DEUTSCHES ARCHITEKTURMUSEUM

PRESS

INFORMATION of September 14, 2022

Frankfurt/Main

ADAPTIVE ARCHITECTURE
BUILDING UPON THE EXISTING

Cité du Grand Parc, Bordeaux, Frankreich Lacaton & Vassal Architectes, Frédéric Druot Architecture, Christophe Hutin Architecture; Photo: Philippe Ruault

September 16, 2022 – January 15, 2023
at the interim space of Deutsches Architekturmuseum DAM OSTEND, Henschelstrasse 18, 60314 Frankfurt/Main

PRESS CONFERENCE:
Wed, September 14, 2022, 11 a.m.

EXHIBITION OPENING:
Thurs, September 15, 2022, 7 p.m.

GUIDED TOURS:
On Saturdays, 3 p.m. with Yorck Förster

OPENING HOURS:
Tue/Thurs/Fri 12.00-18.00, Wed 12.00-19.00, Sat/Sun 11.00-18.00, Mon closed

CONTENT

TRANSFORMING, ADAPTING, REPURPOSING – THE ARCHITECTURE OF THE FUTURE WILL BE DEVELOPED FROM EXISTING BUILDING STOCK. *ADAPTIVE ARCHITECTURE* IS DEVOTED TO CURRENT EXAMPLES DISPLAYING THE WIDE-RANGING POSSIBILITIES FOR THE TRANSFORMATION AND NEW USES OF EMBODIED ARCHITECTURAL HERITAGE.

Through the adaptive reuse of existing structures, architecture can make a much-needed contribution to sustainability – after all, 40 percent of global greenhouse gas emissions are attributable to the building industry. The potential of retrofitting and revitalizing is far from being exhausted. Demolition and new construction are often still the default answer when dealing with buildings that no longer appear to meet modern standards, the current market situation, or efficient and economical usage.

Transformative designs are as old as architecture itself. Although the culture of conversion has waned in recent decades, climate crisis and dwindling raw materials underscore the urgency of its revival – not least because the building industry consumes more resources than any other sector of the economy. Other challenges such as pandemics or population growth are changing the classic images and profiles of urban as well as rural areas. Retail department stores are increasingly disappearing from city centers; multi-story car parks and other infrastructure buildings are becoming obsolete due to new, sustainable mobility concepts – and even religious structures are affected by vacancies. At the same time, social change offers the potential for new functions and design forms that can be respectfully integrated into existing buildings.

The exhibition presents international strategies taking creative approaches to existing architecture, but also places a focus on Frankfurt am Main. Based on seven local projects, different perspectives of users and planners toward existing structures are highlighted.

Adaptive architecture also applies to the exhibition design: The furniture, wall partitions and technical equipment all come from the inventories of the Deutsches Architekturmuseum, which is currently being renovated. In the museum's interim quarters (DAM Ostend), it is also evident that reusing existing architecture is far from standard practice: the building complex from the 1950s is still scheduled for demolition in 2025.

Curators of the exhibition are Jonas Malzahn, Katharina Böttger and Mathias Schnell.

PROJECTS SHOWN IN THE EXHIBITION

Remodeling
Lleialtat Santsenca Civic Center, Barcelona, ES
Atrium Houses, Albertslund, DK
SESC 24 de Maio, São Paulo, BR
Zvonařka Bus Station, Brünn, CZ

Extending
K.118, Winterthur, CH
Outreach Foundation Community Center, Johannesburg, ZA
Cité du Grand Parc, Bordeaux, FR
Quay Quarter Tower, Sydney, AU
Single-Family House, Reinbek, DE

Deconstructing
PC Caritas, Melle, BE
Tainan Spring, Tainan, TW
Alster-Bille-Elbe PARKS, Hamburg, DE

Reactivating
Children's and Youth Club, Wiesbaden, DE
Haus der Statistik, Berlin, DE
Sala Beckett, Barcelona, ES
Haus Bräutigam, Schwarzburg, DE

Urban and Rural Renewal
Shangtian Village, Shangtian Village, CN
Gängeviertel, Hamburg, DE
Etting Street Project, Baltimore MD, US

Building in Historic Monuments
Old Church, Vilanova de la Barca, ES
Spaardersbad, Gouda, NL
Martin Luther King Jr. Memorial Library, Washington DC, US
ExRotaprint, Berlin, DE

Taking Stock of Frankfurt/Main
Former Telekom Site, Ostend
Fritz-Kissel-Siedlung, Sachsenhausen
Lyoner Quartier, Niederrad
Juridicum, Bockenheim
Biologisches Camp, Westend
NiKa, Bahnhofsviertel
Silvertower, Bahnhofsviertel

REMODELING

Remodeling, refurbishing and renovating buildings are among the most common construction projects in Germany. Structural alterations to an existing building - regardless of size, age or function - can extend its service life and improve the quality of its usability, spatial well-being and energy performance. The possibilities of remodeling range from minor interventions and surface maintenance to structural transformations and installations. It involves using fewer building materials compared to new construction and thus fewer precious raw materials. The amount of "grey energy" already bound up in existing buildings is increased by only a small proportion - and by extending the lifetime of buildings continues to be utilized.
Modifications also have their limits: In most cases, these are due to the structural and static conditions in the existing buildings as well as legal constrictions, such as development plans, design statutes and building standards. Despite, or perhaps because of such limitations, redevelopment is an individual, creative task for architects and builders that can result in ecologically sustainable and aesthetically appealing solutions.

