



DESIGN
EDUCATES
AWARDS

Edition
2021
winners
announcement

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Summary 2021

short

The Design Educates Awards recognize, showcase, and promote globally the best ideas and implementations of architecture and design that can educate. DE Awards reach beyond the regular architecture contest priorities, it searches for something that will have a lasting influence beyond the everpresent effects of design and architecture.

Summary 2021 short

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Each year, the esteemed panel of judges selects the outstanding ideas and implementations in the categories of architectural design, product design, universal design, and responsive design. The Jury of the edition 2021 has been joined by Prof. Alison Brooks, Prof. Farshid Moussavi, Prof. Jürgen Mayer H., Prof. Toyo Itō, David Basulto, Hani Rashid, Konstantin Grcic, Andrés Reisinger, Enrica Cavarzan, Dr. Peter Kuczia, Aidin Ardjomandi, Ir. Kristina Bacht, Issa Diabaté, Alain Gilles, Hella Jongerius, Hadi Teherani, Marco Zavagno.

In addition to the main prizes, the awards include “Emerging designers” recognition (for the best student designs), and “Solarlux Choice” (the selection of the projects made by representatives of Solarlux - strategic partner of the awards).

All winning projects are available on the official website of the awards: www.designeducates.com Materials for the press (images and descriptions) are available [here!](#) The laureates of the main prizes are:

Winner for the year 2021 in architectural design: “Zheshui Natural Library” (by LUO studio)

Winner for the year 2021 in product design + Emerging designers 2021: “GoRolloe” (by Kristen Tapping)

Gold prize in universal design: “Braille meets emoticons - a visual language for visually impaired” (by Walda Verbaenen)

Gold prize in responsive design: “Villa Ypsilon” (by LASSA and collaborators)

Solarlux Choice 2021: (1) “Public Library, Dornbirn” (by Dietrich | Untertrifaller with Christian Schmoelz and collaborators); (2) “Prisma - Schorndorf Station” (by schneider+schumacher and collaborators)

The host of the ‘Design Educates Awards is Laka Foundation (a nonprofit and nongovernmental organization). The theme of the awards has been inspired by the research called Educating Buildings (Bildende Bauten) by Dr. Peter Kuczia. Contact the organizer at hello@designeducates.com The strategic partners of the awards are Solarlux GmbH and Architecture in the Foyer. Media sponsors are: Archdaily and v2com. Media partners are: World Architecture Community and Global Design Awards Lab.

Summary 2021 long

The Design Educates Awards recognize, showcase, and promote globally the best ideas and implementations of architecture and design that can educate. Our awards reach beyond the regular architecture contest priorities. DE Awards reach beyond the regular architecture contest priorities, it searches for something that will have a lasting influence beyond the everpresent effects of design and architecture. Each year, the esteemed panel of judges selects the outstanding ideas and implementations in the categories of architectural design, product design, universal design, and responsive design. So far, the awards have been joined by more than 1000 participants from 40 countries, 50 members of the judging panel; approximately 100 laureates have been selected so far.

Summary 2021 long

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The winners, laureates of prizes, special recognitions, and honorable mentions, are selected in categories of (1) architectural design, (2) product design, (3) universal design, and (4) responsive design. In addition to the general evaluation, the student project with the highest score is awarded with the label of Emerging Designers. Parallel to the jury's evaluation, representatives of Solarlux select the laureates of Solarlux Choice.

All winning projects are available on the official website of the awards: www.designeducates.com Materials for the press (images and descriptions) are available [here!](#) The laureates of the main prizes are:

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The jury of the edition 2021 has been joined by:

Prof. Alison Brooks (architect, principal of Alison Brooks Architects)

Prof. Farshid Moussavi (architect, professor at Harvard GSD, founder of FMA)

Prof. Jürgen Mayer H. (architect, artist, founder of J. MAYER H)

Prof. Toyo Itō (architect, founder of Toyo Ito & Associates)

Dr. Peter Kuczia (architect, initiator of the 'Design Educates Awards')

Aidin Ardjomandi (industrial designer, founder of Ardjou Design Studio)

Ir. Kristina Bacht (publishing director, director of AIT-ArchitekturSalons)

David Basulto (founder, CEO, and editor-in-chief of ArchDaily)

Enrica Cavarzan (designer, co-founder of Zaven)

Konstantin Grcic (industrial designer, founder of Konstantin Grcic Design GmbH)

Issa Diabaté (architect, co-founder and managing director of Koffi & Diabaté Group)

Alain Gilles (product and furniture designer, founder of Alain Gilles The Studio)

Hella Jongerius (industrial designer, founder of Jongeriuslab)

Hani Rashid (architect, co-founder of Asymptote, Head of Studio_Hani Rashid)

Andrés Reisinger (artist, director, designer & founder Reisinger Studio)

Hadi Teherani (architect, designer, founder Hadi Teherani AG)

Marco Zavagno (designer, co-founder of Zaven)

Summary 2021 long

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The previous panels have been joined by among others:

Prof. Barbara Holzer, Prof. Ben van Berkel., Prof. Mikala Holme Samsøe, Stefan Behnisch, Jan Musikowski, Christoph Richter, Matthias Hollwich, Mikiya Kobayashi, Amandus Samsøe Sattler, Sarang Sheth, Arturo Vittori, Prof. Shingo Ando, Maria Aiolova, Tobias Wallisser, Prof. Carlo Ratti, Paul Clemens Bart, Marvin Bratke

Category of architectural design

Category of architectural design

Winner for the year 2021 in architectural design

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Zheshui Natural library

Design team:

Team Representative/Chief architect: Luo Yujie

Design team: LUO studio

Participating designers: Huang Shangwan

Client: Zheshui Village Committee, Liuquan Township, Lingchuan County, Shanxi Province

Construction firm: Old Wu XiaoWu and his workmates, Xiao Fang and his workmates,

The villagers of Zheshui Village

Photo credits: Jin Weiqi

Description:

Zheshui Village is located in Taihang Mountains, Shanxi. The village and the topography are closely articulated. Many houses there are built by leaning on the mountain. Zheshui Natural library is inspired by this traditional construction method, and the building is attached to the rock. The "bookshelf" provides three functions in this building: column-grid structure, place to seat and book containers. All foundations are light foundations with minimal natural damage to the land. For the sake of saving materials, the timber we used are very thin. The timber columns are 4 cm thick in section, the timber beams are 2.5 cm wide in section. Each structural component is connected to each other to form a stable structural system. The gap between the columns is filled with glass bricks, which is both an internal and external partition at the same time supporting building units. The roof is assembled with two layers of panels, one layer is laid horizontally, and the other layer is laid longitudinally. All the components work together to form the structure system. They are structures, enclosed components, and windows.

Gold Prize in architectural design

Kö-Bogen II, Düsseldorf – Europe's Biggest Green Facade

Construction period: 2017-2020

BGF office building: 41,370 m²

BGF underground car park: 23,000 m²

Sustainability certificate DGNB Platinum pre - certificate, supergreen®

Client: Düsseldorf Schadowstraße 50/52 GmbH & Co. KG

Design team:

CENTRUM Projektentwicklung GmbH, Düsseldorf and B&L Group, Hamburg

Architect ingenhoven architects, Düsseldorf

Team ingenhoven architects: Christoph Ingenhoven, Peter Jan

van Ouwerkerk, Cem Uzman, Mehmet Congara, Ben Dieckmann,

Patrick Esser, Vanessa García Carnicero, Yulia Grantovskikh,

Tomoko Goi, Olga Hartmann, Jakob Hense, Melike Islek, Fabrice-

Noel Köhler, Christian Monning, Daniel Pehl, Andres Pena

Gomez, Peter Pistorius, Lukas Reichel, Jürgen Schreyer, Susana

Somoza Parada, Jonas Unger, Nicolas Witsch, Dariusz Szczygielski, Stefan Boenicke, Thanh Dang
Project management AIP Bauregie GmbH, Düsseldorf
Structural planning Schüßler-Plan Ingenieurgesellschaft mbH, Düsseldorf
Development plan Heinz Jahn Pflüger - Stadtplaner und Architekten Partnerschaft, Aachen
Geotechnical consulting ICG Düsseldorf GmbH & Co. KG
Facade planning - green facades and green roofs ingenhoven architects
Phytotechnology - building greenery Prof. Dr. Strauch, Beuth University of Applied Sciences, Berlin, Department of Life Sciences and Technology
Consultation on vegetation ecology Prof. Dr. Reif, Albert Ludwigs University Freiburg,
Chair of Site Classification and Vegetation Science
Photo credits: ingenhoven architects / HGEsch

Category of architectural design

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Description:

Kö-Bogen II, Düsseldorf - Europe's Biggest Green Facade
8 kilometres of hornbeam hedges, over 30,000 plants - Europe's biggest green facade is a key element of the Kö-Bogen II commercial and office building - The ensemble marks the conclusion of an extensive urban renewal project in the heart of Düsseldorf. Kö-Bogen II represents a paradigm shift: from an urban perspective, it signals a departure from the automotive era and a turn towards people oriented planning. And with Europe's largest green facade, it offers a forward-thinking urban response to climate change. Giving back as much green as possible to the city is a task that ingenhoven architects have been working on for decades and across different climate zones. With its super-green® concept, the office is taking a comprehensive approach to sustainability.

Today, at the site where an elevated motorway dominated the landscape until 2013, the Hofgarten has moved back into the heart of the city. The composition of Kö-Bogen's dynamic green facades was inspired by Land Art. They enable the new building complex to oscillate in a deliberate indeterminacy between city and park, and open up the view to icons of post-war modernism - the clear austerity of the Dreischeibenhaus [1960] and the buoyant lightness of the Schauspielhaus [1970], whose renovation was also undertaken by ingenhoven architects. Kö-Bogen II is a contemporary answer to these two historic landmarks, confident without being overbearing.

A variety of uses - retail, gastronomy, offices, and recreation - come together on a gross floor area of 42,000 square metres. Measuring 27 metres high and 120 metres long, the facade of the main building along Schadowstrasse - one of the busiest shopping streets in Germany - is completely glazed. Expanded metal slats structure the interior, varying in transparency from closed to open, depending on the perspective. The other facades including the roof are more tempered and planted with 8 kilometres of hornbeam hedges. The accessible sloping roof of the 10-metre-high building opposite is also completely green and invites visitors to relax and take in the sun.

Eight kilometres of hornbeam hedges

The hornbeam was chosen as a native hardwood, and the selected varieties keep their leaves in winter. This greenery improves the city's microclimate - it protects against the sun's rays in summer and reduces urban heat, binds carbon dioxide, stores moisture, absorbs noise, and supports biodiversity. The ecological benefit of the hornbeam hedges equals that of approximately 80 fully grown deciduous trees.

Silver Prize in architectural design

5 Feet

Design: Ryuhei Ichikura, Department of Architecture, Massachusetts Institute of Technology
Credits for photos: Ryuhei Ichikura

Description:

People have thoroughly controlled boundary in architecture. I call such architecture suffocating during this period. A term “zasso”, meaning vegetation that grows independently of what people intend, originated in Japan where the monsoon climate allows random vegetation to grow rapidly. The people have seen zasso as absolute obstacle in the modern life, and have tried eliminating it by herbicide. This proposal challenges the fully intended and controlled boundary in architecture, and aims to keep negotiating it with zasso and children that would go against the people’s intention in a world of 5 Feet above the ground.

Housing for a New Old Town

Minamino is one of the youngest suburban New Towns in Tokyo, and gradually becoming “an old town”. This proposes housing where the isolated senior citizens can move and keep living in the town together. Tamagawa River runs right northern to the town, and a wide variety of zasso grows in the riverbed and the nearby parks. The site is located in the middle of the town, including seven house units.

Houses Floating on Zasso

Low-rise and small-footprint houses stand separately so that the seeds of zasso are delivered well to the in-between spaces via winds, birds and small animals from the outside. Irregular pitch of the roofs, depth of the eaves, and distance of the houses generate microclimate in the site so as to let various zasso inhabit simultaneously. Access to the houses is elevated according to the predicted height of zasso, which is 3-5 feet depending on the conditions.

Zasso Trimming Workshops for the Kids

College students who study landscape or gardening at nearby universities hold zasso trimming workshops for the kids in Minamino. Under the students’ instruction, the kids are to design and handcraft their own open ground in the site by trimming zasso where they can play together across the schools such as hide-and-seek, skipping ropes or playing with flowers.

