment, while the restoration of the housing stock and support from international organisations are opening up opportunities for the city's future development.

In 2024 alone, 4,795 air raid alerts were recorded in Kharkiv. The average duration of an alert is 1 hour and 10 minutes, and the longest lasted 50 hours and 31 minutes. For example, in June, alerts sounded for a total of 468 hours, in July – for more than 26 days, in August – for 16 days, and in September – for 296 hours and 32 minutes.

This data indicates that Kharkiv experienced the highest number of air alerts among these cities, due to its geographical location and proximity to the war zone.

Frequent air raids and security threats affect the psychological state of residents, which in turn changes their consumer behaviour. Demand for non-food items has declined as people focus on basic necessities. According to the Institute of Sociology of the National Academy of Sciences of Ukraine, 60% of Kharkiv residents say they have cut back on spending on entertainment and luxury goods, and 70% have started buying long-term storage products more often.

The air alerts, which have a significant impact on the daily lives of Kharkiv residents, also have a significant impact on business, creating numerous challenges for businesses, including planning work schedules, ensuring employee safety and maintaining productivity. The unstable conditions have led to supply disruptions, increased security costs and lower sales as consumers restrict their movements and purchases during the unrest. This, in turn, forces businesses to adapt by looking for new approaches to maintaining operations, such as working remotely, changing logistics routes or implementing flexible schedules, which ultimately builds the so-called 'business resilience'.

Infrastructure damage in Kharkiv is one of the biggest challenges for businesses. According to the Kharkiv City Council, more than 45% of the city's critical infrastructure has been damaged or destroyed as a result of the hostilities. This includes destroyed transport hubs, power grids and water supply systems. Unstable electricity supply and frequent power cuts have hampered the operation of production facilities, reducing production.

For example, agricultural enterprises in the Kharkiv region reduced grain production by 35% due to constant shelling, mined areas, logistical disruptions, and difficulties in storing products (State Statistics Service of Ukraine, 2024). Retailers have significantly reduced stocks at their distribution centres due to power outages. For example, supermarkets in Kharkiv stopped storing frozen products at their distribution centres and left them only in the freezers of their sales venues, which significantly affected the production of frozen food in Kharkiv.

The war has also transformed business structures in the city. Many large enterprises, especially those requiring sustainable supply chains, have temporarily closed or moved to the western regions of Ukraine. Instead, small businesses, especially in the service, catering, and digital sectors, have become more active, able to quickly diversify and adapt to the new environment and partially work remotely.

According to the Kharkiv Regional Economic Development Department, the number of registered small businesses in 2024 increased by another 8% compared to 2023, continuing the positive trend from 2022.

The service sector, which has traditionally been one of the main sources of employment in Kharkiv, has suffered significant losses. Many catering establishments, retailers, beauty salons and entertainment centres have closed due to the danger to employees and customers. According to the Institute for Economic Research and Policy Consulting (IERPC), in 2024, the level of employment in the service sector in Kharkiv decreased by 22%. At the same time, companies that provide digital and remote services, such as IT consulting or distance education, and food delivery are showing resilience and even growth, as they can operate regardless of physical risks.

The industrial sector, which has been one of the main economic drivers of the Kharkiv region, has been particularly affected by the ongoing shelling and destruction of production facilities. Kharkiv's machine-building and aircraft manufacturing companies, which have traditionally played a significant role in the city's economy, are operating intermittently or have ceased operations altogether. This has led to a decline in local budget revenues and an increase in unemployment. According to the Ministry of Economy of Ukraine, the industrial production in Kharkiv in 2024 decreased by 40% compared to the pre-war level.

Kharkiv's enterprises are reorienting their production capacities to manufacture goods that are in high demand in wartime, such as protective equipment, medical equipment, long-term storage

products, etc. In particular, one of Kharkiv's largest machine-building enterprises has shifted its focus to the production of bulletproof vests and equipment for the military. According to the Kharkiv Chamber of Commerce and Industry, the number of companies producing goods for the Armed Forces of Ukraine increased by 30% in 2024.

The financial sector has also undergone significant changes since February 2022. Banking institutions have been forced to limit their operations, especially in the eastern parts of the city, due to risks to employees and customers. According to the National Bank of Ukraine (NBU), the number of active bank branches in Kharkiv decreased by 20% in 2024. At the same time, the region's investment attractiveness has declined due to high risks. Foreign direct investment in the Kharkiv region in 2024 was down 45% compared to pre-war levels, undermining the prospects for a long-term economic recovery. However, the National Bank and the government are trying to support Kharkiv's economy through government programmes.