Lleialtat Santsenca Civic Center
Barcelona, ES

Function: Cultural and community center
Architecture: H arquitectes, Barcelona, ES
Client: BIMSA (Barcelona d'Infraestructures Municipals)
Year: 2017
Site area: 677,50 m²
Floor area: 1.750 m²
Costs: 2.726.626 EUR

Existing building
Function: Cooperative building
Condition: In need of renovation
Architecture: Josep Alemany Juvé
Client: Cooperative Lleialtat Santsenca
Year: 1928

The repurposing of this former workers' cooperative as a cultural and neighborhood center was launched in 2009 as a collaborative process by local organizations. The goal of the core redevelopment was to utilize the historic buildings and preserve their basic structure as much as possible. Located in a lively and densely populated neighborhood, each of the two main buildings open onto the street, creating an inviting entrance area. By removing structural elements in the central body of the ensemble, an atrium was created allowing optimal access to the different spaces and serving as a central area for communication and recreation. A new roof was erected over the entire complex, uniting all three structures: the northern roofs consist of insulated metal panels, while the atrium and southern roof surfaces were covered with translucent polycarbonate.

Atrium Houses
Albertslund, DK

Function: Housing estate
Architecture: Vandkunsten Architects, Copenhagen, DK
Client: Boligselskabet BO-VEST, Albertslund Boligselskab Afdeling Syd
Year: 2022
Floor area: 110.000 m²
Costs: 300.000.000 EUR (300.000 EUR per house)

Existing building
Function: Housing estate
Condition: In need of renovation
Architecture: Fællestegnestuen
Client: Albertslund Boligselskab Afdeling Syd
Year: 1968

Built in the 1960s, the Atrium Houses form a large-scale, low-rise residential development with high building density. The housing was innovative for its time and initially very popular with residents, but its high structural energy consumption became apparent over time. Through a project competition, the architects paved the way for a new method of renovation, bringing both sustainability and design variety to the more than 1,000 Atrium Houses and their surrounding environment. Housing association and tenants can now choose from a multitude of options for individual remodeling. Test houses explore and display a series of the possibilities – including the reuse of discarded materials, which allows renovation with a significantly reduced waste impact.

SESC 24 de Maio
São Paulo, BR

Function: Cultural center
Architecture: MMBB Architects, São Paulo, BR
Client: Serviço Social do Comércio (SESC)
Year: 2017
Site area: 2.243 m²
Floor area: 27.865 m²

Existing building
Function: Department store
Condition: In need of renovation
Architecture: Arnaldo Gladosh
Client: Mesbla
Year: 1940

SESC (Social Service of Commerce) has been active as a private non-profit institution since the 1940s, operating various cultural, sports and recreational facilities in Brazil. By providing unrestricted access to all venues and services, it promotes the local community and social-cultural interaction. The SESC 24 de Maio is located at the former headquarters of a department store in downtown São Paulo. Its conversion into a cultural center is an exemplary display of adapting to meet evolving social needs.

Conceived as a "stacked city", the 12-story building houses a library, restaurant, sports facilities, exhibition spaces, theaters, studios for educational work and a rooftop swimming pool. By removing structural elements and intermediate levels, further recreational spaces were created and open façade areas and gardens integrated.

Zvonařka Bus Station
Brünn / Brno, CZ

Function: Bus station
Architecture: CHYBIK + KRISTOF, Brno, CZ
Client: ČSAD Brno holding, EP Real Estate
Year: 2020
Site area: 26.700 m²
Floor area: 10.000 m²
Costs: 5.000.000 EUR

Existing building
Function: Bus station
Condition: In need of renovation
Architecture: Radúz Russ
Year: 1985

Built in 1988, the Brutalist-style Zvonařka Bus Station stands out with its imposing supporting structure and sculpted roof edges. Following the privatization in 1989, high operating costs meant that the bus station was barely maintained and led to its gradual deterioration. In 2011, the architects campaigned to preserve the bus station and its central role in the socio-cultural fabric of the city. Their effective publicity generated broad social media interest, and resulting European funding meant that the conversion could be implemented. Temporary containers that had been added in the 1990s were removed, and a second entrance was added at street level, opening up the terminal to the city. The supporting structure of the main building was painted white and given a new lighting concept; a red structural element was integrated, housing an information point, ticket office and waiting areas.

EXTENDING

Adaptive additions and extensions allow the usable floor space of an existing building to be increased. Changing requirements, the desire for new interior design concepts or more space are among the reasons for such structural measures. These can include adding one or more additional floors or extending facades and building sections. Implementing these improvements requires an in-depth knowledge of the existing structure, specific site conditions as well as the legal framework. Design options are as diverse as the foundations on which they are built. They range from sensitive, minimal additions that reinforce the characteristic identity of an existing structure, to the complete overhaul and reinterpretation of a building.
Retrofitting existing buildings avoids demolition and the associated loss of precious embodied energy. Clever additions and extensions can improve the thermal insulation of a building in a targeted manner, while simultaneously increasing usable space. This effect is further enhanced by implementing recycled building components and renewable resources.

K.118
Winterthur, CH

Function: Commercial building
Architecture: baubüro in situ, Zurich, CH
Client: Stiftung Abendrot
Year: 2021
Site area: 1.532 m²
Floor area: 1.266 m²
Costs: 5.394.000 EUR

Existing building
Function: Commercial building
Condition: In need of renovation
Client: Sulzer
Year: 1913

The expansion of this three-story industrial building through three additional floors is a pioneering project implementing circular construction. The Kopfbau Halle (main hall) 118, now used for workshops and studios, consists of around 70 % salvaged building elements. The planning process began with the search for suitable building material to recycle, making it a correspondingly open process that operated with sourced building elements. The structure of Halle 118 is built on reused steel girders, clad with a corrugated sheet metal façade and insulated aluminum windows of various sizes. Natural building materials such as wood, straw and clay were also added. Thanks to avoiding any new materials, the architects achieved the equivalent of an around 60 % CO_2 reduction. The natural and reused components guarantee a good indoor climate and were processed with minimal energy input.