Connections across the Open Ground

The houses have openings at their feet, which can be connected to the open ground after the trimming. Since these openings are tall enough for the kids, they go in and out of the houses to communicate the residents. Then, the everyday lives of the residents are connected across the open ground via the kids. Although this ground is refilled with zasso after a while, the kids are to design the ground again but in a different shape, which makes a different connection with the residents. This continual negotiations of the boundary and transitory connections of the people nurtures heterogeneous and interactive lives in Minamino.

Category of architectural design

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Bronze Prize in architectural design

Fo(u)r friends

Studio: supertecture gUG

Site: Dhoksan, Nepal

Year :2017-2019

Task: 4 new schoolrooms for classes 6 to 8

Client: Patrizia Children Foundation

m²: 150

Costs: 100.000€

Design team: team supertecture and students from HS Augsburg

Photo credits: supertecture and Patrizia Children Foundation

team:villagers of Dhoksan, students from HS Augsburg and volunteers from supertecture: Till Gröner, Angi Fendt, Nadine Maier, Philipp Reinecke, Tobias Veit, Valentin Kingler, Elek Fogarassy, Michael Elstner, Stefan Seifert, Simone Schiller, Anna-Lena Rischer, Marlit Pfeiffer, Daniela Lukas, Paul Hacker, Lena Mischalik, Stefan Meyer, Veronika Lell, Benedikt Dengler, Annabella Ranft, Carolin Jande

Category of architectural design

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Description:

about supertecture

ARCHITECTURE IS A SUPER-POWER

It can transform, protect, energize and rescue society.

Aware of the underestimated general "super-power of architecture @" we feel responsible for serving biggest basic public and social needs worldwide with our individual desire and our powerful profession.

That's why we founded supertecture:

a non profit "think-tank-task-force" for the realisation of social community buildings with young Robin Hoods from all over the world who want to make a change through meaningful architecture and civil engineering.

Supertecture is a growing voluntary movement of young architecture that is priceless in a double sense:

We are longing for architectural quality with a high level of detail, joy, innovation, supervision and thirst for adventure - a passion that could not be financially compensated in its respective contexts. Our salary is the possibility to serve unprivileged communities with doing what we are in love with.

We rather seek to bring architectural peace and happiness to those who can't afford any architecture at all.

Fo(u)r friends

After Nepal's century quake in 2015 we have been invited to the primary school of the Himalaya mountain village „Dhoksan“. The school was in need of four additional rooms: three classrooms and a multifunctional library. In order to display some of Nepal's unlimited possibilities for reused, recycled, regenerative and circular construction technologies we decided to build every room as an individual house - every „classhouse“ from different innovative and underestimated materials: free donated „earthquake“ bricks, earth+bamboo+straw, „earthquake“-rocks + rocky slades, 700 old „earthquake“windows.

old windows

Nepal's latest earthquake destroyed more than 800.000 buildings. Many of the incorporated windows have later been dumped in stocks for old windows and wood. We managed to collect around 700 old windows and to refurbish them. They became both: facades and roof of our multifunctional window-house. It features a library, a multipurpose room in the upper floor and a convenient students-slide towards their homes.

reused rocks

Some years ago almost every traditional building in our village's neighborhood was built from rocks covered with rocky slades. After many houses collapsed during the latest earthquake no one is rebuilding these traditional houses anymore. Reinforced concrete skeleton structures are replacing traditional architecture and former grace of cities and landscapes. By using all those collapsed rocks again and by inventing round rock

windows we tried to make rock-houses “en-vogue” again. All rocky materials in our classroom have their origin in former local rock buildings.

donated bricks

In Nepal’s first brick-crowdfunding we convinced hundreds of households to donate some of the bricks from their earthquake-ruins. Finally we collected more than 14.000 bricks of 50 different types. For every individual type of brick we have designed a unique bonding. Even the roof consists of two different tiled pitches.

rammed earth

The second classroom is made of rammed local earth. Since the people of Dhoksan have not been very confident of using this free material we decided to build our house from five different layers with mixtures ranging from very simple to rather sophisticated earth aggregates: First we mixed earth with a little bit of cement, later with straw, needles and even cow shit. The building’s roof is made of locally treated bamboo and it is covered with straw. Both: treatment of bamboo and straw had to be reinvented in „our“ village.

Category of architectural design

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Special recognition in architectural design

Shougang No.3 Blast- Furnace Museum

Chief Bo Hongtao (Team Representative)

Design Team: Bo Hongtao, Liu Pengfei, Jiang Ge, Fan Dandan, Kang Qi, Wang Zeng, Zhou Mingxu, Zheng Zhixue

Structural and electrical design (CCTN Design) Bo Hongtao, Zhao Jiakang, Zhang Yang, Gao Wei, Zhang Zhicong, Zhu Xueyun, Kang Qi, Zhou Mingxu, Zhao Mengmeng, Ni Ziyu, Zhang Ying, Pang Tailong, Tan Xirui, Li Kehui, Wang Siwei, Xie Xiaoli

Construction drawing (CCTN Design):

Guo Facheng, Cui Xueyu, Wang Chao, Wang Xiangrong, Wang Meng, Hu Cuijuan, Zheng Hao, Zhou Le, Sun Yue, Jiang Zhiyong, Zhang Lixin, Su Wenjing, Li Yungen, Yu Ming song

Photo credits @CCTN Design

Description:

Located at the northwest end of Shougang Park, the project covers an area of about 2.53 hectares, which is next to the Yongding River and backed by Shijing Mountain. The project is the most distinctive and stunning area with highest density of iron making equipment, as the starting of enterprise construction a century ago.

The design uses 3 core strategies, which specifically refer to keeping the authenticity of heritage in physical environment, adding new functions to make the heritage blend with social life and showing respects to history via exhibition arrangements and spatial devices.

The new and old buildings stay in a harmonious relation. The renovated part retains the holistic features of the industrial heritage while implanting new functional spaces inside. And the newly-built part utilizes the minimal volume and landscaped architecture to avoid interference on the style of heritage.

The main function of the project is the Shougang Museum, which displays the heritage and legacy of the corporate development history. Through the way of empathy, visitors are evoked to go through the company’s century-old development history and the vision of the rise of the national industry behind it, the dream of the rise of the country and the city, the hardships and struggle of the enterprise and its employees, as well as the process of technological growth in the iron making industry etc. Some parts of the blast furnace itself were turned into sight-seeing areas where visitors can interact with the heritage, environment and the city. These include the casting house platform, canopy platform, hot-blast stove platform and the rooftop platform.

The underwater parking lot meets the requirements for transpor-

tation infrastructure and greatly improves the convenience and accessibility of citizens. At the same time, elements, such as the underwater exhibition hall, Wall of Honor and Pillar of Honor, enrich the spatial experience and also enhance the cultural and social value of the heritage.

On the east bank of the Xiuchi three “hilly-like” landscaped auxiliary buildings were added, which include academic lecture halls, temporary exhibition halls, souvenir sales and supporting restaurants whose spaces allow more possibilities for the citizens to relax, communicate, and enjoy exhibition activities at the heritage site, thus allowing material and functional safeguard for the heritage to enter daily urban life.

Category of architectural design

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Special recognition in architectural design

The VOXEL a Quarantine Cabin

Team Representative: Michael Salka

Directed by: Vicente Guallart & Daniel Ibañez

Academic Coordination by: Michael Salka

Developed by: Master in Advanced Ecological Buildings and Biocities students, class of 2020: Alex Hadley, Anfisa Mishchenko, Sena Kocaoğlu, Camille Garnier, Dania Abourouss, Ester Camps Bastida, Filippo Vegezzi, Giada Mirizzi, Juan Gabriel Secondo, Maitri Joy Uka, Camila Fajardo, Nathalie Botbol, Shreya Sharma, Yue Zhang, Zhiqian Liu, Rafael Abboud, Irene Rodríguez Perez

Hosted by: Valldaura Labs at the Institute for Advanced Architecture of Catalunya

Valldaura Management by: Laia Pifarré

Sponsored by: Saltoki, Miogás, Mause, Distribució Sostenible, Bestiario, Henkel, Cork 2000 & Tallfusta

Guided by: Oscar Aceves, Miquel Rodríguez, Jochen Scheerer, Elena Orte, Guillermo Sevillano, Eduardo Chamorro, David Valldeoriola, Miguel Nevado, Jordi Prat, Gustavo Escudero

Assisted by: Bruno Ganem, Luis Leverí, Akshay Mhamunkar, Daniel Nahmias, Layth Sidiq, Kya Kerner

Photo credits: Adrià Goula

Description:

The Voxel is an autonomous, 12 square metre cross-laminated timber (CLT) structure clad in a parametric rainscreen, exemplifying an advanced ecological approach to architectural production.

BIO-CIRCULARITY

Valldaura Labs is located in Barcelona's Collserola Natural Park, and the Voxel's primary materials never left this site. Before being processed in immediately adjacent facilities with both manual and computationally-driven tools, the Aleppo Pine used in the construction was selectively harvested from the surrounding forest in accordance with the sustainable management plan in order to promote succession toward a mature, resilient, dynamically stable ecosystem. Every timber element can be traced back to its exact point of origin, and all building components have been rigorously quantified in terms of their geographic source and embodied carbon, accounting for each fuel or energy input throughout the entire respective life cycle. It is thus possible to evidence that the overall construction sequesters over 3000 kg of CO₂e. Moreover, software has been developed to display this crucial information with interactive infographics easily understood by non-experts. Such global awareness and hyper-localism is further combined with the reimagination of linear cycles of material waste as circular flows, for instance by repurposing off-cuts from the CLT fabrication as an organic skin of charred slats with naturally formed profiles which blend harmoniously with the landscape. The wooden rainscreen elements are protected from fire, infestation and rot through controlled pre-burning, inspired by the Japanese yakisugi tradition, which additionally safeguards their potential for eventual composting due to the avoidance of unnecessary chemical additives. Similar-

ly, all structural joints between CLT modules are fastened with dowels of regional beech wood rather than conventional steel hardware. The foundations are of poured-earth concrete, substituting the industrially produced substrates of typical mixes with filtered soils resulting from the excavation. The structure can consequently be demounted, leaving nothing behind but four small points of solidified indigenous dirt. Solar panels with battery storage power lighting and devices, while a rooftop garden, rainwater collection and greywater recycling systems integrate with a self-contained biogas infrastructure for blackwater treatment to generate only usable fuel and sanitary fertilizer as by-products. Containment of all equipment in the ventilated voids of the facades and on platforms suspended below the structure, yet above the ground, facilitate maintenance or removal and minimize environmental disturbance.

PROGRAM

The Voxel was conceived and fabricated during Catalonia's coronavirus lockdown, and is intended for use as a quarantine cabin. The Voxel therefore accommodates one occupant isolated for 14 days.

REALIZATION

The Voxel is a project of the Institute for Advanced Architecture of Catalonia's Master in Advanced Ecological Buildings & Biocities 2019/20, representing a collaboration between 17 international students, volunteers, and the Valldaura Labs team, along with consultants and sponsors. The Voxel is optimized for pre-fabrication and rapid deployment; all CLT and facade modules were prepared in secure workshop settings before being quickly assembled near the final site. The completed structure was then mounted in its ultimate position by a crane. These strategies maximize safety, precision, and efficiency, while mitigating damage to the site.

Category of architectural design

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Honorable mention in architectural design

Qishe

Design team:

Team Representative/Chief designer: Han Wenqiang

Project designer: Wang Tonghui

Structural consulting: Zhang Yong, BAMBOO ERA

Mechanical & electrical consulting: Zheng Baowei, Yu Yan, Li Dongjie

Lighting consulting: Dong Tianhua

Plant consulting: Zhang Xiaoguang

Image editing: Wang Tonghui, Wen Chenhan

Construction team: Chen Weixing, BAMBOO ERA, etc.

Photo credits:: Wang Ning, Wu Qingshan

Design company: ARCHSTUDIO

Description:

It's named as „Qishe” („Qi” and „she” respectively refers to „seven” and „house” in Chinese language), because its address number in the hutong is 7 and it originally consisted of 7 pitched-roof buildings. As approaching the project, the architects set two goals: renovating the old and inserting the new. On the one hand, the architects neatened the houses, repaired all the building surfaces, and reinforced the architectural structures, with a view to reproducing the appearance of the traditional Siheyuan. On the other hand, they brought in new living facilities such as bathroom, kitchen and garage, HVAC pipes and lines, as well as new veranda spaces.

The veranda functions as a circulation route, reshapes the spatial pattern and layers, and provides a playful walking experience.