CONSEQUENCES
OF THE WAR FOR KHARKIV

22%

Reduction of employment
in the service sector

40%

Reduction of production
in the industrial sector

45%

Reduction of investment
in Kharkiv region

The government provides tax incentives for businesses affected by the war and introduces financial assistance programmes for small businesses (e.g. 5-7-9%), which helps to preserve jobs. In addition, international organisations, such as the European Union and the World Bank, are providing funds to support the rebuilding of infrastructure and to support local businesses. The Ministry of Finance estimates that the total amount of international assistance for the Kharkiv region in 2024 was around USD 200 million.

Kharkiv businesses also face additional risks that directly affect their financial plans. They are forced to anticipate costs in case of damage to infrastructure, equipment or buildings in order to minimise losses in the event of shelling or other war-

related incidents. This may include allocating funds to rebuild destroyed or damaged facilities, taking extra security measures, insuring against war risks, and installing temporary solutions such as generators or backup communications systems.

Such costs increase the financial burden on businesses already operating in difficult conditions. Instead of investing in development or modernisation, they are forced to keep some of their assets for emergency recovery. This also affects budget flexibility: due to the unpredictable nature of the situation, companies are forced to keep significant reserves or allocate funds for preventive measures instead of strategic initiatives. In the long run, such war costs reduce profits and reduce the investment attractiveness of companies. But the so-called 'war costs' also include huge donations from Kharkiv companies and Kharkiv residents to support the Armed Forces, as the social responsibility of businesses and the population is at its highest level since Ukraine became an independent state in 1991.

Such an important component as human capital has undergone a transformation not only spiritually and mentally, but also physically due to the changing demographic situation in Kharkiv after the start of the large-scale invasion. Many residents evacuated to safer regions of Ukraine or abroad. It is estimated that in 2022 the city's population decreased by 20-30% due to evacuation and migration. This has led to a labour shortage, especially in industries requiring highly skilled professionals.

Due to the mobilisation of a significant number of men into the Ukrainian military, the labour market in Kharkiv is being forced to transform traditionally male occupations. This shift is noticeable in industries such as manufacturing, logistics, construction and maintenance. Due to the shortage of male labour, women are increasingly taking up vacancies that traditionally used to be occupied by men.

According to the Kharkiv Regional Employment Centre, from 2022 to 2024, the number of women in areas such as production line operators, public transport drivers, and construction workers increased by 15%. In particular, the professions of locksmiths, electricians, commercial vehicle drivers, and even mechanical maintenance specialists are attracting more and more women.

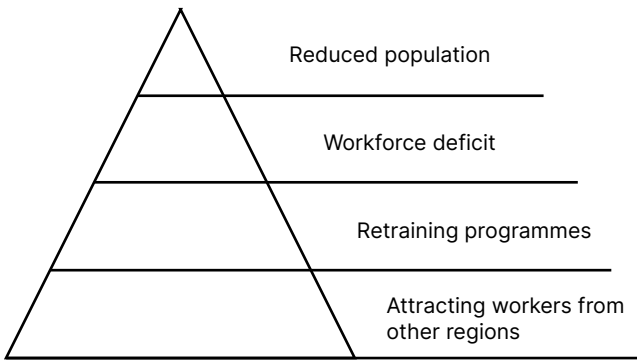
In response to the staff shortage, companies are implementing retraining and training programmes, attracting workers from other regions and expanding remote work opportunities. These measures are aimed at maintaining production capacity and ensuring the continuity of business processes.

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FUTURE PROSPECTS

DEMOGRAPHICS



Eastern Ukraine should become a testing ground for new approaches to creating an effective, fair, comfortable, safe and attractive environment for people, businesses and investments – all the values Ukraine is fighting for in this war. Ukrainians, for the most part, want to live, work, have children and defend this kind of country after the war. Here in Kharkiv, we see the need for such a transformation better and more clearly, because the level of our losses leaves no hope for a mere return to the usual past.

100 years ago, when Kharkiv was the city of the renaissance of Ukrainian culture before the massive communist repressions, Kharkiv residents used to say with pride, ‘The sun always rises in the east.’