Outreach Foundation Community Center
Johannesburg, ZA

Function: Community center
Architecture: Local Studio, Johannesburg, ZA
Client: Lutheran Community Outreach Foundation
Year: 2015
Site area: 120 m²
Floor area: 300 m²
Costs: 200,000 EUR

Existing building
Function: Event hall (uncompleted)
Condition: Solid concrete structure
Architecture: Manfred Hermer
Client: German Consulate
Year: 1977

This community center of a non-profit organization is located in Hillbrow, the lowest-income area of Johannesburg's inner city. Spread out over two levels, it houses a computer room, dance studio and meeting areas for local residents. The building extension rests on the sloped rooftop of an unfinished

event hall, built for the former German consulate in the 1970s. All spaces lead to a communal, semi-public roof garden. The main entrance and the east façade of the building are designed as a translucent vertical access area. The prefabricated wall and roof panels of cold-rolled corrugated steel were clad with clear polycarbonate to provide the required thermal insulation while revealing its underlying structure. The community center was funded by a national lottery grant, and a fundraising campaign initiated by the architects also enabled the construction of an outdoor amphitheater.

Cité du Grand Parc
Bordeaux, FR

Function: High-rise apartment buildings
Architecture: Lacaton & Vassal Architectes, Montreuil, FR; Frédéric Druot Architecture, Paris, FR; Christophe Hutin Architecture, Bordeaux, FR
Client: AQUITANIS O.P.H. de la Communauté Urbaine de Bordeaux
Year: 2016
Site area: 24.200 m²
Floor area: 67.710 m² (44.210 m² existing, 23.500 m² extension)
Costs: 27.200.000 EUR transformation (52.000 EUR per unit), 1.200.000 EUR new dwellings

Existing building
Function: High-rise apartment buildings
Condition: In need of renovation
Architecture: André Conte, François Brochet, Jean-Jacques Prévot, Paul Daurel
Client: Office Public HLM de la Ville de Bordeaux
Year: 1960

Cité du Grand Parc is a large, early 1960s subsidized housing development near the center of Bordeaux, with over 4,000 residential units. In the first stage of a comprehensive renovation program, three of its high-rise buildings (G, H and I), were remodeled. The addition of winter gardens and balconies provided each of the 530 flats with more natural light, open space and a better view of the city. The 2.8-meter extensions made of prefabricated concrete elements created both usable space and a climate buffer zone between in- and outdoors; bathrooms and electrical systems were also upgraded. The amount of work required per flat was minimized through precise planning, thus reducing the burden on tenants to 12-16 days. Upward building extensions created additional apartments with spacious roof terraces.

Quay Quarter Tower
Sydney, AU

Function: High-rise office building
Architecture: 3XN, Sydney, AU; BVN, Sydney, AU; Tom Dixon Studio, London, UK; ASPECT Studios, Sydney, AU
Client: AMP Capital
Year: 2022
Site area: 11.121 m²
Floor area: 102.000 m²

Existing building

Function: High-rise office building
Condition: In need of renovation
Architecture: Peddle Thorp & Walker
Client: AMP Capital
Year: 1976

Located in Sydney's central business district close to the Sydney Opera House, the Quay Quarter Tower was the site of a 1970s office skyscraper that no longer met present-day standards. Instead of demolition, the decision was made to sustainably redevelop the existing structure. This included redesigning and re-cladding the exterior facade and refurbishing the entire building. 45,000 m² of additional floor space was created through a vertical extension, expansion of individual floors and a new podium. In the process, the architects integrated large parts of the existing supporting structure: two-thirds of the girders, columns and floor plates as well as almost the entire core were retained. Compared to demolition and a conventional new construction, this resulted in saving almost 7,500 metric tons of CO2.

Single-Family House
Reinbek, DE

Function: Single-family house
Architecture: Schoener und Panzer Architekten BDA, Leipzig, DE
Client: Private
Year: 2015
Site area: 972 m²
Floor area: 116 m²
Costs: 220.000 EUR

Existing building
Function: Single-family house
Condition: In need of renovation
Client: Private
Year: 1930s

Located in a semi-rural residential area, this single-family house from the 1930s no longer met the living requirements of a growing family. The 66 m² of existing floor space was thus completely renovated to make it more energy-efficient, and a two-story, 50 m² extension was added to the rear of the house. This created a spacious living room with direct access to the garden terrace on the ground floor, and the rooms upstairs were opened up to the roof by removing the attic. To ensure that the new volume of the house was clearly legible and its original form resembling those in the neighborhood remained recognizable, both parts of the building were separated by a visible groove. While the plastered exterior of the existing structure received a composite insulation system, the extension, made exclusively of thermal insulation brick, was rendered white on both the in- and outside.

DECONSTRUCTING

Working with existing architecture also includes the deconstruction of entire buildings, sections of buildings or structures. Gutting or demolishing individual elements – including non-load bearing interior walls and technical services – can be useful depending on condition and changed usage requirements, and

help enable a more efficient use of space and energy resources. Deconstruction often leads to new social, cultural or economic functions of a building and extends its life.
In addition to buildings, roads and infrastructure can also be deconstructed. Unsealing soil not only creates recreational and leisure areas for the community with green spaces and bodies of water, but also new spaces for flora and fauna. Especially in an urban context, renaturation contributes to the growth of plant life and greater biodiversity.
Ideally, the removed building materials and components from deconstruction and renaturation are then reused or recycled elsewhere.

