



verything is Architecture," wrote the Pritzker prize-winning architect Hans Hollein in 1968. Frustrated by the dreary functional blocks that filled Vienna's craters left by WWII bombs, Hollein knew architec- ture had to be about much more than concrete walls.

We may be drawn to a city for work, study, or love, but we stay because it feels good to live there. And in that, we can all play a role.

It was the local grannies who most surprised architect Herwig Spiegl of AllesWird-Gut. During the construction of magdas Hotel in the Prater, a social business established in 2015 by Caritas to employ refugees, Spiegl at first feared local prejudice. The reality was quite the opposite: Neighbors offered donations of furniture and helping hands. The architects had selected designer ceiling lamps with naked wire frames. "Just the idea of a lampshade," he recalls with a smile. "Some old ladies were horrified. Next thing? They knitted 80 unique shades! Not our original idea, but they look great!"

Even companies begged to be involved, launching a "co-planning process" - the very public participation the city of Vienna urges style" of the infamous Pruitt-Igoe high-rises in St. Louis in the 1960s, or the La Courneuve housing estate in Paris in 2004. Extensive global analysis by Gehl Architects, featured in the film The Human Scale, reveals these mistakes in countless planning decisions and cheap housing thrown up in hyper "gigacities" such as Dhaka (in the

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ing locales.

Herwig Spiegl, architect at AllesWirdGut in Vienna

METROPOLE

(sometimes reluctant) architects to do on every project. "You try to design, define, and draw the plan, every little detail controlled," explains Spiegl, also a lead architect at the new Aspern Seestadt development. "On magdas Hotel, that vision was constantly disturbed, or let's say inspired – a very funny experience, because we couldn't predict the final result." The ethos of magdas Hotel grew to consciously integrate locals and immigrants in its public spaces. It's one of Vienna's most soul-enrich-

After years of top rankings from the Mercer Survey, the Economist, too, has dubbed Vienna the world's most liveable place, in part due to the city's emphasis on magdas-style "bottom up" designing. Top-down planning has arguably led to urban tragedies: The 2017 Grenfell Tower fire in London was, as much as anything, the result of city planning mistakes, as was the soulless "international

bottom five of the Economist list). Vienna, one of the world's wealthiest cities per capita, is certainly not Dhaka, (pop. 19 million). But the challenges for urban sustainability – public space, affordable housing, climate change, and community cohesion - are shared across the globe.

Architectural eras are defined by design styles. Will our era bring solutions we can actually live in?

DESIGNING SOCIABILITY

Humans are visual and tactile. We respond to details that stimulate our senses, enliven our stories, elements that may be knitted in the moment, or stretch back two millennia. For Laurids Ortner, whose O+O Baukunst designed the two most iconic modern museums in Vienna (the mumok and the Leopold), Vienna's beauty is shaped by its history. "There is nothing bad about contemporary buildings playing second fiddle here."

The Leopold and the mumok are set in the 90,000m² Museumsquartier, the most sociable spot in the inner city, and one of the largest centers for contemporary art and culture worldwide. The baroque masonry facades and interior courtyards of the former royal stables (planned by Johann Bernhard



Fischer von Erlach) wrap perfectly around their modern neighbors.

The architect Professor Manfred Wehdorn, a specialist in working with national treasures, recalls: "The MQ went through many incarnations. High towers - a Hollein concept became a political issue."

What "saved" the MQ were the brightly colored cubist lounge chairs, designed by architects Anna Popelka and Georg Poduschka in 2002. "A good part of getting public acceptance of the MQ was these 'Enzis'," said Wehdorn. Critical details can influence spaces. "The two big staircases and the pond were also heavily debated," Wehdorn laughed. "But what I saw was that students and visitors would sit here, and on a hot day, they would wade in

the pond. And that is exactly what happened!"

Controversies are nothing new for architects. "Our era is marked by the mass production of buildings stamped out according to some accepted standard," complained Austrian architect and theorist Camillo Sitte in his 1896 call for humanism in design, The Art of Building Cities. "The modern city planner has become impoverished. He can produce only dreary rows of houses and tiresome "blocks" to put beside the wealth of the past."

But how can a growing city house half a million new residents if not in high-rises and blocks? According to the mayor's Municipal Housing Report, Vienna's population will increase 20% to 2.2 million by 2050, requiring some 400,000 new flats. The metro system, whose Jugendstil stations were designed by Otto Wagner in 1898, already carries 500 million rides annually.