Until the outbreak of the large-scale war, Kharkiv remained a white spot on the map for most of the world – a city whose existence was almost unknown. Despite its great history and many talented people born here, the city, as well as the whole of Ukraine, was hidden from much of the world by the deliberate policy of the communist empire and the inferiority complex and ineptitude of the post-communist elite. Now we have global recognition – something that thousands of cities have been trying to get for decades, investing huge amounts of money to attract the world’s attention first to themselves, and only then to their real achievements. And especially due to the nature of our recognition – associated with war, death, and destruction – we have no right to neglect the chance to create a city where you want to live not only because of the somewhat irrational ‘Kharkiv frontline spirit’.

‘Kharkiv: taking off!’ and ‘Kharkiv: a place where the sun rises’ can become our city’s new mottoes.

Our approach to the creation of a local development strategy is based on two main principles:

1. Using of synergies at the intersection of social and economic sectors;
2. Creation of large pioneering projects in cooperation with the private, municipal and public sectors – the so-called ‘Takeoff HUB’.

In our opinion, the effectiveness of the approach, the speed of implementation and the prospects depend on the creation of a Free Economic Zone in the region with the introduction of special regulatory and tax systems. However, even within the current national system, we believe that the proposed approach has good prospects for promoting rapid change and achieving results in all areas of social and economic life.

The list of key strategic determinants is, of course, indicative and needs to be clearly formulated

The outflow of population could not but affect the activities of all educational institutions, which in peacetime formed the human potential of Kharkiv. This is especially true for students and universities, technical schools and colleges. Students who studied at Kharkiv universities came from different cities, regions, and even different countries. Some of them stayed in the city after graduation, forming the demographic base of the population and the inflow of personnel to enterprises. Now Kharkiv is left without this. The war has been going on for three years. Students receive a bachelor’s degree after 4 years of study. A junior bachelor’s degree (college) takes 1.5–2 years.

Students who were enrolled in Kharkiv universities were taken by their parents to safer areas or abroad. Some of them have returned, but this still does not offset the existing outflow of students. If we do not immediately introduce some additional incentive programmes to encourage enrolment in Kharkiv universities alongside the existing benefits, if we do not strengthen specialised education and expand courses at Kharkiv’s specialised and higher education institutions, the city’s potential may soon be lost...

Local authorities are making great efforts to ensure that Kharkiv residents feel the effects of the war as little as possible and lead their daily lives as they did before the full-scale invasion. However, more can be done.

Here is our vision of specific steps aimed at restoring Kharkiv. The first and primary aim is to save lives in the region, and in the short term, to create all the necessary conditions for the migration of ‘old’ and ‘new’ people, primarily qualified specialists, students, businesses, etc. back to the city. This vision is based on the results of the analysis of the previous experience and the understanding of the futility of applying ‘palliative therapy’ to Kharkiv. The war dictates the need and provides a unique opportunity to create a precedent for a bold and rapid transformation of the region into a mighty outpost of new post-war Ukraine in eastern Europe.

STRATEGIC DETERMINANTS

1. EDUCATION

Development of high-quality education, preparing highly-skilled specialists to cover the needs of the region and the country. The key task is integration of educational programmes with the needs of the job market.

2. SCIENCE

Supporting scientific and research establishments and universities, attracting young scientists, development of science-related fields.

3. HIGH-TECH PRODUCTION

Modernisation of production, development of export, attracting foreign investment. Creation of a cluster for innovation, uniting universities, research centres and private businesses.

4. BUSINESS

Creation of an attractive investment climate, free economic zone, shortening of bureaucratic procedures, ensuring businesses have access to funding.

and described. It is based on the experience of discussions in various focus groups, taking into account the unprecedented challenges associated with the events of the large-scale war with Russia and its current and future short- and long-term consequences.

The goal of the proposed strategy is exponential growth through the creation of large projects with synergies at the intersection of business sectors.

The goal is to combine existing projects and stimulate the development of new ones in the full development cycle (description of an idea, business concept, resources, land development, design, effective management mechanisms, financing structure, etc.), conduct professional expertise and implement them on the basis of an open platform for further implementation.

It may be done with the help of the creation of large international infrastructure projects – ‘EAST UKRAINIAN/KHARKIV TAKEOFF HUB’

Such hubs do not replace existing infrastructure elements, but are created to accelerate the provision of additional services and opportunities in certain areas of activity and at their intersection.

These institutions can be state-owned, municipally-owned, privately-owned, or jointly created and operated in partnerships (foundations, NGOs, communities, state and local authorities, friendly investors, universities, businesses, etc.). Consumers of ‘HUB’ services and products can also be representatives of all sectors of the economy and social life, both from Ukraine and abroad. ‘HUBs’ will become ‘growth points’, objects of investment, partnerships, etc.