The front courtyard is mainly used as a garage. The architects retained its pitched roof, removed the front and back walls, and shifted the entrance door to the side, so as to leave more space for parking. The middle courtyard is a public activity space. It

previously contained three houses, one on the north, two on the sides. Based on its original layout, the design team set a living room, a tea room, a dining room and a kitchen, etc. in this area. The architects adopted a symmetric spatial pattern, which inherits the sense of formality of traditional courtyard buildings. The back courtyard is a dwelling space, mainly consisting of two bedrooms, a tea room, and a study.

The material scheme of the project well combines the old and new. The architects preserved the textures of traditional architectural materials whilst adding some new materials in an appropriate manner, so as to retain the marks of time, and present the contrast and fusion between the new and old. The original pine wood framework of the Siheyuan was maintained, with its damaged components replaced by the same material.

The traditional pitched roofs used no modern waterproof materials and had poor thermal insulation. Considering this, the design team optimized the roof system and performance on the premise of retaining the original gray tile rooftops. As to the curved roof of the newly built veranda, the architects utilized polymer mortar as the finish, which is smooth and forms contrast with the adjacent textured tile rooftops. The old building walls were restored, by reusing the gray bricks from demolished temporary architectural blocks in the courtyards.

Category of architectural design

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Honorable mention in architectural design

Ötzi Peak 3251m

Typology: Viewing platform
Location: Schnals Valley Glacier, South Tyrol (Italy)
Client: Schnalstaler Gletscherbahn AG
Architecture: noa* network of architecture
Team representative: Lukas Rungger
Completion: August 2020
Intervention: New construction
Surface area: 80 m2
Text (DE): Barbara Jahn-Rösel
Translations (EN): Marianne Lehnis
Photo credits: Alex Filz
Corten steel & glass: Gufler Metall

Description:

Ötzi Peak 3251m: Reaching the peak

Where a raindrop begins its long journey into the sea, new perspectives appear: at the new observation deck on the Schnals Valley Glacier, and your mind is refreshed with the wide-open views.

There is something sublime about this special place, right at the top of the Schnals Valley Glacier ridge, where Italy's impressive alpine landscape soars high above the reservoir below, and Austria is around the corner. In this unique geographic location, fate decides whether a drop of glacier water will make its way towards the Mediterranean or the Black Sea.

ONWARDS TO THE PEAK

The Hotel Grawand lies at the very top of this unique alpine intersection, which at over 3,000 meters above sea level, is one of the few hotels in Europe located at such an altitude. The summit is a stone's throw away at a distance of about 50 meters. The breathtaking landscape view of snow-covered mountain peaks makes time standstill. Hikers and skiers visit the peak to experience nature at its fullest: rugged, stony, with wind and weather – pure.

Real trailblazers

In order to enable visitors planning a more extended stay, as well as day-seizing mountain nomads, to experience not only the breathtaking ride to the mountain station, but also to get to know the fascinating history of this alpine wonderland, the architects designed a unique architectural structure.

A viewing platform was developed based on a light structure made

of Corten steel, giving a modern touch that also blends in with the landscape. The design incorporates the pre-existing summit cross, and the platform only touches the ground where there is a static necessity - creating a detached, almost floating construction which lets you become one with the mountains and breathe in the freedom.

New perspectives

The platform follows the natural topography with a plateau grid placed on top of slender crossbeams, which are enveloped in vertical lamellas of Corten steel. The parapet-high, vertical elements trace these gentle curves in their sequence. This creates a magical effect: an opening and closing of views that follows the movement of the viewer - an invitation to discover new perspectives time and again. This unique dynamic creates a fully immersive, sensual experience in which time stands still for a moment and every other souvenir is eclipsed.

A snapshot

Speaking of time, a geometric funnel was cut into the undulating viewing platform to direct viewers eyes towards something timeless - the place where Ötzi was found. Only a few meters from the Austrian border, the angle of the viewing funnel takes the visitor on a carefully crafted, intellectual journey to the Iceman. The viewing funnel was designed with Corten steel, and like the slats on the railing, the steel turns dark brown, grey and black as it yields to the elements and becomes one with its surroundings. The funnel end is completed with a glass railing which gives your thoughts flight in breathtaking suspense - it seems like you are walking on air.

Category of architectural design

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Honorable mention in architectural design

Cycling through the Trees

Client: Visit Limburg

Mission: To work with public and private-sector parties in the leisure economy to develop and stimulate market-driven, high-quality, attractive and sustainable tourism. We strive to achieve added value for all parties in the tourism industry and we position Limburg as a strong brand and as a distinctive tourist destination in the heart of Europe.

Team representative: Ward Segers - project manager cycling projects

Photo credits: Visit Limburg and Luc Daelemans.

Design team: BuroLandschap in collaboration with De Gregeorio & Partners.

Since the company was founded, the BuroLandschap team has designed and created a considerable number of projects, a wealth of experience that has led to our current vision of 'the essence of space': SIMPLICITY - NATURE - USE - CULTURE. When implementing this vision, BuroLandschap always starts by looking at the elements that are already present in the natural environment. The combination of private spaces, which are a source of local knowledge, and public spaces, with their urban, cultural context, is something Pieter continues to find enriching. 'Our vision of the private garden, for instance, is to use the natural palette that is available and revive it. And, we always strive to create a garden that is totally organic and fits in beautifully with both the natural surroundings and the individual.' Through innovative designs, BuroLandschap aims to create the right link between people and NATURE. In the case of private gardens, there is often no real historical background to work with; instead, the focus is mostly on the surrounding vegetation and the people in the environment. In this instance, USE is coupled with local CULTURE in the concept. 'People are disconnected from nature. We actually want to reconnect them with nature.' That is why BuroLandschap tends to focus on ways to help vegetation that is naturally present re-establish itself, by using mostly native plants, for example.

‘There is no need to complicate things. All we have to do is give nature a chance to bloom before our eyes in all its SIMPLICITY and beauty.’

This interrelationship between CULTURE and NATURE is very important in the public landscape too. ‘We have to be able to continue telling the story of the past, so we can keep creating the future.’

Obviously, the restoration of old landscape gardens with historical elements requires considerable historical knowledge, which is why BuroLandschap has entered into a partnership with Hex Castle after many years of working together. Knowledge of the cultivation of old, forgotten vegetables and herbs and of maintenance without the use of pesticides is shared and incorporated into projects all over the country.

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Description:

In Bosland you can cycle through the trees. This cycle path safely takes you into higher realms. Quite literally - because you cycle up to a height of 10 metres between the trees. You can see, feel and smell nature’s splendour. The cycling experience is a cycle path through the crowns of the trees that consists of a sleek double circle with iconic allures. It is located in Bosland, the biggest forest area in Flanders, at junction 272 of the Limburg cycle node network.

The path is 700 meters long and gradually rises 3-4% to subsequently descend again after 9 meters. The diameter of the bridge is 100 meters. The cycle path was built in PU coating and steel, supported on narrow corten steel columns (diameter 20 cm) and provided with a railing with a stainless steel net structure.

The 450 unique columns are placed alternately at 1, 2 and 3 meters from each other and symbolize the straight trunks of the pine trees. This ensures that the construction blends nicely into the environment. The cycle path width of 3 meters is not a superfluous luxury. This way the cyclist has enough space. To keep the cycling experience pure, road markings and information or focus points on the elevated cycle path were omitted. The construction was connected to the existing cycle route network via a new concrete cycle path. The connection was completed via a roundabout with a corten steel ring on the inside with the necessary information about the project. The accompanying cycle pavillion is made up of two corten steel frames around which trees are stacked like a log. These trees are the trees that were felled to make room for the cycle bridge.

The construction of the bicycle bridge had to be done with full respect for the forest, for the subsurface and for the objectives that Bosland has in terms of forest management. That required an ingenious way of working. The construction was prepared as much as possible in the workshop and then assembled on site, like a big puzzle. In the centre of the circle a large building crane of 37 meters high was placed. It stood far above the trees and made it possible to build the entire structure on site. By using a construction crane, we avoided soil compaction and unnecessary logging in the remaining part of the forest. When choosing the construction, the CEC principle of Visit Limburg was taken into account: a Car-free route, full of Experience and Comfortable. The experience is in the interaction with the magnificent nature and in the feeling that you grow with the trees and „float” the higher you get off the ground. As you rise, you experience the forest environment in various ways. And that is the goal of Visit Limburg: creating unique cycling projects that strengthen the landscape experience.

Honorable mention in architectural design

Capsule Hotel and Bookstore in Village Qinglongwu

Architect's firm: Atelier tao+c

Design team: Tao Liu, Chunyan Cai, Guoxiong Liu, Lihui Han

Location: Tonglu, Zhejiang Province, China

Completion Date: OCT 2019

GFA: 232 sqm

Photo credits: Su Sheng Liang

Category of architectural design

Description:

The site is an old house of wood structure and mud walls in the village Qinglongwu, facing the green mountains east side. The architect regenerated this 232sqm building by inserting bedrooms and bamboo bookshelves and transformed it to a capsule hotel that can accommodate 20 people, along with a community library into the 7.2-meter high two-stories space.

To convert an old house to a mix-use space with capsule hotel and library, the biggest challenge to the architects, is to ensure the privacy of the accommodation area while giving openness and continuity to the public areas within such a compact space. After removing the original floors and partition walls, the architect opened the ground floor for library and public spaces, placed two independent "floating" structure above, which will be used separately for male and female guests equipped with 10 uniformed capsule rooms and one bathroom for each. Instead of a regular floor height, the architect divided the floating mass by 1.35 meters, a height that can only allow people to sit or to lie low, then split and staggered the floor slabs to create an unconventional three-floor space with interesting perspectives, and formed a few "double-height" spaces in the accommodation areas, so the hotel guests can still find a place to stand and to walk through, it is also where people's point of sight is above the floor height. The split and stacked floors are connected by thin metal staircases, with only 9 steps to reach another level, formed a zigzagging route with quick turns, similar to the paths in the mountains where moments of people's meandering, ascending, stopping, reading, snooping and resting in the capsules are revealed from time to time.

The idea of „buildings inside the building" blurs the boundaries of various spaces and formed a balance between the privacy of the "floating" accommodation area and the openness of the public space on the ground floor. However, when you are looking at the front of the two "buildings" from the entrance hall, you will find a clear cross-section relationship between the staggering floor slabs, while the capsules on the other sides of masses are aligned with the repeated modular compartments of the bookshelf constructed from local bamboo.

The exterior renovation is an extension as well as a reflection on the reorganization of the interior spaces. Based on the vertical programming of the capsule rooms, the restrained openings on the exterior wall to maintain the original simplicity of the building. Given the amazing natural landscape at the east end of the building, the architect cut the whole gable wall on this side and embedded a transparent structure of wooden frames and corrugated polycarbonate panels, introducing the green of the mountains and forests into the interior. The openings in the ceiling also brings rich natural lights into the interior spaces.

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Honorable mention in architectural design

Delas Frères Winery

Client: Champagne Deutz Delas Frères
Site: 40 Rue Jules Nadi, Tain l'Hermitage, France
Surface: Chai 3 200m2
Wine shop 400 m2
Guest house 1 400m2
Architect: Carl Fredrik Svenstedt Architect, with Carl Fredrik Svenstedt, Boris Lefevre, Pauline Seguin, Thomas Dauphant, Marion Autuori, Benoit- Joseph Grange Winemaking: Jean-Philippe Ducoin
Managment: Maxime Pannunzio and Laurent Hochart
Engineers:Structural: Becamel Mallard
Curved stone wall: Stono
Thermal: MAYA
Landscape: Christophe Ponceau and Melanie Drevet
Decorator: Julia Rouzaud and Goodmoods
Buildiers: Ferreira masons
Printemps de la Pierre Stonemasons
Graindorge Stonecutters
Les Carrieres de Provence Stone quarry
Sodimetal steelwork and cladding
Lapize electricals
CVI plumbing (chai)
SOFI plumbing (house and shop)
Hertrich carpentry
Roffat groundwork
Jacouton tilework
Sols terrazzo floor (shop)
Photo credits: SG = Sergio Grazia, DG = Dan Glasser

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Description:

MOVING MOUNTAINS

Architecture is about projecting into the future, about envisioning what does not exist yet.

It is often about making seemingly impossible things possible. Contemporary construction in solid stone requires particular engagement, mobilizing the willpower and energy of a large team of actors willing to explore unknowns, to make a new reality out of existing conditions. It is also, quite literally, about moving mountains.