PC Caritas
Melle, BE

Function: Free space
Architecture: architecten jan de vylder inge vinck / inge vinck jan de vylder architecten - A JDVIV / IVJDV A + ETC (ab / from 2019); architecten de vylder vinck taillieu - A DVVT (bis / till 2019), Gent / Ghent, BE; BAVO collective – Gideon Boie, Brüssel / Brussels, BE
Client: Caritas, Karus
Year: 2016
Floor area: 1.800 m2
Costs: 400.000 EUR

Existing building
Function: Psychiatric building
Condition: Slated for demolition
Year: 1908

Part of a clinic ensemble built in 1908, with stately villas and idyllic green spaces, this psychiatric hospital no longer met modern standards and had long since fallen into disrepair: the roof was gone, walls torn down, and windows were no longer glazed. Instead of the planned demolition, clinic management decided to preserve the building at the request of patients and employees. Revitalization of the quasi-ruin into an experimental open space was carried out in close cooperation with various user groups. An easily accessible pavilion-like spatial structure was created by opening the ground floor to all sides. Several ceilings were removed to make room for trees, free-standing glass houses and lounging areas. The building is now supported by a new, green-painted steel structure. The PC Caritas represents an unusual mix of demolition, repair, and adaptive architecture.

Tainan Spring
Tainan, TW

Function: Public park
Architecture: MVRDV, Rotterdam, NL
Client: Tainan City Government
Year: 2020
Site area: 54.600 m²
Costs: 4.700.000 EUR

Existing building

Function: Shopping mall
Condition: Run down, to be demolished
Architecture: C. Y. Lee
Year: 1983

The city of Tainan was traditionally characterized by a network of canals, mainly used for its fishing industry. Beginning in the 1980s, the waterways were gradually closed off from the town - a shopping center was built right next to the Tainan canal, for example. The mall in turn subsequently lost its purpose with the increase in online trading. Following an extended planning process to revitalize the city center, the structure was deconstructed and meticulously recycled. Today, the roof of the underground garage has been transformed into a public park, with an urban lagoon whose water level rises and falls according to the rainy and dry seasons. Plants and shady trees have helped create a space with a special welcoming atmosphere that serves as a meeting place with playgrounds, gathering spaces and a stage. Traces of the former shopping center: occasional supports and pillars from its concrete framework - have been preserved for use by shops, kiosks and other facilities, and stand out in the park as a reminder of the former structure.

UVA de La Imaginacíon
Medellín, CO

Function: Public building
Architecture: Colectivo 720 Architects, Medellín, CO
Client: Mayor of Medellín
Year: 2015
Costs: 3.576.000 EUR

Existing building
Function: Water tanks
Architecture: EPM (Empresas Públicas de Medellín)
Client: EPM (Empresas Públicas de Medellín)

Unidad de Vida Articulada (UVA) is a program that was funded by the city of Medellín from 2012 to 2015, involving socio-cultural interventions at 37 of its total 144 municipal water tanks. UVA de La Imaginacíon is located in a low-income, densely populated neighborhood and is one of the city's oldest drinking water reservoirs. It included four water tanks, two of which were partially dismantled and two that remain active. Through integrative architecture, a recreational public space was created for the neighborhood, using minimal financial and material resources; a wide range of cultural activities at the site also strengthens the local community. One of the biggest challenges and the main strategy of the project was to open up the infrastructure to the residents of the city, without affecting the operation of the municipal utility system.

Alster-Bille-Elbe PARKS
Hamburg, DE

Function: Public park
Architecture: atelier le balto, Berlin, DE; Hallo: Verein zur Förderung raumöffnender Kultur e.V., Hamburg, DE

Client: Freie und Hansestadt Hamburg, Behörde für Umwelt, Klima, Energie und Agrarwirtschaft Hamburg
Year: Since 2019
Site area: 5.100 m²
Costs: 600.000 EUR (since 2019)

Existing building
Function: Recycling yard
Condition: In need of renovation, partly dilapidated
Architecture: Various
Client: Stadtreinigung Hamburg
Year: 1896–1990

The planned green corridor Alster-Bille-Elbe will eventually encompass a 4-km long band of footpaths, cycle paths and public parks in the eastern area of the city of Hamburg. The Alster-Bille-Elbe PARKS project, or PARKS for short, was created in 2019 with the aim of developing a section of the planned green corridor collaboratively - from and with existing elements. The project integrates building structures, local flora and fauna, current uses and new ones. Spaces will be designed in cooperation with the neighborhood community, local associations and municipal representatives. Planning workshops, interventions, walks, cultural events and gardening activities underscore the collective, self-organized working process. Incorporating existing local knowledge opens new perspectives for the future design of public green spaces.

REACTIVATING

Vacancies can result from demographic change, urbanization, digitization and deindustrialization, as well as land and real estate speculation – and affect buildings of different uses, sizes and ages. Revitalizing unused buildings or sections of apartments, single-family homes, office buildings, factories or churches, often requires a change of use.
Transforming buildings into multipurpose structures with open-use and flexible floor plans can activate productive energies. Creative strategies and approaches can uncover the potential in vacant spaces and make them usable. One approach to solving this problem is the interim use of structural facilities for a limited period, which can be carried out with little investment. For vacancy activation to be ecologically and socially sustainable however, it needs to become more permanent. The proactive acquisition of existing buildings safeguards against decay by keeping them in service – it reduces vacancy and is also a political statement.

Children's and Youth Club
Wiesbaden, DE

Function: Children's and youth club
Architecture: A-Z Architekten, Wiesbaden, DE
Client: CASA e. V. Centrum für aktivierende Stadtteilarbeit
Year: 2020
Site area: 700 m²
Floor area: 155 m²
Costs: 350.000 EUR

Existing building
Function: Signal box
Condition: Vacant
Client: Deutsche Bahn
Year: 1963

Once a signal box of the former Wiesbaden West freight station until its closure, this building now houses a supervised children's and youth center. With a few targeted interventions, it was possible to transform the robust element of railway infrastructure into a new use. Massive existing masonry forms the framework of the structure. On the outside, the signal box was given a new, rear-ventilated façade made of regional wood and old timber, with removable elements available to young people in the neighborhood as a creative activity surface – meaning it will be continually changing in the future. Inside, the brickwork has been cleaned and is visible; engineered wood panels (OSB) are used in all the new interventions. On the ground floor there is a multifunctional room with a kitchenette and mobile furniture. The upper floor, with its glass-encased leisure area, provides access to the revitalized roof area.