The planned U5 line by YF Architects and Franz Architects will transport millions more. Wiener Wohnen, the city's housing agency, has already begun on 19,000 new units under the "Smart City" initiative in greenfield and brownfield (formerly industrial) zones, financed with €733 million in government subsidies, and over €2 billion marked for construction. It is a tradition of long-standing.

THE FIRST GEMEINDEBAUTEN

A fin-de-siècle housing crisis that saw 300,000 homeless and neighborhoods of dark, overcrowded flats with toilets down the hall was

Vienna's University of Economics and Business aims to set a daring example of modern city planning, with Zaha Hadid's Library & Learning Center at the center. Built between 2008 and 2013 on an area of 100.000m², the WU campus hosts 25.000 students Six architectural bureaus, coordinated by BUSarchitecture. were involved in the planning process.



"We are trying to produce a new paradigm, balanced with nature, the market, ecology and density."

Laura P. Spinadel, architect at BOA & BUSarchitecture

compounded by the post-World War I influx of tens of thousands from the former Empire. The new social democratic government of Red Vienna responded with a call for housing designs that would provide "sun, air and light for all." Funded by a dedicated luxury tax, the City Council built vast "superblocks," which offered a high standard of living at affordable prices. They featured good design with private kitchens and baths, balconies, gardens, meeting rooms and theaters, shops and cafés, kindergartens, clinics and services on the ground floor. They even had breastfeeding rooms.

Architect and founder Daniela Walten and Gerhard Girsch of BWM, known for their inventive 25hours Hotel and Hotel Topazz, are managing the renovation of the longest of the Red Vienna superblocks: The fortresslike Karl-Marx-Hof in Heiligenstadt, completed in 1933 by Karl Ehn, is over 1km long and houses 5,000 people in 1,382 apartments. During the February Uprising in 1934, it became the Socialist stronghold against the Austro-Fascists, who bombarded the rebels barricaded inside. An aged look, even bullet holes and tank tracks have been preserved. "We always try to capture the identity of a place in a restoration," says Girsch.

In another example, architects Azita Praschl-Goodarzi and Martin Praschl at p.food painstakingly restored the 70 modernist houses of the famous 1932 Werkbundsiedlung. But they are far more excited by their current project to convert a large block on the Gürtel into a mixed-use community to include the disabled. "We've convinced private owners to combine public areas into common gardens and a pool, and to share an ecological heating system," says Praschl.

Worker, immigrant and "red light" districts along the Gürtel are benefitting from these private-public cooperations. The world's first inner-city Ikea by the Westbahnhof is part of a conscious strategy to adapt to changes in mobility and lifestyle. "Our concept is very green and accessible, with the roof terrace open to the public seven days a week," notes Jakob Dunkl of Querkraft architects. Here, wide wooden steps will double as seats - keeping public space public, and encouraging strangers to sit together.

THE HUMAN ELEMENT

Sitte developed his very modern theory of architecture from classical principles: Create shapes that fit what is inside, not the other way

around; beauty is not always symmetrical; a grouping of irregular objects can produce harmony; interactions occur best in the nooks of irregular squares, by off-center street ornaments, and the corners of crooked streets. The best urban spaces feature these details. Where architecture is lacking, pop-ups, street art and urban farming add life to the city.

The modernist movement that still inspires much of today's stripped-down style dates back in Vienna to 1911, when Alfred Loos horrified city planners, the public and even the Emperor Franz Joseph with the Looshaus' naked marble facade and frameless windows, likened to a face missing evebrows. Criticism forced him to add window boxes.

But in fact, Loos did love detail, despite his provocative thesis in Ornament and Crime (1913). He designed a localized alternative to the "Vienna Style" historicist motifs, or the heady arts and crafts symbolism of the Secessionists. In the Loos Bar off Kärntner Straße, a clever juxtaposition of marble, leather, and tricks of light make quarter columns appear whole in the smoky mirrors.

One hundred years later, and Loos' style and the equally criticized Ringstraßen buildings - are celebrated as intrinsically Viennese.

"People are very much attracted to things that convey a meaning to them."