The Delas Frères winery revives an abandoned site in the heart of a Tain l'Hermitage, reputed for its wines grown on terraced hills above the Rhône River since the Romans. Using highly technical structural stone construction, a new wine chai and a wine shop frame a renovated guest-house and its walled garden, tying the project to its context.

The wine building forms an undulating garden wall in structural stone, built for quality and emotion. The stone ties the project to the site, while the solid, porous walls create ideal conditions for wine. Ramps allow visitors to discover the wine process, and lead to views to the hills from a roof terrace.

The separate wine shop faces the winery across the garden, taking the form of a linear wall with space behind shading, staggered stone pillars. A large chestnut tree shades the glazed entrance, cut out of the building to save the tree. The existing guest-house was entirely renovated, with tasting rooms and a restaurant giving onto the garden and rooms above.

The undulating winery wall is carved by robot, and is post-tensioned to the foundations using steel cables. Eighty meters long and seven metres high, the wall has a geometrically stable form. Despite the unique technicity of the wall, the blocks are mounted traditionally by a two-man father and son team of stone-masons.

DURABILITY

The chai is built to last. Solid, untreated materials and passive systems create good environments for the wine and visitors. The un-insulated stone walls give thermal inertia to the building and allow it to breathe, making ideal conditions for the

wine aging in casks. A natural wine process is facilitated by the non-hermetic conditions and the use of a gravitational flow. The stone wall required only 25 percent of the energy of a solution in concrete, and the whole project was particularly cost efficient, despite appearances. Combined with strategies such as natural daylighting, the use of the high ground water level for heat exchange and the reuse of stone cuttings as gravel for the garden, the building is both performative and built to last.

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Honorable mention in architectural design

Pirouette house

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Team Representative: Ar.Vinu Daniel
Design: Wallmakers
Firm Location: Samuel's Pyramid, Civil line lane, Padivattom, Kochi -682025
Completion Year: 2020
Gross Built Area: 196 sqm
Project location: Maruthankuzhi, Trivandrum, Kerala
Lead Architects: Ar. Vinu Daniel
Photo credits: Jino Sam
Design Team: Ar.Vinu Daniel Ar. Oshin Mariam Varughese Ar. J.M.Srivarshini Ar. Gayatri Maithani, Ar. Swathi Raj Ar. Keerthi Kausalya Ar. Shiuly Roy Ar.Neeraj S., Murali Ar. Dha-wal Dasari
Interns: Nihaal Gafoor Smit Zalavadia Apoorva Goutam Harshita G Tophakhane Manav Muralee Rohith Krishna Bharati Gupta Yash Sukhwani Neeraj Viswam
Client: Mr.Kiran
Engineering: Adcons Infrastructure Pvt Ltd
Landscape: Vinu Daniel and team
Fabrication team: Kunjumon James and team -J.K steels
Carpenters : Sarath Prasad and team, Shivadas
Masons : Ezhil and team, Deepu and team

Description:

Located smack in the middle of an urban and crowded locale of Trivandrum, the site was a small plot that was being suffocated by other residential projects from all four sides. The idea of this residence was to have an inward facing house with all its spaces opening into a funneling central courtyard. The house is aligned in the East-West direction with openings facilitating for maximum cross-ventilation.

In the context of the city of Trivandrum that stands as a testimonial to many of Ar.Laurie Baker's masterpieces, it seemed fit to modify one of his own introductions, the Rat trap bond masonry technique in this site which didn't offer the opportunity for soil excavation or for making mud blocks. Keeping in mind that Brick kilns in Trivandrum is a dying industry with people opting out for wire-cut machine made bricks, this was also an attempt to promote this local agriculture based industry that is on the brink of extinction. The Rat trap bond is a brick masonry method of wall construction in which bricks are placed in vertical position instead of conventional horizontal position and thus creating a cavity within the wall that increases thermal efficiency, cuts down on the total volume of bricks used and is ideal for concealing structural members and service ducts. The idea was further developed to form a series of slanting walls that danced left and right, converging only to support the Ferro cement shell roof. Each staggered wall has been tailor-made to suit the issue of deficiency in space that this residence posed, aiming to create larger volumes and a feeling of privacy. Scaffolding pipes left behind from the construction stage soon were reused to form the central staircase and the grillwork. Keeping in mind the principle of discarding nothing as 'waste' the wooden planks were also pieced together to form part of the flooring in the living areas. Cane has been acquired from the neighborhood, treated and wound around the grillwork to create

subtle screens for privacy and for various furniture.
The Pirouette House features the “Last of the Mohicans” fired bricks as an ode to the stellar practice of Laurie Baker with spaces that are made beautiful by the pure geometry and patterns created by the walls that seem to be coming alive and pirouetting around.

Materials used in Construction:

1. Fired bricks for Rat Trap bond masonry:

Rat trap bond is a brick masonry method of wall construction introduced by Laurie Baker in Kerala, in which bricks are placed in vertical position instead of conventional horizontal position and thus creating a cavity (hollow space) within the wall that increases thermal efficiency and cuts down the number of bricks.

2. Waste wood - Cut wooden scrap pieces have been joined to panel a part of the flooring.

3. MMT Ferrocement shells- These wafer-like structures are steel reinforced arched shells with effective thickness of 2.5cm and they take equal load of respective R.C.C slabs. They effectively reduce the overall cement consumption by 40% and steel consumption by 30%. These replace the R.C.C Slab in roofing as they are as strong as 1200 kg/m²

4. Discarded Scaffolding pipes for Staircase and Grillwork - The staircase and the grillwork of this house has been made entirely out of scrap scaffolding pipes that have been welded in place.

5. Oxide - Floor and selected walls have been finished with grey and yellow oxides.

6. Cane - Cane has been treated and woven together in-between the grillwork to act as a partial screen for privacy.

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Honorable mention in architectural design

Waldorf School Barcelona

Project name: El Til·ler School

Architecture Firm: Eduard Balcells Architecture+Urbanism+Landscape, Ignasi Rius Architecture, Tigges Architekt

Completion Year: 2018

Gross Built Area: 950m²

Project location: C/ Apel·les Mestres 11, Bellaterra, Cerdanyola del Vallès (Barcelona)

Google maps: <https://goo.gl/maps/YkHrJuJpv4hytzQH6>

Design team: Eduard Balcells, Ignasi Rius, Daniel Tigges

Clients: Fundació per a l'art d'educar de Rudolf Steiner

Engineering: Bernuz-Fernández (Structural engineering), Progetic (Mechanical engineering), Egaractiva (Quantity surveyor), Factors de Paisatge - Manuel Colominas (Agronomical engineer & Landscape consultant)

Collaborators: Manel Romero, architect, Elisabeth Terrisse, architect

Photo credits: Adrià Goula

Description:

Recycling five buildings and a garden

The El Til·ler - Linden Tree- School is carefully inserted into a large, mature and abandoned private garden close to Barcelona. The complex is articulated along the existing main access path, which becomes a “rambla” -the Mediterranean name for high street- that ends at a square which opens to the landscape. Five of the six buildings which make up the school are existing modular pavilions of wood and steel which come from two other sites previously occupied by the school. These buildings are disassembled, transported and precisely reconfigured at the new site, adapting to the topography, existing vegetation, sun exposure and views. The sixth building, which is presented here, houses the kindergarten and the common spaces.

Sequences, horizons, light. Urban design as an expression of pedagogy

The school proposes a contemporary spatial expression of the Waldorf-Steiner pedagogy adapted to a Mediterranean climate.

Thus, there are no interior corridors, and access to the classroom follows a gradual exterior spatial sequence: rambla - courtyard - porch - receiving hall - classroom. The horizons -the views- expand as the child grows, and the rotation of the classrooms on the topography gives them varying light qualities, both in intensity and color. Sequences, horizons and light personalize each classroom, emphasizing and accompanying the experience of growing up and learning.

Alcoves and frames. Architecture as an expression of pedagogy
The new building, which houses the kindergarten and common spaces, frees the plan from columns and concentrates them at the facades in the shape of thick buttresses, making it possible to place the kindergarten classrooms on top of a necessarily column-free multi-purpose hall. The spaces between the buttresses become alcoves, which are shaped according to the functional and pedagogical needs of each space. On the outside, the alcoves are contained within frames which order the facade and visually reduce the size of the building, bringing it closer to that of children.

All-wood facades

The facades are entirely made of wood and are formed by large format prefabricated elements. The "balloon frame" elements have a three-layered pine panel finishing inside, and thermal insulation of wood-fibre panels. The covering is made of thermally-modified pine wood slats, which are fixed on a ventilated chamber. This so called thermowood will no longer require any subsequent maintenance.

Passive climatic comfort. A school without heating

The massive concrete structure, consisting of in situ columns and perimetral beams, with prefabricated concrete plates, provides a large thermal inertia, storing the heat generated by the high occupation of the classrooms and, at the same time, preventing excessive heating in summer.

Thus, the combination of the thermal insulation without thermal bridges, together with the large thermal inertia of the concrete structure, almost eliminate the need for heating in winter, where only a small electric radiator is used for each classroom in moments of cold peaks. Comfort during the rest of the year is achieved through cross ventilation, ventilated facades and external Venetian blinds.

The facade evolves from a flat surface into an inhabited space, the classroom turns into a house and the school becomes a small village along a rambla.

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Honorable mention in architectural design

Nasushiobara City Library

Location: Komatsu, Ishikawa, Japan

Date of Completion: October, 2013

Principal Use: Museum

Structure: Reinforced Concrete

Site Area: 14,428.84m²

Building Area: 6,153.21m²

Total Floor Area: 6,063.03m²

Design: Mari Ito/UAo

Photo credits: DAICI ANO

Description:

A public library at the heart of a compact, vibrant city
This library and community center is located in the city of Nasushiobara, about 150 km north of Tokyo. The commission was awarded in a 2016 competition. Forests, an important part of the city's identity, inspired the design. When we step into a forest, we sense the subtle yet constant changes in season, weather, and plant and animal life, absorbing these transformations in multiple emotionally powerful ways. Similarly, as visitors walk freely through the library, they experience layers of subtle changes unfolding across softly defined borders, from the aphorisms and other exhibits displayed at various locations in

the building to the activities and other human-caused transformations taking place. Through the stimulation of multiple senses, the design is intended to spark new realizations and learning. The first floor is a lively, accessible space filled with many intersecting subtleties, while the stacks on the second floor provide a comfortable space for getting lost in reading or research. Three key features of the building—"forest pockets," radiating bookshelves, and the "leafline"—are described below.

1. Forest Pockets

The "forest pockets" are atria resembling small clearings in the woods where the sky suddenly becomes visible and light pours in. They have no clearly defined purpose but instead are available for community events, exhibits, and other uses. Sounds and sights escape upwards and outwards, allowing people in other parts of the building to sense the activity in these spaces.

2. Radiating bookshelves

Radiating bookshelves form the framework of the entire building. On the first floor, lines of sight filter through the latticework dividers that gently partition the space as if one were looking between trees in a forest, creating an interconnected, constantly changing panorama of layered activity. On the second floor, the radiating shelves form a real-life version of the pie charts used in the Japanese library classification system, improving searchability and enabling circulation routes that cut across the categorized stacks.

3. Leafline

The "leafline" is a louvered ceiling covering the entire interior, modeled on the lower edge of a forest crown. The height variations in the polyhedral form create a number of loosely divided spaces of varying size. Dappled light pours through the louvers to the first floor, creating a varied light environment. The result is an interconnected, forest-like space that gently enwraps visitors, turning the surrounding cityscape as well as the everyday activity of the people who gather in the library to learn and participate in events into a variety of ever-changing scenes.

Today, public libraries are no longer expected to serve only as a "third place" where people can gather, but also to spark vital learning and interaction that ripples through the wider community as social capital, contributing to the development of the city as a whole. The awareness and knowledge that individuals gain in this "forest of words" return to their neighborhoods as a powerful resource capable of setting off significant change and inspiring lasting awareness in the broader community. Those are the ideals that Nasushiobara City Library embodies.

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Honorable mention in architectural design

Out of sight

Design: Luan Fontes

Photo credits: Luan Fontes

Description:

Sustainable dance school and emergency social housing.