Haus der Statistik
Berlin, DE

Function: Mixed use development (public administration, culture, education, residential, work)
Architecture: Teleinternetcafé + Treibhauslandschaftsarchitektur, Berlin + Hamburg, DE; ZKB eG + raumlabor, Berlin, DE
Client: Land Berlin
Year: 2030 (expected)
Site area: 3.000 m²
Floor area: 115.000 m²
Costs: 600.000.000 EUR

Existing building
Function: Administration building
Condition: In need of renovation, vacant
Architecture: Architektenkollektiv Manfred Hörner, Peter Senf, Joachim Härte
Client: Land Berlin
Year: 1970

After almost ten years of vacancy, this building complex on Berlin's Alexanderplatz is being redeveloped, converted and expanded for artistic, cultural, social and educational activities, as well as for affordable housing and municipal administrative purposes. The project represents an alternative concept to a market-oriented urban development. An initiative of committed people from the cultural sector, including artists, architects and politicians was able to prevent plans for the sale of the complex to private investors and its subsequent demolition. Since 2018, five cooperation partners from the civic and public sectors have been working equally on this experimental and cooperative neighborhood development project. In an open workshop process, planning was carried out from the start with the intensive involvement and participation of urban groups. Even during the ongoing construction phase, so-called pioneer uses have been taking place, testing flexible operating models and possible synergic uses.

Sala Beckett
Barcelona, ES

Function: Theater and school of drama
Architecture: Flores & Prats Arquitectes, Barcelona, ES
Client: Sala Beckett
Year: 2017
Site area: 1.228 m²
Floor area: 2.923 m²
Costs: 2.500.000 EUR

Bestandsgebäude
Function: Cooperative building
Condition: Vacant
Architecture: Josep Masdeu
Client: Cooperativa Pau i Justícia
Year: 1926

Once a workers' cooperative, used as a meeting place, theater and public venue for parties until becoming vacant, this building is located in a former industrial neighborhood affected by major transformations and gentrification. The still existing interior decoration – mosaic floor coverings, wood carpentry with colored glass – reveals its cultural history and the stories that are an integral part of the building. Lacking preservation constrictions, the architects were able to redesign the interior, using as much as possible from the existing structure. Reusable elements found were carefully dismantled, inventoried and stored. As part of a long planning process, pieces were meticulously analyzed – some were removed and reinstalled elsewhere, allowing traces of the changes to remain visible in the building. This is also why the local neighborhood – many of whom were members of the cooperative, can once again identify with the building, now used as a theater.

Haus Bräutigam
Schwarzburg, DE

Function: Guest house and learning place
Architecture: Haus Bräutigam e. V., Schwarzburg, DE
Client: Haus Bräutigam e. V., Sondervermögen StadtLand Thüringen, Stiftung trias
Year: Since 2019
Site area: 1.000 m²
Floor area: 420 m²
Costs: 2.500.000 EUR

Existing building
Function: Guest house
Condition: Vacant, partly in danger of collapsing
Architecture: Heinrich Macheleidt
Year: 1907

Haus Bräutigam was erected as a guesthouse for its owner Lydia Bräutigam in Schwarzatal, a popular holiday region in Thüringen for many years. Today, many of the formerly busy summer resorts stand

empty. Since 2021, the association Haus Bräutigam e. V. has leased the building to develop it into a place for temporary living and working. Members, supporters and interested parties will be able to use and rent the spaces in the future. A central element of the project is the motto "Join in and do it yourself": formats such as the 'Open construction site' and the Bauschule Haus Bräutigam teach interested laypeople the basic principles of construction and craftsmanship; conversely, the association is able to account for its share of the financing through the workmanship of its members. The collaborative building process makes Haus Bräutigam a multi-layered site of teaching, learning and research in a rural setting.

URBAN AND RURAL RENEWAL

Towns, communities and neighborhoods were developed often over a long period of time by their local residents and users. Urbanization and structural change can lead to building conditions that no longer meet modern requirements or become dilapidated, accompanied by a possible decline in social coexistence and the quality of life in a community.
Urban and rural renewal is concerned with preserving, improving and further developing existing residential structures. This applies not only to vacant buildings in city or town center areas, but also to derelict sites of former industrial and commercial locations. Careful renewal can be realized through the inclusion of existing structures, as well as participatory or self-organized planning. Historic preservation often plays an important role in this process.

Shangtian Village
Shangtian Village, CN

Function: Guest houses
Architecture: Xu Tiantian/DnA_Design and Architecture, Peking / Beijing, CN
Client: Shangtian Rural Revitalization Development Co. Ltd, privat / private
Year: 2018
Site area: 10.123 m²
Floor area: 5.207 m²
Costs: 3.408.000 EUR

Existing Building
Function: Residential and agricultural buildings
Condition: Vacant
Client: Private
Year: Varies

In recent years, many young people have moved away from Shangtian, a 600-year-old Chinese mountain village, to larger cities. This exodus was accompanied by a growing number of vacant and decaying apartment buildings. Drawing upon the town's traditional history and impressive landscape, the architects converted vacant buildings into guesthouses with 30 beds for rural tourism, while preserving their structural heritage with minimal interventions. The project was made possible with the help of an experimental cooperative system, in which the villagers became shareholders of a collective local enterprise through the value of their land, as well as with the support of the local government. The resulting profits from tourism directly benefit the local residents and the preservation of the village.