Marcos Nadal, researcher at the department of psychology, TU Vienna

LIVING WELL

But what elements of architecture actually affect our well-being? "We know more about the right habitat for mountain gorillas than we do for Homo sapiens," says Jan Gehl. This is not for lack of trying. The architectural process is now flooded with specialist consultants analyzing pedestrian traffic and the optimum flexible layouts for urban micro-living. The $\[mathcal{Closs}$ 16.5bn London Crossrail uses cold lighting to speed flow in the passages, and warm lighting to relax commuters on the platforms.

The Hauptbahnhof and its distinctive "crystalline roof" joined Vienna's skyline in 2014. "I think of large-scale developments as a "nucleus effect" to launch the redevelopment of a whole area," says Albert Wimmer, coarchitect with Ernst Hoffmann and Theo Hotz. "You connect the project to the local fabric by developing a story, like the connection to the Belvedere, or the Sonnwendviertel." When the appealingly trashy Südbahnhof was torn down in 2010, beloved artwork lost a home. Locals mourned the iconic silver lettering that towered over the station. Wimmer cautions patience. Plans call for artwork in the tunnels and concerts in the main halls, he says. "It's an organic process, involving history, present culture." The Südbahnhof's old Gryphon is back at the main entrance.

Experts in Neuroesthetics and Cognitive Architecture study how our brains respond to elements of design. Research in London confirms that we walk faster past monotonous glass storefronts, and slow down along a street with small shops. In living spaces, curves, edges, patterns, shapes, access to open spaces and ceiling height matter. And storytelling is key. "People are very much attracted to things that convey a meaning to them," confirms Marcos Nadal, a researcher at the TU. "People are interested in variety, complexity, but within some order or formal framework."

While Hollein wrote about spaces needing "haptic, optic and acoustic properties," architects are still skeptical about using behavioral data to optimize planning. An obvious benefit is in the social interactions Wiener Wohnen hopes to foster. "Imagine if we could design spaces that would encourage cooperation in schools, workplaces or housing projects," says Nadal.

At the award-winning WU Campus (2013), the Zaha Hadid-designed Learning Center is full of curves. The 55,000m² campus with 400 rooms and study spaces for 3,000 students is centered on a wide, public area, landscaped and welcoming. People love it. Laura P. Spinadel, Austrian-Argentine architect with BOA and BUSarchitecture, designed the master plan and the Teaching Center with humans in mind. "We are trying to produce a new paradigm, balanced with nature, the market, ecology and density." Her "Urban Menus" concept will use modeling technology to help the public see what architects and planners envision, increasing the chances of everyone getting what they want.

VIENNESE SOLUTIONS

How we live has changed drastically since 2000. Statistik Austria reports a sharp rise in single households, from 22% to 45% since 2000. Rents are rising faster than incomes, the number of home seekers is growing. Barriers between our work, public and private spaces have blurred.

The "Smart City" initiative, based on the utopian 1970s "compact city" of mathematicians George Dantzig and Thomas L. Saaty, also echoes Red Vienna ideals. Today's Wiener Wohnen demands all new public housing projects offer amenities and design quality, along with contemporary eco- and "microliving" innovations, such as moveable walls and private outdoor space. Architects can now add bigger balconies by exploiting a regulation allowing "decorative elements" to extend across property lines.

"Compact city" designs must also encourage cycling, neighborhood cooperation, social interaction, mixed land use, and sustainability. Ground floors are designated for small businesses and shops to seed a neighborhood and reduce dependence on cars. To avoid the gentrification and speculation rampant in other capitals, the land is offered at $C7/m^2$ and developers must compete with architects' plans in hand. The best project, not the deepest pocket, wins.

MA 50. Vienna's Department for Housing Research and International Relations, considers the new projects as quasi "labs," where planners will learn from the pioneers of the first estates and apply those lessons to the next. The city also monitors a project's socioeconomic profile – by age, education, profession and ethnic mix - to limit ghettoization. A study of the first residents of the Aspern Seestadt in Vienna's 22nd district - one of the largest in the EU, planned for 20,000 residents and as many work spaces - returned mixed results. While the U-Bahn now reaches Aspern, residents miss the city vibe; they complain about ongoing construction, half empty spaces, and limited amenities. Architects and planners hope the public will give the new developments a chance - it's a long game.