Overall context

The place chosen for the implantation was Frades Island, in the northern area of Rio de Janeiro, Brazil. Located in the literal southeast of the state, in a slightly dense region, just 11 km far from the city center. The project land is characterized by the combination of landscape formed by plains and an intense and preserved afforestation that configure the bucolic climate, having as principal view the Presidente Costa e Silva Bridge which connects Rio de Janeiro to Niterói. Having as object of study extensionist projects of local relocation, as well as the learning resulting from the experience of residents, the project aims thinking the island from the limits that define it, whether physical-tangible or social, assuming a critical reading about the role that they play in these resident's lives.

Process

The project was thought to take 6 months, with an estimated execution of 4 months. In it, I proposed the insertion of 42 containers of 20 foot treated with thermal insulation, totaling a space built of 620 m to meet two needs: a dance school that previously operated in spaces adjacent to the church and three emergency social housing, which would serve as temporary shelter for the residents, always having on mind the necessity of a fast and accessible construction, with materials of easy insertion on the local.

Their project aims to respect the limits of the existing topography, tracing the axis of the street parallel to the neighboring building, a church dating from the XVIII century, within the limits of the unified lots, taking advantage, above all, of the space in which it had been the stage of small tenements belonging to the local religious.

Outcomes

As a result, we have a project with a structural system 85% lighter than the usual masonry and that takes half the time to be executed, in comparison to any other common building. Already in the community, thanks to the larger space we have for the cultural area, we would be able to double the number of children attended by the school, changing, therefore, the young local population's reality. We can also count with internal and external lounges and social areas that make the buildings key parts in the community's experience. The addresses would provide not only temporary shelter for the three local families, but could also serve as shelter to other families in the future.

Impact

The project as a whole, together with the political local movements and extension research, warn/alert about the need for government and society care towards the remaining population of Ilha dos Frades, especially the right to access to culture and decent housing, present in the Brazilian constitution. It comes as a conversation topic the importance of the historical-ancestral preservation of the place, through the generations of families that since the century XIX have been there, whom thanks to the project would continue to inhabit the place and mitigate, therefore, the effects of gentrification and real estate speculation in the Rio's port area.

Honorable mention in architectural design

Atelier Alice Trepp

Design architect: Mino Caggiula

Project architect: Alberto Bernasconi

Executive architect: Andrea Maldarizzi

Team: Laura Martinez, Maurizio Civelli

Photo credits: Paolo Volonté

Client: Alice Trepp

Description:

Artist Alice Trepp models sculptures with her hands, immortalizing moments in time. Artists work on their subject while architects get people to live inside what they build. The Trepp Atelier was developed for a person but also for a place. Designing an Atelier to mirror the thought and philosophy of an artist has long fascinated generations of artists and the architects charged with the task. Located near Origgio, a village overlooking the lake of the same name, Alice Trepp's Studio is both a place of work and a home. Atelier Trepp is built to slot as naturally as possible into the contour lines forming the morphology of the site. Placed mainly underground, it takes its cue from ancient Greek theaters that were molded to fit into the natural morphology of their context. Wedged into the two highest upward-curving contour lines, the building fits seamlessly into the sinuous lie of the land. The volume takes shape rising like leaves out of the ground to make the architecture appear

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a natural landscape feature. An iconic touch has been added by pivoting the construction around a 'cenote', in acknowledgement of the artist's Ecuadorian origins. Built around this core, the two stories intersect, creating a dynamic play of transparency and visual permeability. Interior and exterior spaces blend and re-form, constantly interacting with the light and the surrounding countryside. The cenote in Atelier Trepp is a space of contemplation and communion with nature. Reflected, refracted light playing on water is conducive to a multi-sensorial awareness of the passing of time. The cenote marks out the passing of time as the day proceeds and the light changes, capturing the fleeting moments of the day. The freshness coming off the water, the light breeze that gently sways the sweet-smelling overhanging vegetation, the twittering of birds, and the view of the passing clouds conjure up visions of the artist lying on the gravel of the shallow water immersed in a moment of sensory exploration - the search for the sublime in the everyday, a moment of contemplation for the artist before, during and after the creation of a work of art.

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Honorable mention in architectural design

Frankfurt Pavilion - Frankfurt Book Fair 2018

Planning and construction period: 2017 - 2018
Typologies: Cultural buildings
Client/client: Frankfurter Buchmesse GmbH
Form of award: Direct
Typologies: Cultural buildings
Project Architect: Till Schneider
Project Management Planning: Kai Otto
Project Management Parametrics: Ragunath Vasudevan
Structural design: Bollinger+Grohmann International GmbH
Building physics: IPB Planungen AG
Fire protection: hilla wichert brandschutzsachverständige ingenieur und architekt PartG mbB
Wood: Holzbau Amann GmbH
Membrane: Taiyo Europe GmbH
Media technology/electrical: AVMS
Transport/storage: Zöllner Transport GmbH
Ventilation and air conditioning concept: IPB Ingenieuregesellschaft for Energy and Building Technology mbH
Gross floor area: 480 m²

Description:

Structures designed for trade fairs obey completely different laws compared to normal architectural tasks, since at any specific trade fair they are only in use for a limited amount of time. This means that once the event has finished, such structures often land up on the rubbish dump. It goes without saying that this approach is anything but sustainable.

For its temporary pavilion, the Frankfurt Book Fair wanted to adopt a totally different stance: The task for us as architects was, on the one hand, to create a 500m² space to house a variety of events and, on the other hand, to ensure that the object created would maintain a recognisable emblematic impact at each annual Book Fair, for at least ten years. Sustainability is reflected in the potential ways the building can be used, its adaptability to different locations, the materials employed, an optimised construction for both rapid assembly and dismantling, a minimal storage footprint and a sustainable approach throughout the development process itself, between the client, planners and the contractors.

The pavilion consists of wood, a renewable raw material - in this case 75m³ of laminated veneer timber (Kerto-Q) for the self-supporting (load-bearing) structural elements and the floor area, plus some 1,000 m² of recycled PVC membrane for the envelope, which can be reused in another form. Both have a positive

effect on the ecobalance.

This interlocking pavilion design, consisting of three identical shell-shaped wooden rib structural units – each clad with a membrane – promotes natural ventilation. Air enters the room through joints in the floor panels, and is distributed from there. The air flows continuously up through the central openings integrated in the roof.

Here we applied a parametric 3D planning method, which led, with the help of complex calculations, to a material-saving structure and a paperless working method, in which all changes take place via digital data transfer or data exchange.

This integrative design process allows one to investigate simultaneously how architectural changes will influence all the other parameters – in this case involving changes to the load-bearing elements and the associated membrane, as well as stability and the amount of material used.

Working in close collaboration with representatives from the Frankfurt Book Fair, the structural engineers, and the executing companies, something special was created: A place that defies the hustle and bustle of the Fair and conveys a feeling of peace and security.

The planning and implementation of this pavilion represent a logical response to the challenges posed by climate change: The project demonstrates that with the help of precise and integrative planning, a resource-saving production – in terms of both material and cost – can be achieved without losing sight of aesthetic aspects. Right from the outset, the main achievement of all those involved was to investigate how CO² consumption could be minimised at all stages: from project development, through production, construction, use, and dismantling, to storage and re-use.

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Honorable mention in architectural design

Cafeteria for Anne Frank School and Heilbrunnen School in Stuttgart

Project team: Nils Krause, Joep Kuys

Project panel: Client: Hochbauamt Stuttgart on behalf of Schulverwaltungsamt, Referat Jugend und Bildung

User: Anne-Frank-Gemeinschafts- und Heilbrunnenschule

Effective area: 470 m²

Floor area: 660 m²

Building volume: 3,170 m³

Completion: 2019

Photo credits: Wolf-Dieter Gericke: header image 00, 01, 05

hammeskrause architekten and Wolf-Dieter Gericke: 02

Philipp Muerdter: 03, 04

Description:

Mensa Anne-Frank-Gemeinschaftsschule und Heilbrunnenschule, Stuttgart

Cafeteria for Anne Frank School and Heilbrunnen School, Stuttgart

There are few projects in which decision-making on the building design through a participatory procedure is more appropriate than in building for pupils. This has undeniably been achieved with the new cafeteria building for the Anne Frank School and the Heilbrunnen School in Stuttgart. The cafeteria is the place for joint lunches and school functions. In terms of urban planning, the cafeteria is positioned so that it succeeds in integrating both school buildings structurally and spatially via the shared schoolyard. This also allows the different pedagogical focuses of both schools and their pupils to meet the intense social demand for lived inclusion. Hence it obviously follows that precisely this involvement in the design process for the cafeteria can be a central aspect of an integrative and participatory procedure. This was convincingly achieved for the design of the

envelope covering the roof and the wall. It became the self-evident and intuitive identification and projection surface for the interactive merging and coexistence of both schools on the campus.

The new cafeteria building is located in its access area. In terms of urban planning, it forms both the entrance and the end of the schoolyard. The campus is characterised by several school buildings typical of the 1960s. Rough exposed-aggregate concrete parapets alternate with brown, thick-profiled ribbon windows made of tropical wood. The roofs are flat and hard. Not replicating this in the design of the new cafeteria is due to the desire for a contemporary expression of the positive and enriching diversity that a school should facilitate. Its archetype, combining roof and wall into one strong element, deliberately contrasts with the existing buildings, thereby creating a robust visibility for the new, vibrant building block in the grey, heterogeneous suburban fabric for the students, the teachers and the residents of the district.

In a number of intensive, joint workshops held over a period of several months, the pupils of both schools developed and discussed ideas and variants, from which they elaborated a generally approved colour concept for the new building shell. This hands-on design process was accompanied by the art teachers and moderated by the architects.

The idea of a “flower meadow for a picnic” developed in the workshops could be implemented without any changes. This one, jointly designed layer of four differently coloured aluminium shingles is a symbol for the pulsating heart of both schools and the pupils with their very different talents. Realising that you can make a difference, that you can contribute to making the world a “better place” has become the central message for the children. Bright and light, the roof-wall element spans the dining and function hall without any supports. Its fully glazed gable opens up the cafeteria towards the campus as an inviting gesture. Due to its eastward orientation, the interior and the schoolyard merge into one another. The interior fit-out and its elements support this spatial connection. Deliberately positioned openings in the walls and roof allow daylight to enter and direct the eye to the outside.

Category of architectural design

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Category of product design

Winner for the year 2021 in product design + Emerging designers 2021"

Category of product design

GoRolloe

page 26

Founder, CEO, team rep, and author: Kristen Tapping

Description:

Air pollution is one of the most important public health challenges of the 21st century as it continues to threaten the health and prosperity of populations across the globe. It is responsible for more than seven million deaths every year worldwide, of which 600,000 are children. Its global cost is \$9 billion a day, or \$4 trillion per year. Our product comes at a needed time in the market due to these social and environmental challenges.

GoRolloe is developing a bicycle wheel to filter outdoor air pollution including noxious gases and particulate matter. Using only the rider's kinetic energy, the wheel draws polluted air into a set of filters and expels the cleaner air towards the rider's face and into the environment. The average PM2.5 concentration in London is 13.3 µg/m³. Our 26" wheel can filter 1.25 m³/km of air which, based on the usage of 11,500 Santander bikes in London, equates to 170,560m³ filtered per day, or 24 professional European football fields at a 1 meter height.

The filters can be cleaned and reused on a continuous basis creating a circular product lifecycle. Captured pollutants are donated to third party organisations to create new products such as construction material. The materials used to create the wheel will either be a reinforced recycled polymer that can in turn be recycled, or an innovative biocomposite that can withstand environmental stresses and the extreme wear and tear that comes with industrial usage.

The wheel can be adapted to any bike and is initially targeted at cycle-for-hire schemes followed later by the consumer market. The end users of the product are city commuters using bikes for their daily transits. Local authorities are interested in this solution as it improves air quality for their community, gets their citizens involved in sustainability, and promotes a green image of their city.

By integrating cycle-for-hire schemes, our product will be available throughout most city areas reaching people from all economic statuses. This innovation enables citizens to actively participate in creating cleaner air around them, increasing health and safety for themselves and the public.

The concept was initially developed by the founder as a student at London South Bank University (LSBU) and has since won an award, received international media coverage, and received interest from government bodies and private manufacturers and distributors.

The product is now undergoing development and testing to optimize function, promote ergonomic use, reduce manufacturing costs, and establish concrete data on pollution capture. We have in-kind support from LSBU allowing us to conduct prototyping and testing using their equipment and facilities. We have also been awarded an engineering grant by Sustainable Innovations providing us with experts in material research, filter testing, and CFD analysis. During final stages, the filters will be tested in a real environment and analysed by third party laboratories to externally validate the data.

GoRolloe aims to have test models ready to pilot launch by Fall 2021 and have commercial output by mid-2022.