Gängeviertel
Hamburg, DE

Function: Mixed use development (residential, work, socioculture)
Architecture: Bosse Westphal Schäffer Architekten (BWS), Plan-R Architektenbüro, Hamburg, DE
Client: Gängeviertel Genossenschaft 2010 eG, Verein Gängeviertel e.V., Bezirk Hamburg-Mitte, Behörde für Stadtentwicklung und Wohnen, steg Hamburg mbH
Year: Since 2009
Site area: 4.000 m²
Usable area: 7.500 m²
Costs: 24.700.000 EUR

Existing Building
Use: Mixed use development (residential, work, commercial)
Condition: In need of renovation, largely vacant
Architecture: Various
Client: Various
Year: 19th century

Hamburg's centrally located Gängeviertel quarter, where dock workers in particular used to live, was planned to be sold by the city and then largely torn down. Several hundred activists from the initiative Komm in die Gänge were able to prevent this in 2009 through a "cultural occupation" of the site, saving the twelve largely empty buildings from demolition. The initiative's core goal – besides preserving the structural heritage – is to create spaces for housing, studios, commerce, culture and social activities. As a result of the large public mobilization, the city bought back the quarter and the initiative developed a utilization concept. A 75-year ground lease was signed between the two parties in 2019, and wide-ranging renovation work on the buildings is to be completed by the end of 2027. After that, responsibility for the respective buildings will pass to the Gängeviertel Genossenschaft, a cooperative that aims to make all its decisions on a grassroots democratic basis.

Etting Street Project
Baltimore MD, US

Function: Residential buildings
Architecture: Jay Orr, Mike Dominelli, Baltimore MD, US
Client: Black Women Build
Year: 2021
Floor area: 1.000 m²
Costs: 1.228.000 EUR

Existing Building
Function: Residential buildings
Condition: Slated for demolition
Year: Various

Black Women Build is a bottom-up organized initiative founded in 2017 to rehabilitate dilapidated houses in West Baltimore. Their work concentrates on the structural disadvantages in lending due to racism and lack of access to capital for Black women in wealth building. It promotes home ownership by training

Black women in carpentry, electrical, and plumbing skills, and renovating vacant and crumbling homes in Baltimore. Upon completion, women have the opportunity to purchase the house they worked on, creating intergenerational wealth. The project includes ten two-story row houses that had been vacant for decades and were slated for demolition. Under historic preservation guidelines, the buildings were renovated in several phases, and optimized for low energy consumption and housing costs.

BUILDING IN HISTORIC MONUMENTS

Heritage protection aims at preserving, modernizing and securing individual buildings or entire complexes with special value for the public interest without excessive structural changes – for instance, historic town centers, streets, squares or building ensembles. Architectural monuments are of artistic, scientific, technical, artisanal, historical or urban planning significance.
Historical building preservation and its application are carried out differently depending on the legal environment in a country. There are strict or relaxed rule interpretations as well as varying protection procedures and legal constrictions for structural changes. Contemporary use is often connected with an obligation to care for the historical stock, which can ensure its good condition and extend the life span significantly. When dealing with structural measures, both architects and building owners need to be patient and remain open for a dialogue with the responsible authorities. With mutual respect and a willingness to compromise, results can be achieved that promote the future viability of architectural monuments.

Old Church
Vilanova de la Barca, ES

Function: Multi-purpose hall
Architecture: Alea Olea Architecture & Landscape, Barcelona, ES
Client: Vilanova de la Barca Town Council
Year: 2016
Site area: 410 m²
Floor area: 300 m²
Costs: 275.000 EUR

Existing building
Function: Church
Condition: Partially demolished, ruinous condition
Client: Catholic Church
Year: 13th century

Dating from the 13th century, this Gothic church building in the Catalan municipality of Vilanova de la Barca was partially destroyed during the Spanish Civil War in 1936. 70 years later, the church was transformed into a multi-purpose space for the community. The conversion integrated and secured the preserved apse, fragments from the naves and west façade, thus restoring the original building volume. The architects embraced the value of initiating a "dialogue" between old and new elements, between the building's past and present. Crucial to the reconstruction was the shell of the structure with its façade and roof: The new exterior brick façade incorporates the dense, irregular texture of the old stone and creates continuity, while the interior façade, with its white perforated bricks, contrasts with existing historical elements.

Spaardersbad
Gouda, NL

Function: Multi-familiy house
Architecture: Mei architects and planners, Rotterdam, NL
Year: 2019
Geschossfläche / Floor area: 1.320 m²

Existing building
Use: Swimming pool
Condition: In need of renovation
Architecture: Wolter Bakker
Client: Vereenigde Sportfondsenbaden
Year: 1939

The Spaardersbad is one of the last remaining indoor swimming pools from the 1930s in the Netherlands. It was named by the inhabitants of Gouda, who collectively saved money during the Great Depression to have it built. Listed as an historical building, the swimming pool was closed in 2013. In 2016 the architects began to preserve and transform it into an apartment complex with six units. Their concept is based on three decisive interventions: opening the exterior façade at selected points, restoration of the original skylight, and the installation of a glass façade in the former pool hall. Inside, characteristic existing elements can also be found: Tiles, changing rooms, wardrobes and stair railings have all been reused, and the diving board now serves as a bar in one of the apartments. The swimming pool itself has also been preserved and is now used as a communal courtyard.

Martin Luther King Jr. Memorial Library
Washington DC, US

Function: Library
Architecture: Mecanoo, Delft, NL; OTJ Architects, Washington DC, US
Client: District of Columbia Public Library
Year: 2020
Site area: 43.000 m²
Floor area: 39.600 m²
Costs: 195.000.000 EUR

Existing building
Function: Library
Condition: In need of renovation
Architecture: Ludwig Mies van der Rohe
Client: District of Columbia Public Library
Year: 1972

This library building designed by Mies van der Rohe, with its characteristic steel and glass exterior façade, was upgraded and transformed into a contemporary hub of learning and knowledge. Despite necessary changes and new uses created during renovation, the architects made sure that the existing building, which opened in 1972, and its particular features remain clearly recognizable. Interventions included a redesign of the main entrance and staircases, conversion of the central reading room into an event space

and the removal of columns and partitions on the upper floors, creating open and flexible areas. A landscaped roof terrace and a café on the ground floor were also added; reading rooms were modernized and new areas for children and young people established. The rejuvenation increased the building's public usable space by 60 %.