Kharkiv has undergone significant changes

5. AGRICULTURE

Modern technology in agriculture, support of farmers, development of the process manufacturing.

6. CREATIVE INDUSTRIES

Support of creative spheres, development of innovative approaches, attracting young talented people.

7. TOURISM

Development of tourism infrastructure, promoting touristic routes, attracting tourists.

8. ART AND CULTURE

Support of museums, theatres and other culture-related establishments, development of cultural events.

9. MEDICINE AND PHARMACOLOGY

Modernisation of medical establishments, development of pharmacological industry, increasing the quality of medical service, using the experience of military medical help.

during the war, which are reflected in various sectors of life and business. Infrastructure damage, high risks to the lives and health of employees, and changes in consumer behaviour pose numerous challenges for businesses. It is the forced rapid adaptation, including by switching to remote work and reorienting to military products, that allows businesses to support the economy and the resilience of Kharkiv’s residents. While government and international assistance plays an important role in supporting the economy, the region’s recovery requires long-term efforts and stabilisation to return investment and ensure normal economic functioning. Gradual development and implementation of civic initiatives, such as the ones described above, can significantly strengthen the city’s resilience and speed up its recovery after peace returns.

Nadiia Proskurnina

Doctor of Economic Sciences, professor at Simon Kuznets Kharkiv National University of Economics

Dmytro Kutovy

co-founder of ‘Kharkiv Media HUB’ NGO

OUTRO

DEFIANCE AND CARE: THE MOVING FORCES DURING THE WAR. SBM STUDIO – KHARKIV

'SBM Studio' is the only architectural bureau in Kharkiv that has not stopped working during the entire war. We have always cared for ecosystems of cities: landscape parks, embankments, and public spaces.

We have always been closely in touch with the local communities, which meant that at times we had to oppose the local government or developers. It may be due to this kind of mentality that our team could not abandon the city almost surrounded by enemy armies. We stayed in Kharkiv, simultaneously helping to protect our city by supporting the defenders of Ukraine, saving civilians in trouble, and continuing with our professional projects. It sounds a bit surreal, but this is exactly how things are.

While the SBM men are now either serving in the Ukrainian Armed Forces or helping to clear the region from land mines, the women keep working on architectural projects. We feel privileged to still have the opportunity to devote our time to architecture. We are currently focused on two projects: a shelter for the elderly and disabled people in Kharkiv and a rehabilitation centre for the military in Kyiv.

We certainly hope that the war and the destruction it has brought will somehow trigger changes for the better in our city and society.



SBM Studio

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

ARCHITECTURE OF SOLIDARITY: ABOUT IG ARCHITEKTUR – VIENNA

When I chose to study architecture, the intersection of creativity, technology, and social aspects was what ultimately drew me in. This complex interplay continues to fascinate and challenge me every day in my practice.

In our professional practice, we architects constantly work to anticipate the needs of people we rarely know and transform them into high-quality spaces. We are masters of putting ourselves into foreign worlds, while also having the ability to step back and look at the big picture from a bird's-eye perspective. Thus, it is in the very nature of architects to continually look beyond the obvious.

Within the construction industry, which is often driven by profit, our desire to achieve the best for as many people as possible is frequently perceived as disruptive. There are constant attempts to cut costs, especially in areas designed for social interaction and the creation of communities. The lack of such spaces leads to increasing individualisation, division, and the disintegration of solidarity in our society. Mutual understanding and tolerance can only arise through contacts and relationships, making meeting places and communities all the more important.

At the beginning of the 21st century, there was a desire among architects to come together. Under the three pillars of solidarity, transparency, and sustainability, a group of committed colleagues united to improve the professional access and working conditions of architects. IG Architektur was born. Over the years, many societal issues have been added to the professional-political agendas. The large number of engaged individuals and the broad scope of activities, all still subsumed under the three pillars, inspired me to get involved and make a difference. Looking beyond our own horizons has been a constant companion at IG Architecture for many years, allowing us to learn about other life realities. This endeavour was also pivotal in connecting with colleagues from Kharkiv, who have been fighting for their very survival since Russia's invasion. Showing solidarity and genuine interest, as well as developing new perspectives together, is the core of our dialogue. We are proud that, with the support of the Margarete Schütte-Lihotzky Project Scholarship, we were able to document this dialogue between the cities of Kharkiv and Vienna in this publication.