Gold Prize in product design

Kikomo. The digital time

Design & photo credits: Kerim Nail Karakurt

Description:

The Corona pandemic creates new challenges for the world and forces people to make serious changes to their lifestyle within a very short time. During the first lockdown in the spring of 2020, the first problems already became noticeable, such as social distancing. Employees now find themselves in online instead of offline meetings, while staying at home. Parents have to look after their children during their home office activities, and the children try to follow their education through online classes. Digital consumption is rising.

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Because of the rising digital consumption it's important for parents to have a clear overview of their child's digital behavior. On the other hand an important goal for Kikomo is to ensure a higher level of appreciation and a self-responsible feeling for children towards their digital time. The focus is set on a controlled but non-restrictive form of monitoring to make sure children don't have a strong sense of surveillance but at the same time, parents are still in control and having a clear overview of the digital usage.

First of all, children receive the Kikomo watch. They can decide for themselves to take the watch with them or not. This doesn't influence the performance of the product. This encourages both the feeling of self-organization as well as independency. Alongside the watch, there's a connected application which is installed on both the parent's and the child's smartphone. The watch is connected with the application through Bluetooth.

In the settings, the parents can now set the available screen time for the child and select the apps and games that are going to be time-limited. As soon as the child uses an application that's selected on the list, the available time decreases until it's used up. From this moment on, the corresponding apps and games lock themselves. It does not limit any other functions on the phone. Of course every day, the child is given a new chance to manage his or her time better, which encourages a long-term healthy and sustainable use of digital media.

The design of the Kikomo watch serves as an interface between the digital and analog worlds. The available digital time is presented as a bar on the clock, which has a gradient towards the end, graphically underlining the fading time. After each elapsed hour, the clock produces a sound. If the time runs out, the chosen digital media can no longer be used for the rest of the day.

Kikomo deliberately displays the progression of digital time on the analog clock, drawing the eye away from the screen. The shape of the clock is designed to be precise, simple, but also robust. The round shape picks up the character of a clock. The injection-molded case allows the object to be resistant to everyday use. In order to tempt neither digital, nor analog interaction, the colors of choice are black and white. To attach Kikomo, it has an eyelet. Whether on a keyring, backpack, necklace or bracelet - every child can find an individual place for their watch.

Silver Prize in product design

Amplify

Design & photo credits: Alice Turner

Description:

In the 60's, glasses were aids for a disability. Now, glasses have evolved into eyewear, a fashion statement and an extension of your personality. This shift made me question why the main innovation in hearing aid design is developing technology to make them smaller and more hidden. Hiding something away suggests it's something to be ashamed of.

Inspired by the book 'Design meets Disability' by Graham Pullin, I have designed a range of 'hearwear' products. I wanted to design a hearing aid the user would be proud to wear, a product that is designed to be seen. It is a conceptual piece that questions what a hearing aid could be.

'Amplify' is a hearing aid that uses bone conduction technology to provide the user with a comfortable and high quality audio experience. This technology enables the device to decode sound waves and convert them into vibrations that can be received directly by the cochlea so the eardrum is never involved. The product enables Bluetooth connectivity so that it can be paired to any smart device including your car Bluetooth system, smart televisions, phones and speakers. The device can be paired through the connectivity settings in the app where there are many features available such as a help centre for any-time technological support.

I believe it is time for a new era of designing for disabilities, one where the products amplify the strength, beauty and individuality of the wearer. I hope that 'Amplify' can inspire us to question the future of disability design and radically challenge what currently exists within this space.

Category of product design

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Bronze Prize in product design

With love... Plastikoff

Design & photo credits: Elvira Lepikhina

Description:

The problem of pollution of the environment with waste is one of the main problems in solving the environmental problems of modern society. The subject of my study was a study of the shaping properties of plastic and the possibility of its adaptation to a textile base. This collection is an experiment in the field of hot pressing. All clothing models are made in different techniques using materials such as plastic and foil.

Honorable mention in product design

Elixir

Team members: Henrike Mohr, Esther Grünewald students at Münster School of Design, FH Münster, Photos: Authors"

Description:

elixir re-act for our water elixir re-act for our water is a series of five different water glasses, which aims to encourage a responsible use of our clean drinking water. The design of the glasses makes clean water appear dirty and thus breaks the everyday routine access to drinking water. Each glass represents one continent and reflects the most polluted river of that continent. Everyone should identify with the issues around them, because the global problem of the increasing pollution of drinking water affects everyone. Access to drinking water is a basic human right. We want to help raise awareness for the 785 million

people who don't have that access by educating about that topic. These glasses give the buyer the opportunity to join and share our vision by becoming active himself.

Honorable mention in product design

TiN panel

Design : Maryam Vaseghi

Category of product design

Description:

Environmental problems, fossil fuel resources reduction, and having fresh air have been led to increase the application of a sustainable system with a natural pattern cycle. In this design, an active ventilation system in a particular panel is a concept that is used in a bridge connecting two spaces. This method has been proposed using CFD simulation. These panels are heated by solar radiation and the active approach is water in a set of bubbles containing water with Titanium nitride (TiN) particles. This heat is directed through narrow tubes to a copper plate. The copper layer on the back of the panel balances the heat that enters the passageway. Titanium nitride can help to increase heat when combined with water. The heat and humidity generated is directed to the top of the roof which contains the cylinder for growing the plants. The shape of the bubbles and modules have been taken from the virus on a microscopic scale. Nature has the best sustainable form and function in the environment.

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Scientific process of project

In this report, we examined the simulation of a simple glass panel on a bridge in winter. In the initial case, the solar flux is considered from top and next to panel 18 degrees Celsius in winter. We need a comfort temperature about 23 degrees Celsius, so this panel raises the temperature with area of contact further by designing five bubbles in the centre of the polygon. Then we entered the geometry into ANSYS Meshing software to produce a grid. A grid is prepared with the organization for simulation. The simulation is performed by the steady method in the k- ϵ -Realizable model. The air density approximation is used by the incompressible ideal gas method. The boundary condition is the pressure inlet. The coupling equations of velocity and pressure are also solved using the coupled algorithm.

Results 1:

In bridge simulation, the pressure drop value is -0.00016 Pascals and the bridge temperature value is 287.71742 degrees Kelvin.

In the next step, we entered the TiN panel into ANSYS Meshing software to produce a grid. A grid is prepared with the organization for simulation.

Results 2:

In the present simulation, the temperature of the bridge is 300.67593 degrees Kelvin, which is about 2.5 degrees better than the previous case.

Design purpose

Green construction methods, when integrated with eco-friendly design and construction provide the most significant benefits to reduce carbon footprint and actually lend a helping hand to the environment.

Benefits of TiN capsule panel:

Reduces Wastage of Water and Energy

Conserves Natural Resources

Improves Air and Water Quality

Protects Biodiversity and Ecosystems

Reduces Costs and Increase Value

Improves Occupant Productivity

Improves the Quality of Life

Minimizes Strain on Local Infrastructure

Honorable mention in product design

NomNom

Design & images credits: Philipp Hainke

Description:

“NomNom is an ecological cutlery set that is significantly more durable than conventional eco-alternatives due to its biological coating. All objects are completely plant-based and 100% biodegradable. The innovation of NomNom lies in its surface: a purely biological coating of plant waxes makes the objects water-resistant. It also gives the material a much smoother surface, reminiscent of plastic, which feels much more pleasant on the mouth and lips than conventional products without a coating. Unlike many other biological waxes, the melting point of the wax used in NomNom is over 80°C. This is not only important for use in contact with hot food, but also allows it to be used in hot beverage applications, such as Coffee or Tea. Here, too, NomNom promises great potential.

The wax infiltrates deep into the wood pores and seals the surface permanently. The coating makes the surface not only water-repellent, but also more durable, which is particularly beneficial for the knife's cutting edge. The extremely resistant coating results in the possibility to clean the cutlery and also to re-use it several times. The cup is bonded with an ecological adhesive based on lime and casein which makes it extremely resistant to moisture.”

Category of product design

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Honorable mention in product design

The Glass Garden

Design & Photo credits: Aleksandra Kujawska

Description:

THE GLASS GARDEN Urban agriculture, horticulture - urban agriculture. The glass garden is a response to the urban man's longing for contact with nature. It is the phenomenon of an urban and home place in the city to grow herbs and vegetables. Greenhouses, apart from aesthetic benefits, provide supplements with crops. Garden: its individual elements, number and size of greenhouses are individually tailored to the needs of an urban farmer. Made in hot smelting, from tibia, no need to use a mold. Simple to use. Glass Garden was appreciated by the artistic community in Poland and included in the glass collection of the Křkonoše Museum.

Category of universal design

Golden Prize of the year 2021 in universal design

Category of universal design

Braille meets emoticons - a visual language for visually impaired

page 31

Design & visualizations: Walda Verbaenen

Description:

Emoticons are universal images that are commonly used to show our feelings and emotions in one image.

Happy, enthusiastic, sad, combinations of both,... all these feelings can be symbolized by one symbol, an emoticon. They are used by people who can see, and therefore immediately can show in one character how they feel.

Emoticons are used as a visual language, but what about people who can see poorly or not? Persons who have maybe never seen what a face looks like?

Visually impaired persons who are using the Braille language are forced to use the 26-letter alphabet to describe their emotions. This insight was the starting point for setting up an experimental addition to the existing Braille alphabet, an emoticon alphabet based on emoticons, converted into a 'dot' language that characterizes Braille.

A new 9-dots grid has been developed in order not to confuse with the basic structure of the Braille alphabet (where a 6-dots grid is used for letters, and a 12-dots grid for numbers).

The braille 'emoticon' letters are structured logically. The emotions of the face, which characterize the emoticons symbols, are replaced by dots. These dots represent the movement of mouth and eyes. In this way braille gets a face that expresses emotions. 22 of the most common emoticons have been translated into this new 'Braille Dingbats' grid.

This typographical experiment tries to build a bridge for visually impaired and/or blind people to a visual language, and appears as a 'Braille Dingbats' alphabet in addition to the existing Braille alphabet. It shows the supporting function that design offers, and gives a meaningful contribution by means of design and typography.

Walda Verbaenen is currently working as a PhD student at READ-SEARCH, PXL Mad School of Arts / Hasselt University in Belgium. Her PhD study, starting from her Masterproject Phenotype (2019) would like to give a supporting function that Type Design can offer for the correct pronunciation of a language, by creating a new typographic system - experimental and functional.

'Braille meets emoticons', which also fits into her interest for human issues and social design, and more specifically in language and communication, was developed as an experimental side project next to her PhD, which will be developed later.

Silver Prize in universal design

Coral Carbonate: Architecture Beyond the Built Environment

Design & photo credits: Alex Schofield

Company: Objects and Ideograms, a design workshop

Description:

The footprint of our existence has had catastrophic impacts on ecosystems globally. In particular, coral reefs are being decimated by human-induced conditions quicker than they can re-cover and grow. This project exhibits novel application of a 3D printed coral substrate, in form of the material substrate Calcium Carbonate, as targeted intervention and artificial restoration for aquatic ecosystems. More specifically, Calcium Carbonate is 3D printed to mimic materiality which makes up the hard structural home of coral's living polyp inhabitants. This unique material development has led to the invention of material methodology in support of a wide range of ocean life ecosystems by fabricating and reseeded a 3DP calcium carbonate scaffold. The 3DP calcium carbonate is currently being tested as structures, tiles, and frags used to further test live applications in support of artificial coral restoration, but also shows promise as a biological substrate for the growth of other ocean life. The ultimate goal of such an intervention is the cultivation of a healthy and biodiverse aquatic ecosystem through adaptation and repair of physically damaged environments caused by anthropogenic sources.

This project and application goes beyond simply a substrate to seed and supplement the growth of coral, but creates a link between our anthropocentric built environment and surrounding natural ecosystems. What once was a hard edge, being our coastlines and interface with water bodies, is now being explored as a softer edge as we reconsider our interface between the world beyond buildings. This project has applications in coastline infrastructure, aquaculture, and bioremediation as substrate and surface to foster growth of aquatic organisms.

Alternative materials for underwater fabrication, such as concrete and other land based materials of the built environment, often leach undesirable byproducts and contribute a large carbon footprint in the process of their own production. However, new techniques of Carbon capture and sequestration from our atmosphere, essentially removing harmful CO₂ from our environment, can also create a renewable source of Calcium Carbonate while helping diminish our growing CO₂ pollution. By combining design and material innovation with the rapid and customizable fabrication potential of 3D printing, this unique application for ocean life conservation can be readily deployed at various scales in any unique environment.