The revitalization of stagnating neighborhoods is guided by the city's two-pronged, gradualist approach: "Gentle urban renewal," to avoid negative gentrification; and "slow tourism," a Europe-wide movement to draw tourists out of saturated old towns to discover the culture, details and flavors of outlying neighborhoods. Cities adopt hipster concepts such as "fragmented hotels," like the Urbanauts concept designed by BWM.

Bettina Götz and Richard Manahl of Artec are currently in the early stages of the much-anticipated 58m-high Althan terraced housing project, which will drape a wide, leafy public space over the Franz-Josefs-Bahnhof in the 9th. The project's elevation suits the district's hilly topography. "Two areas of the city will finally have a direct connection, and city views framed with wide, inviting staircases," says Götz. "It will feel like a Viennese "Highline," adds Manahl with a smile, "except the trains are still there."

PRESSURES ON THE OLD CITY

Vienna's inner districts face constant pressure from developers to place high-rises ever closer to the historic center. Last year, Vienna was downgraded to "World Heritage in danger" (potentially affecting tourism and restoration



funding) amid the ongoing controversy over a proposed high-rise complex at the Heumarkt, a site bordering the old city. "This is a very stupid place for a high-rise. Maybe it won't be built," says Hermann Czech, one of the architects on the 1999 Donau City high-rise development in the 22nd district. Once again it's a lifeless, modernist design. "The building would stand out like an idiot," fumes Czech. "There are other ideal spots, such as along the Danube Canal by the Urania."

The mean height for the inner districts is two to six stories, similar to highly liveable areas like Notting Hill and Greenwich Village. When Christchurch, New Zealand, was devastated by an earthquake, Gehl architects polled the public: Their clear preference was an average of six stories. Planners, caving to public pressure, agreed on seven. "We develop high-level dreams for "alphas," but they are just 10%. What happens to everyone else?" asks Spinadel. "We are now talking about smart living, but four people in 50 m², so much technology, so many bad materials, is not smart." Spinadel is sourcing ideas worldwide. "Economists understand 'positive speculation.' When you talk to city planners, architects or developers, all you hear is, "That's too expensive." But what does that mean if in 10 years, we have to destroy what we build so cheaply now?"

It's not yet certain if Vienna's new experiments in urban growth and regeneration will again set an example for the future. Artec's sensitive approach to the former Palais Althan in the 9th district will bring a new openness and much needed neighborhood development to a drab area. Götz likes to quote Loos: The rejuvenation of the Hotel Topazz on Hoher Markt, in Vienna's 1st district, was overseen by the Viennese bureau BWM Architekten. The idea was to create a cheerful counterpoint to the surrounding historical ensemble.

"Everything which does not make the situation better, makes it worse."

PAST, PRESENT, FUTURE

"History can feel like "a backpack you carry around with you," says Wimmer. For Jean Nouvel, "In a city marked by history, architecture is an opportunity to continue games begun in other years." He purposefully tilted his 2010 Sofitel toward Hollein's 2000 Generali Media Tower, forming a gate to the 1st district and Stephansdom.

Austrian architects have often left Vienna to invent the future. Richard Neutra and Rudolph Schindler designed the modern California Aesthetic. The urban planner Victor Gruen pioneered the first pedestrian shopping mall in Kalamazoo, Michigan, in 1959. Peter Ebner developed the 3M lab at UCLA for 3D micro-printing of houses – a trend he predicts will change the building industry in 10 years.

Can architects improve Vienna's liveability even more? Walten would like to design artistic U-Bahn stations that would encourage subway use. Spiegl would develop both sides of the canal to attract more people to the calming waterside. Götz would like to make a museum or library on a tiny patch of desolate land in the culture-starved 5th district, Czech to turn the lst district into a mixed-use pedestrian-mobility zone. And Dunkl? "I imagine a huge center on Heldenplatz, with spacious public areas, attractions and workshops to highlight the value of architecture in society."

To countless Viennese and their visitors, the best place is simply a perfectly designed spot for a coffee, like the Kleines Café, on Franziskanerplatz, or a *pierogi* at the Salzamt – both designed by Czech, who also redesigned the art-filled U-Bahn with Arbeitsgruppe 4 in 1967. "Architecture should feel like it's been there forever," he says. Kleines is full of architectural slights of hand, from the disorienting mirrors and the suspended ceiling that gives a feeling of space, to the salvaged tiles and textiles that lent the bar an instant lived-in feel when it opened in 1970.

The story is in the details. That's how liveable spaces keep us coming back for more.