ExRotaprint
Berlin, DE

Function: / Mixed use development (work, culture, social)
Architecture: Oliver Clemens, Bernhard Hummel, Daniela Brahm, Les Schliesser, Berlin, DE
Client: ExRotaprint gGmbH
Year: Since 2007
Site area: 8.400 m²
Floor area: 11.600 m²
Costs: 6.000.000 EUR

Existing building
Function: Commercial area
Condition: In need of major renovation
Architecture: Klaus Kirsten (among others)
Year: Around 1900 and 1950s

The building complex ExRotaprint consists of eleven sections, including early 20th century 'Gründerzeit' commercial structures and extensions from the 1950s. It has been listed as a protected historic site since 1991. Tenants founded the non-profit ExRotaprint GmbH in 2007 and acquired the ensemble, which was in great need of renovation. Its goals included a diversified use, preservation of the structural heritage and long-term development of the site. Previously used by a company for the production of printing presses, the location was reorganized: 120 rental units now offer space for workshops, offices, manufacturing as well as ateliers and creative studios. Small architectural interventions follow the concept of adapting existing stock; renovations have focused on the building shells, façades and roofs. A few changes to the floor plan and small structural extensions, including a roof extension, have enabled new uses.

TAKING STOCK OF FRANKFURT/MAIN

Frankfurt am Main has been building and adapting for centuries. Today, 49.9 percent of the city's surface area is built-up. Its existing building stock from different architectural periods is used for private as well as public purposes, encompassing residential, commercial, retail and office use, education and science, health, culture and sports. Due to their age, climatic changes, and the ever-changing needs of a society, many of the buildings need to be renovated, transformed – and most importantly: used.
This survey of Frankfurt am Main covers a broad spectrum of issues, using examples from seven different buildings. In addition to realized conversion projects, it also presents buildings whose future is still uncertain despite their architectural development potential. Planners, users and owners report on the challenges and potential of adaptive building with existing structures.

Former Telekom Site
Ostend

Function: Mail order company, office building, temporary use (including studios, offices, gastronomy, DAM)
Architecture: Hans Hach
Client: Neckermann Versand KG
Ownership: Neckermann Versand KG, Deutsche Bundespost/Telekom, Adler Group S.A., ?
Year: 1951, 1953, 1961
Site area: ca. 12.000 m²
Floor area: ca. 30.000 m²
Condition: Functional
Outlook: Demolition planned for 2025

This commercial building complex at Ostbahnhof was originally constructed for a mail order company, and later used by Deutsche Telekom. A real estate developer acquired the building in 2016 and planned its demolition in 2025. It has been used temporarily by offices, studios and gastronomy since the end of 2019 – and since 2022 by the Deutsches Architekturmuseum (DAM). A large part of the site remains vacant. With its over 30,000 m² of usable space, there are many opportunities here. An open skeleton construction of reinforced concrete allows variable positioning of lightweight walls and thus a variety of uses, including residential. The 1950s structure features other spatial qualities such as continuous floor heights of over three meters.
The building is currently on the market again, and its future is uncertain. Demolition would mean the loss of precious embodied energy, as well as generating large amounts of waste.

Fritz-Kissel-Siedlung
Sachsenhausen

Function: Housing development
Architecture: Menges Scheffler Architekten, Frankfurt am Main, DE
Client: Nassauische Heimstätte, Vonovia
Year: 2021
Gross floor area: 10.480 m² (Nassauische Heimstätte: 82 residential units; Vonovia: 48 residential units)

Existing Building
Function: Housing development
Urban design: Ernst May, Herbert Boehm
Client: Nassauischen Heimstätte, SÜWAG
Year: 1955

Upward building extensions are an instrument well-suited to urban infill development and the creation of additional living space. 130 new apartments were created as a result in the landmarked housing estate Fritz-Kissel-Siedlung, almost 70 years after its construction. The buildings were topped up with 1-3 room apartments, with about a quarter of the apartments declared as social housing for low- and middle-income renters.
Prefabricated wooden frame modules were placed on top of the existing buildings. The façade is screwed on and balconies inserted as one piece, meaning that the components can be easily dismantled and returned to the material cycle. Adding one or two stories to each building took an average of three

months. Scaffolding and heavy machinery did impair residential use, however residents were able to remain in their apartments almost continuously during the construction work. Along with the upward extensions, a new landscape design was also created.

Lyoner Quartier
Niederrad

Function: Mixed-use area
Architecture: Various
Client: Various
Year: Since 2010 (first conversion of a high-rise office building)
Area: 1.440.000 m²

Existing area
Function: Commercial area
Condition: In need of renovation, partial vacancy
Architecture: Various
Client: Various
Owner: Various
Year: From 1960s onwards

The Lyoner Quartier is evolving from a commercial district into a neighborhood for living, working and leisure. The “office city” Bürostadt Niederrad was created here in the 1960s. At that time, the model of an "office city in the green” with high-rise buildings, car-friendly access and park-like surroundings was seen as progressive. The shortcomings of this purely mono-functional structure became apparent however during the 1980s: its one-sided usage and lack of connection with Frankfurt's inner city led to growing vacancy rates, reaching a peak of 30 % in 2006. The conversion of offices into residential space followed, including apartments for families as well as single-occupancy “micro apartments”. Other urban renewal measures included creating playgrounds, small parks, continuous green strips and bike paths, and the creation of a social infrastructure.

What are the challenges of urban renewal? What form of urbanity is produced? In addition to urban transformation, two repurposed buildings are presented.