This project's origins and inventions come in direct response to a world in crisis. We are seeing the world change in such a way as reflected from our modus operandi as humans who have little considered our impacts. This project most importantly operates at the intersection of both human and aquatic needs, a space seldom considered within construction of the built environment. While we may be land dwelling mammals, we still have great impact on ecosystems we may never visit or see and thus we must consider our intentional design and construction of a built environment that is equitable to all living organisms on this planet. This project's methodologies of computational design and fabrication utilizing CaCO₃ provide various benefits for a shift from an anthropocentric built environment to that of a symbiotic one.

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Bronze Prize in universal design

Towards a Caffeinated Architecture

Design & photo credits: Alex Schofield

Company: Objects and Ideograms, a design workshop

Description:

Coffee, as a material, has never exhibited itself in the world as that of anything other than a vessel in which to hold chemical materials for our consumption. Perhaps it is because of our detachment with coffee, as a commodity for consumption rather than plant and bean, that we often perceive coffee grounds as material waste. The focus is so largely on the end result, on that perfect cup of coffee, that we have become detached from all its embedded cultural, economic, physical, and environmental footprint. In 2020 alone, we consumed and produced 21 billion pounds of coffee grounds. To get an idea of scale - if we were to replace the Empire State Building's concrete with coffee, we could build roughly 5000 Empire State Buildings in a year. All of this is revelation that perhaps we understand very little about the power of such a commodity. Because if we did realize its power - as commodity, culture, and drug - we would realize that coffee is a huge waste, a missed opportunity as grounds for reuse. We are bound to the grounds of our own waste, we must turn over these used grounds, and build.

With our ever growing demands of materials and energy for construction, we should look towards alternatives to lessen our burden and reliance on the scarcity of existing resources left on our planet. In fact, upon closer examination we would observe that building components, specifically their materials, have not radically changed since their development during the industrial revolution. We instead have doubled down in the fabrication of a world composed of concrete, wood, glass, and metal (and plastic). This project challenges our notions of contemporary materiality, in direct response to anthropocentric impacts of the built environment, asking how we might rebuild an architecture constructed from grounds of waste.

Coffee generates an extremely large amount of material waste, one that has such a complex and rich amount of resources put into it that there must be a better form of use than to discard it. This project proposes and demonstrates a material application which utilizes unique personal research in digital manufacturing combined with the material of reused coffee grounds to realize three methodologies of fabrication; 3D printing, subtractive CNC, and hyphal biomass. Utilizing a unique and novel 3D powder printing formula to fabricate objects, recycled coffee grounds are turned into a fine powder which can further be used to build up discrete architectural parts additively in their creation. Reused coffee grounds can also be cast to create a hard composite solid which may then be subtractively removed using CNC technology. The reused coffee grounds can also be mixed with mycological fungus which feeds from the nutrient rich coffee as it builds its own hyphal biomass. Through the technological design of digital manufacture, forms and applications of construction made from reused coffee grounds can be reimaged in furthering our often disconnected relationships with contemporary consumer-waste materials.

Category of universal design

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Category of responsive design

Category of responsive design

Golden Prize for the year 2021 in responsive design

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Villa Ypsilon

Team Representative for submission: Theo Sarantoglou lalis
Project name: Villa Ypsilon
Programme : Summer House
Total Area : 150 sqm
LASSA Website : lassa-architects.com
Design team : LASSA : Theo Sarantoglou Lalis (Principal) and Dora Sweijd (Principal) with Kasper Ax (Associate), Yousef Al Mehdari, Theo Grousopoulos, Thomas Jensen, Valeria Garcia, Nikolaos Klimentidis, Greg Spaw, Luke Tan, Yu Zheng
Local Architect (Permit) : V. Kosmopoulos
Structural Engineer : Metep, L. Babilis
Formwork Engineer : Nous, Manja van De Worp.
Formwork Construction: LASSA
General Contractor : Triedkat: V. Leriou
Photo credits: NAARO (Naaro.com)

Description:

Villa Ypsilon is a summer residence nestled in a hillside olive grove in the southern Peloponnese. The project brings together design that engages the body and the triggering of senses and an approach to architectural practice that aims to democratise bespoke construction.

Villa Ypsilon is characterised by its green roof shell, acting as an accessible extension of the terrain, and framing the most significant views of the site from inside and out. The bifurcating pathways of the shell define three courtyards, forming distinct hemispheres with unique occupancy following the course of the sun throughout the day. The crest of the shell ties in with the hillside landscape; rising just to the height of the surrounding olive trees and integrating the foreground qualities with background vistas of the bay of Schiza and Sapienza, as well as mountain views toward the east.

The interior is defined by two primary spaces - a more private area, containing three bedrooms and two bathrooms with views to the east, and a more common area toward the south, containing kitchen and living room areas, which provide balanced access to all three courtyards. The organisation is designed so you may circulate with ease through, around and on top of the villa, establishing a continuous promenade that links indoor and outdoor activities.

The remote location of the project in combination with the limited budget (350.000 Eur) and non-standard geometry induced a construction strategy that called for a large amount of off-site prefabrication and self-assembly which allowed to reduce the construction time to 7 months without compromising anything in terms of quality or exceeding the budget. This hands-on approach allowed for a minimal use of commercial 'off-the-shelf' products while instead favouring a local supply chain.

Designing Occupancy

The iterative design of the shell through its shadow analysis was aimed at designing occupancy and activating the use of the courtyards throughout the day. The west courtyard is in the shade until 11:30 for breakfast, then the shade shifts to the

east courtyard from 12:30 where people can have lunch, and finally the shade shifts to the south in the afternoon. This specific choreography of the shadows invites the users to explore the whole periphery of the house and the variety of experiences: the agrarian landscape, the distant mountain views and the panoramic views of the sea.

Environmental Response: Geometry vs mechanical systems

The resulting environmental strategy of the project favored the development of climate resilient geometry rather than the use of mechanical systems. The form of the concrete shell, coupled with the planted roof and cross ventilation strategy, balances the reach of sunlight into the house across the summer and winter seasons and maintains a natural level of comfort.

Partial Self construction and the re-skilling of the architect LASSA's team acquired a CNC machine that allowed for extensive prototyping and the production of all non-standard elements. This included: the concrete shell form work, the living room double-curved lost form work/acoustic ceiling, custom window frames, interior furniture and partition systems as well as landscape and pool formers. The parts were shipped to site and assembled by the architects themselves in only four days. The formwork was designed in such a way its assembly did not require the use of screws, tools or an instruction manual. Instead of using plans, sections and elevations as building instructions, the architects produced wood formers and formwork directly in the office. This experience suggests a complete rethinking of the role of the architect during the design, procurement and assembly stages while enhancing creativity. The project seeks to demonstrate the viability of non-standard construction using both digital design and manufacturing within economically tight constraints thus forming a new body of knowledge integrated within the architect's office.

Category of responsive design

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Silver Prize in responsive design

Constellations

Design & images credits: Nataly Gattegno

Location: University of West Florida, Pensacola, Florida, USA

Lead Designers: Jason Kelly Johnson & Nataly Gattegno, Future-forms

Client: Reubin O' D. Askew Institute for Multidisciplinary Studies, University of West Florida

Date Completed: 2020

Description:

Constellations is a dynamic and immersive artwork animated by flowing patterns and algorithmic formations of light and shadow. It is an iconic sculpture that merges digital craft and cutting edge fabrication with data visualizations of abstract phenomena found in nature at a variety of scales. Constellations creates a theater-in-the-round that acts like a portal into an invisible world of dynamic visual poetry inspired by ideas of science, art and technology.

Constellations is located between the Center for Fine and Performing Arts and the Hal Marcus College of Science and Engineering at the University of West Florida in Pensacola Florida. It anchors the landscape between the STEM disciplines on campus and creates an open ended framework for dialogue between the arts and the sciences. Part performance space and part data visualization device, Constellations creates the gathering space for the dialogue of different disciplines and information.

The structure forms a 30' x 25' x 16' theater in the round - a place to gather, collect and experience. Constructed out of stainless steel, Constellations is made up of a series of galvanized steel structural columns, stainless steel elliptical beams and lattices. Suspended from the lattices are a series of stainless steel trays that hold Phillips Color Kinetic LEDs, controlled by a Pharos LED controller.

Inspired by early studies and translations of animal locomotion using chronophotography and planetary motion simulations, Constellations uses geometry, light and shadow to create a meditative internal space that at night becomes a playful illuminated sculpture displaying constellations of motion. Never the same - always in flux.

Constellations merges art and science, technology and experience, data and art. The theater-in-the-round brings together people from divergent disciplines, to observe patterns of data, discuss and collaborate. Whether a musician seeing the rhythm of a score, a dancer studying a choreography, a computer scientist observing data patterns, or a meteorologist gazing at images of clouds; Constellations brings together otherwise siloed disciplines and people through the merge of art and technology.

Category of responsive design

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Bronze Prize in responsive design

The Apothecarts

Design team: Emilie Taylor Welty (professor), Nick Jenisch (project manager), Elizabeth Bateman, Jeremy Baudy, Anna Deeg, Claire Divito, Rebecca Dunn, Adrian Evans, Danelle Martin, Danielle Scheeringa, Bhumi Shirole, Zach Speroni, James Ridenert, Dana Ridenour

Support: Johnson Controls, Inc., Tulane's Community Engaged Learning and Teaching program, Skatelite

Collaborators: Solitary Gardens, The Albert and Tina Small Center for Collaborative Design at Tulane's School of Architecture, Resurrection after Exoneration, Samara School of Community Herbalism

Description:

How can design start a conversation and serve as tool for advocacy and education?

The Apothecarts are a series of mobile apothecary carts that challenge us to imagine a landscape without prisons. There are 2.2 million incarcerated people in the United States, and of those around 90,000 are subjected to indefinite solitary confinement every day. The devastating, and often irreparable, effects of solitary confinement include, but are not limited to, alienation, dehumanization, despair, disorientation, paranoia, and suicidal ideation. The Prisoner's Apothecarts are a series of mobile healing units that transform plants from Solitary Gardens into medicine for communities most deeply impacted by the insidious reach of mass incarceration. The apothecary produces natural medicine, tea, tinctures, steams, and salves in conversation (written letters) with folks in solitary confinement across the US. As the medicine is designed by folks who are incarcerated and distributed to affected communities, incarcerated individuals now have a unique opportunity to heal the communities they are often accused of harming. The mobile apothecary carts, or "apothecarts," are a series of herbal medicine carts that advocate for prison reforms and make healing justice visible and accessible across the City of New Orleans.

The Apothecarts were designed and built during the fall of 2020 by students at Tulane's School of Architecture. This work is an ongoing effort to expand design access across our community, improve the design process, and prepare a new generation of architects to create a more just world. This academic studio pairs a team of architecture students with a local non-profit to program, design, and fabricate a project that models design excellence and best practices in community engagement. This research is action based and includes interviews, area expert teach-ins, observation, and surveys as part of the project design phase. That research then directs the design options presented to a core group of stakeholders who participate in a multi-stage feedback loop resulting in a final built project, or in this case two small built projects. The Apothecarts project is focused at the intersection of design, social justice, and abolition and shows

the potential of design to impact complex social issues.

Honorable mention in responsive design

Coral Carbonate: Architecture Beyond the Built Environment

Design & photo credits: Alex Schofield

Company: Objects and Ideograms, a design workshop

Category of responsive design

Description:

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The footprint of our existence has had catastrophic impacts on ecosystems globally. In particular, coral reefs are being decimated by human-induced conditions quicker than they can recover and grow. This project exhibits novel application of a 3D printed coral substrate, in form of the material substrate Calcium Carbonate, as targeted intervention and artificial restoration for aquatic ecosystems. More specifically, Calcium Carbonate is 3D printed to mimic materiality which makes up the hard structural home of coral's living polyp inhabitants. This unique material development has led to the invention of material methodology in support of a wide range of ocean life ecosystems by fabricating and reseeded a 3DP calcium carbonate scaffold. The 3DP calcium carbonate is currently being tested as structures, tiles, and frags used to further test live applications in support of artificial coral restoration, but also shows promise as a biological substrate for the growth of other ocean life. The ultimate goal of such an intervention is the cultivation of a healthy and biodiverse aquatic ecosystem through adaptation and repair of physically damaged environments caused by anthropogenic sources.