IG Architektur

Magdalena Lang

architect in Graz, chairwomen of IG Architektur and recipient of the Margarete Schütte-Lihotzky Project Scholarship



In February 2022, Russia started a war against Ukraine. It's been over 3 years, and there is still little hope for an end to this criminal invasion.



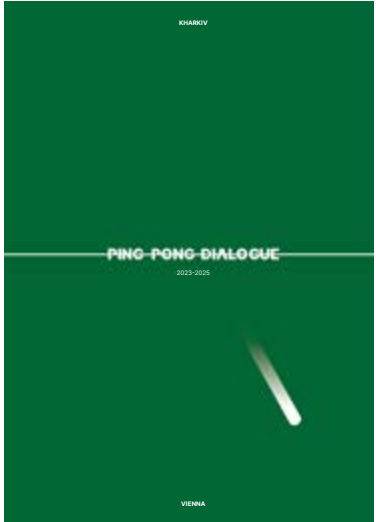
Snapshot of one of the ping-pong meetings in Kharkiv and Vienna in autumn 2023, both groups arranged at a half of a ping-pong table in front of big screens.



As agreed during our online discussions, we visited outstanding examples of Austrian architecture and city planning, for example the Karl-Marx-Hof.



As a part of the meeting, Olha Kleitman gave a lecture about Kharkiv. She also presented the social project 'Velyka Rodyna'.



This report of the unusual coworking process, prompted by the Russian war of aggression, will be published in summer 2025.

2022 2023

2024

2025

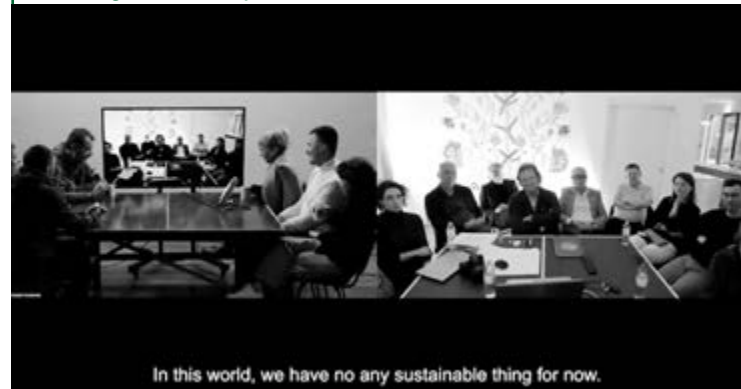
At 2023 Kyiv Biennial (organised in Vienna), architects from Kharkiv and Vienna started a dialogue, which extended beyond the exhibition. Johannes Zeininger designed this sketch to show the idea of the format.



In September 2024 the female members of the Kharkiv team were able to leave Ukraine for a meeting in Vienna to plan the book, a project supported by the Margarethe Schütte Lihotzky Stipendium 2024 of the BMWKMS.



Apart from working on the book, we created a digital sculpture (digisculp) – a film, cut from all our online sessions to show the idea of the dialogue (edited by Jakob Hütter).



A get-together at a Vienna coffee-house.



Members of the dialogue.



TEAM

Kateryna Ahafonova
Olha Kleitman
Magdalena Lang
Ihor Razbeyko
Lukas Schumacher
Yuliia Skyrta
Lisi Zeininger
Johannes Zeininger

MANAGING EDITORS

Valeriia Ahafonova
Michaela Geboltsberger
Katja Puschnik

TRANSLATION AND PROOFREADING

Andriy Borovskiy

LAYOUT AND DESIGN

Euheniia Ilina

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AUTHORS: VIENNA

Ralf Bock
Franz Denk
Lena Diete
Hannes Gröblacher
Martin Hess
Gerhard Huber
Adrian Judt
Thomas Laimer
Magdalena Lang
Lilli Lička
Karoline Mayer
Stefan Mayr
Gabriele Morkunaite
Erich Raith
Georg Schöllhammer
Lukas Schumacher
Susanne Tobisch
Fabian Wallmüller
Lisi Zeininger
Johannes Zeininger

AUTHORS: KHARKIV

Kateryna Ahafonova
Vasyl Bilous
Andriy Hirnyak
Iryna Ivolzhenko
Olha Kleitman
Kateryna Kublytska
Dmytro Kutovyi
Ruslan Misiunia
Nadiia Proskurnina
Ihor Razbeyko
Yuliia Skyrta
Artem Sosipatrov
Yuriy Spasov
Serhiy Strybul
Bohdan Volynskyi

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CREDITS

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(2) Miho Kontorovich
(3) Johannes Zeininger

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Future prospects

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