Juridicum
Bockenheim

Function: University building until the end of 2022
Architecture: Ferdinand Kramer (design), Heinrich Nitschke (execution)
Client: Goethe-Universität Frankfurt, Land Hessen
Ownership: Land Hessen, Stadt Frankfurt am Main, ABG-Frankfurt Holding
Year: 1962/63 (planning), 1963–1970 (implementation)
Site and floor area: 22.802,1 m2 (total usable area), twelve floors above ground
Condition: Functional with need for renovation
Prospect: Planned interim use (housing for refugees, AdA Kantine, culture), 2023 call for planning competition for longer-term use (Hochschule für Musik und Darstellende Kunst, Zentrum der Künstes,

housing), preservation of existing building uncertain

The 1960s structure was erected for use as a university building and is part of the Bockenheim Campus. The former university grounds are scheduled to be developed into the future Kulturcampus Bockenheim, with a mixture of uses from culture to research, commerce and housing.

The university will vacate the Juridicum premises by the end of 2022. The building's structure and design allow for simple thermal refurbishment due to its mounted façade cladding. Its shallow depth also offers very good options for light exposure in residential use.
The development plan adopted in 2016 still included the demolition of the building, but this is currently being increasingly called into question. The city of Frankfurt am Main (Department of Culture) and the State of Hesse are planning a joint competition for longer-term use of the grounds (University of Music and Performing Arts, Center for the Arts and housing). Until then, housing for refugees is to be created here, and it is also a desired temporary location for the solidarity-based restaurant (AdA Kantine) as well as other cultural uses.
How can the existing building be preserved, and best be used? These questions are currently being addressed by initiatives, city politics and architectural firms, among others.

Biologisches Camp
Westend

Function: Vacancy (southeastern part), office building (northwestern part)
Architecture: Ferdinand Kramer, Walther Dunkel, Helmut Adler
Client: Goethe-Universität Frankfurt, Land Hessen
Ownership: Land Hessen (southeastern part), Stadt Frankfurt am Main (northwestern part)
Year: 1954–1956 (southeastern part: Institute buildings for anthropology, botany, microbiology and zoology; auditorium; connecting passage; gardener's house; greenhouses), 1966 (northwestern part: lab building and farm building)
Condition: In need of renovation (southeastern part)

The southeastern part of the architectural ensemble (former Biological Institute) is now so dilapidated that it can no longer be entered - the buildings have been empty since 2011. However, their flexible structure and central location invite an interesting mix of uses: Interior and exterior walls can be moved without static changes, which would enable their use for public facilities as well as heterogeneous living and working forms. Various scenarios for the buildings have been discussed since the Goethe University's department of Biological Sciences moved out, and under fluctuating political majorities.

Why is a large part of the landmarked Biologisches Camp still empty and falling apart? This question was also asked by an architecture student in 2018, whose design for a mixed use of the buildings is presented here alongside historical plans.

NiKa
Bahnhofsviertel

Function: Residential building and public areas on the ground floor
Architecture: Architekturbüro Meides & Schoop, Offenbach am Main, DE
Client: Hausprojekt NiKa GmbH

Year: 2019
Site area: 234 m²
Floor area: 1.790 m²
Costs: 2.700.000 EUR (renovation costs)

Existing building
Function: Office and commercial building
Condition: In need of renovation
Architecture: Richard Heil
Owner: Heinz Dinter Rauchwaren- und Rohfellgroßhandel, later: Stadt Frankfurt am Main
Year: 1958

NiKa is a multi-generational housing project that has succeeded in creating sustained affordable housing in a central location, based on the "Mietshäuser-Syndikat" (union of rental properties) model, which enables long-term collective ownership by the residents.
Site of the Frankfurt fur trading business for almost 50 years, the building had been partially vacant since the year 2000. The property was donated to the city by the owners' association, leading to its public tender through a conceptual bidding process. This instrument allows an allocation to the best concept at a fixed price. NiKa was awarded the contract and the conversion into a community housing project followed.
The building's reinforced concrete skeleton structure allowed floor plans to be redesigned. Seven rooms of equal size were created on each residential floor, with a living, dining and cooking area per unit – three different apartment sizes are available. The seventh floor and a newly created roof terrace are common areas. The ground floor areas are used publicly together with and for the residents of the neighborhood.

Silvertower
Bahnhofsviertel

Function: Office building
Architecture: schneider+schumacher, Frankfurt am Main, DE
Client: Dresdner Bank AG, Commerzbank AG, Deutsche Bahn AG
Year: 2008–2011
Gross floor area: 77.509 m²
Costs: 110.000.000 €

Existing Building
Funtion: Office building
Condition: In need of renovation
Architecture: ABB Architekten
Client: Dresdner Bank AG, Commerzbank AG
Year: 1978

With its 166 meters, the Silvertower was the tallest high-rise building in Germany between 1978 and 1990. 30 years following its construction the office building was completely retrofitted and sustainably upgraded. Architects and clients agreed not to change the futuristic shape of the tower and continue using existing aluminum facade elements. Forward-thinking planning during its construction in the 1970s made it possible to simply remove each façade element and factory-fit it with new glazing and better thermal

insulation. This eliminated waste and saved the embodied energy already invested in the structure.

The structural design is characterized by recessed columns, a floor height of 4.70 meters and systematically integrated passages for building services and infrastructure, allowing easy adaptation to current fire protection and air conditioning requirements. The project demonstrates how even complex buildings such as high-rises can be renovated sustainably and what conditions new buildings should have in order to be adapted easily in the future.

IMPRINT

ADAPTIVE ARCHITECTURE – Building Upon The Existing
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COOPERATION

Conversion is the new building. After all, investments in existing buildings are investments in climate protection. The architecture magazine Baumeister is devoting three issues during the winter months to the topic of building on and examining how existing architecture can be adapted to new tasks - be it by rebuilding, adding on or extending. And poses the question of how the prioritization of the existing building stock will change the profession of architect in the years to come.

The Baumeister issues will be available at DAM Ostend when they are published.

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