This project and application goes beyond simply a substrate to seed and supplement the growth of coral, but creates a link between our anthropocentric built environment and surrounding natural ecosystems. What once was a hard edge, being our coastlines and interface with water bodies, is now being explored as a softer edge as we reconsider our interface between the world beyond buildings. This project has applications in coastline infrastructure, aquaculture, and bioremediation as substrate and surface to foster growth of aquatic organisms.

Alternative materials for underwater fabrication, such as concrete and other land based materials of the built environment, often leach undesirable byproducts and contribute a large carbon footprint in the process of their own production. However, new techniques of Carbon capture and sequestration from our atmosphere, essentially removing harmful CO₂ from our environment, can also create a renewable source of Calcium Carbonate while helping diminish our growing CO₂ pollution. By combining design and material innovation with the rapid and customizable fabrication potential of 3D printing, this unique application for ocean life conservation can be readily deployed at various scales in any unique environment.

This project's origins and inventions come in direct response to a world in crisis. We are seeing the world change in such a way as reflected from our modus operandi as humans who have little considered our impacts. This project most importantly operates at the intersection of both human and aquatic needs, a space seldom considered within construction of the built environment. While we may be land dwelling mammals, we still have great impact on ecosystems we may never visit or see and thus we must consider our intentional design and construction of a built environment that is equitable to all living organisms on this planet. This project's methodologies of computational design and fabrication utilizing CaCO₃ provide various benefits for a shift from an anthropocentric built environment to that of a symbiotic one.

Honorable mention in responsive design

Renaturalisation of wetlands in the City of Stalowa Wola

Design: LAX laboratory for architectural experiments (arch. Anna Grajper, arch. Sebastian Dobiesz)

Visualisation credits: LAX laboratory for architectural experiments

Category of responsive design

Description:

The main goal of the project is the renaturalisation of wetlands in the City of Stalowa Wola, which has seen a deterioration in its water-holding capacity due to draining and isolation from its feeding source - the San river.

The main design assumptions were based on the guidelines of the EU "Life for Climate" program in the 2020 edition, under which the city authority plans to obtain funds. Thus, the method of shaping the project was subordinated to pro-ecological technological, functional and spatial solutions aimed at increasing the city's resilience to climate change. In response to these objectives, the project proposed an innovative method of wetland reclamation, based on the technology of condensation of water vapor from the site. To achieve this goal, the project proposed Interactive Passive Atmospheric Water Collection Systems (IPAWC Systems) based on hydrophilic materials technologies patented by Durham University. The implementation of the Systems was proposed on the basis of partnership between the University providing the technology and the City of Stalowa Wola.

The Systems themselves are designed in a way that allows them to adapt to the prevailing climatic conditions, which increases the effectiveness of water collection. Their changeability takes place in real-time. Depending on the form of the objects adapted to the specific location in the area, the Systems react to the level of air humidity, ambient temperature, the level of sunlight or the wind force. The use of solutions from the field of Interactive Architecture in the design of the Systems also allows for gathering the people's interest in the phenomenon of obtaining water and the process of its accumulation.

An important feature of the project is to guarantee the educational value of the project by making it possible to observe the modes of operation of the IPAWC Systems. Empirical observation of the phenomenon contributes to the visitors' understanding of how quickly water „escapes“ from our environment and how important it is to store it widely. It draws visitors' attention to the fact that every part of the space requires a constant water supply to avoid desertification caused by evapotranspiration. Exposing the systems at different altitude levels and in various natural circumstances (in treetops, on filtering islands, among flower meadows and sandy areas, and others) allows people to pay attention to the rate of water leakage depending on the substrate and exposure. Thus, the project promotes knowledge about the phenomena of closed water cycles occurring in nature.

The assumed objectives of the project are to contribute to the development of new, effective methods of water retention in wetlands. The design study site is an excellent field for research in this topic due to the specific location of these wetlands. As a result of many years of urbanization, they were completely incorporated into the city and cut off from the processes occurring in the wider biotope of the region. This situation allows for greater precision in determining the impact of the applied design solutions on the real reduction of emissions during the project implementation.

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Honorable mention in responsive design

Infinity 6 Pop-Up School by Crossboundaries

Team representative: Binke Lenhardt

Program: Pop-Up School

Location: Shenzhen, China

Building area: 200 sqm Site Area: 324sqm

Completion Date: Dec. 22, 2019

Partners in Charge: Binke Lenhardt, DONG Hao

Design Team: Marijana Simic, Cynthia Cui, HOU Jinghui, HAO

Hongyi, GAO Yang

Photo credits: BAI Yu

Category of responsive design

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Description:

In the past 40 years, the city of Shenzhen in China has grown its population more than 40-fold, while the number of primary schools has not even doubled, going from 226 to just 342. As China's largest city of immigrants, with a very young population, the pressure to get seats in the city's school system became an urgent matter for the city government that had openly acknowledged that it is now the city's top priority to build and expand its public school system.

Can architects help this process by embracing fast, modular building technologies without compromising the future education principles that imply bigger freedom in arranging spaces? Invited to address this matter through an installation at the Shenzhen - Hong Kong Biennale, Crossboundaries came up with Infinity 6 - a fun inducing manifesto for future schools, where you can learn about the possibilities of modular prefabrication, while experiencing and interacting with the playful space.

Working closely with the fabricator we amended the standard modular system to respond to our interlocked "X" shape, creating plazas of different sizes and characters in each of the resulting corners. No matter which side you approach the building from, it awaits you with an open, welcoming area.

This idea of openness ripples through our vision of the future, where school extends beyond its walls and becomes a welcoming, interactive space. In the world in which education is becoming a lifelong journey, no longer limited to certain age, place or linear teaching programs, the notion of school should transform as well, to include a more flexible, improvisational and collaborative mindset.

To summarize this vision, we tried to express it through six spatial representations: 1 - gathering plaza that features a stage and the "hang out stairs" for big public gatherings, 2 - in & out plaza, that features classroom porosity where the outdoor space physically participates as a learning space, 3 - private plaza as an antidote to gathering that features a graffiti blackout poetry wall and individual seating, 4 - texture plaza that features richness in texture, 5 - big openings on the façade that integrate the school with its surroundings by providing the glimpses into the school's inner world and 6 - "smart" building features that promote interactivity and embrace unpredictability of skills that future will require. Visitors of the installation were invited to explore the small, yet playful space and experience each plaza and their characteristics. The exhibition inside the space featured some of Crossboundaries' previous educational projects, including the recently finished Jinlong School in Shenzhen that was in big part made of prefabricated modular elements.

The conversations that started at the exhibition opening, that we full-heartedly participated, gave us an insight in many of the parents' and teachers' hopes and wishes for the next generations' education. This is how our own mission as educational space designers constantly broadens: it should always echo the ways of the future learning and imply the active participation in cross-disciplinary conversations and trends that influence the future of schools.

Emerging Designers

Emerging designers 2021

Emerging Designers

GoRolloe

Founder, CEO, team rep, and author: Kristen Tapping

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Description:

Air pollution is one of the most important public health challenges of the 21st century as it continues to threaten the health and prosperity of populations across the globe. It is responsible for more than seven million deaths every year worldwide, of which 600,000 are children. Its global cost is \$9 billion a day, or \$4 trillion per year. Our product comes at a needed time in the market due to these social and environmental challenges.

GoRolloe is developing a bicycle wheel to filter outdoor air pollution including noxious gases and particulate matter. Using only the rider's kinetic energy, the wheel draws polluted air into a set of filters and expels the cleaner air towards the rider's face and into the environment. The average PM2.5 concentration in London is 13.3 µg/m³. Our 26" wheel can filter 1.25 m³/km of air which, based on the usage of 11,500 Santander bikes in London, equates to 170,560m³ filtered per day, or 24 professional European football fields at a 1 meter height.

The filters can be cleaned and reused on a continuous basis creating a circular product lifecycle. Captured pollutants are donated to third party organisations to create new products such as construction material. The materials used to create the wheel will either be a reinforced recycled polymer that can in turn be recycled, or an innovative biocomposite that can withstand environmental stresses and the extreme wear and tear that comes with industrial usage.

The wheel can be adapted to any bike and is initially targeted at cycle-for-hire schemes followed later by the consumer market. The end users of the product are city commuters using bikes for their daily transits. Local authorities are interested in this solution as it improves air quality for their community, gets their citizens involved in sustainability, and promotes a green image of their city.

By integrating cycle-for-hire schemes, our product will be available throughout most city areas reaching people from all economic statuses. This innovation enables citizens to actively participate in creating cleaner air around them, increasing health and safety for themselves and the public.

The concept was initially developed by the founder as a student at London South Bank University (LSBU) and has since won an award, received international media coverage, and received interest from government bodies and private manufacturers and distributors.

The product is now undergoing development and testing to optimize function, promote ergonomic use, reduce manufacturing costs, and establish concrete data on pollution capture. We have in-kind support from LSBU allowing us to conduct prototyping and testing using their equipment and facilities. We have also been awarded an engineering grant by Sustainable Innovations providing us with experts in material research, filter testing, and CFD analysis. During final stages, the filters will be tested in a real environment and analysed by third party laboratories to externally validate the data.

GoRolloe aims to have test models ready to pilot launch by Fall 2021 and have commercial output by mid-2022.

Solarlux Choice

Solarlux Choice 2021

Public Library, Dornbirn

Solarlux Choice

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Author/Architecture: Dietrich | Untertrifaller with Christian Schmoelz
Project management: Peter Nussbaumer, Christopher Braun
Client: Stadt Dornbirn
Location: A-6850 Dornbirn, Schulgasse 44
Competition: 2015
Construction: 2018-2019
Area: 1,610 m²
Capacity: Library for up to 100.000 books, media & games, makerspace, event hall, café
Team Planning: Statics: gbd, Dornbirn
HAVCR: Messner, Dornbirn
Building physics: Weithas, Hard
Electronics: Hecht, Rankweil
Soil mechanics: 3pgeo, Bregenz
Landscape: Balliana-Schubert, Zurich
Team Execution: Builder: Wilhelm + Mayer Bau, Götzis and Rümmele Bau, Dornbirn
Facade: Möding Keramikfassaden, Marklhofen (DE) and Spiegel Fassadenbau, Koblach
Wood-aluminium windows and portals: Böhler Fenster, Wolfurt
Photos credits: © Aldo Amoretti. © Albrecht I. Schnabel

Description:

Public Library, Dornbirn - Project Description

Dietrich| Untertrifaller Architekten ZT GmbH

The library of Dornbirn was designed as an inter-generational sharing, meeting and learning space. It promotes reading and the practice of languages, the exploration of computerized research methods and new forms of communication. "The new library is a milestone for Dornbirn's culture and education," says Mayor Andrea Kaufmann happily.

Urban Context

The ovoid shaped pavilion was established autonomously and stands out expressively among the rectangular shapes of the surrounding buildings. The external path crosses the building, which then becomes a public space.

A facade of 8,000 stylized ceramic books

A lattice of prefabricated ceramic elements is mounted on a steel frame at a distance of 70 cm from the glazed facade. The ornaments are inspired by books arranged on shelves. At night, the light filtered by these moucharabys offers an open image of the park and the city.

Behind this fixed shading system, which also saves energy costs, there is a ring of room-high wood-aluminium windows with triple glazing and additional ventilation sashes in working areas.

A public living room for curious people

New media, the increasing digitalisation of our everyday lives and the associated change in our entire reading and communication culture have made libraries to become a public living room in which curious people with similar goals can come together; The access path leads directly to the double height auditorium with the central lending desk, that is flooded with natural light by its central atrium. The open-access area on both levels is organized around the atrium. A single-flight staircase leads to the basement, where the media library, the games library and an open maker's space are located.

A total of 1,200 square metres, spread over three floors, offer sufficient space for up to 100,000 books and magazines, cosy corners for reading, listening to music and trying out games, as

well as offices and meeting rooms. The large, flexibly usable assembly hall serves as a reading area or event hall for lectures, book presentations and film screenings, depending on requirements. Practical detail: A screen is concealed in the staircase parapet on the ground floor, with the corresponding projection technology located opposite at the other end of the hall. If required, the central skylight window can be shaded.

Media competence for children

The municipal library creates room for new media, new and additional educational offers and numerous events, which are intended to teach children in particular more media competence. There are separate areas for the different age groups, but there are also retreats, for example the reading room to comfortably browse. In the gaming zone, children and young people can meet their friends and try out the latest electronic games. The BI:JU youth library is designed as a lively meeting place and offers young people a wide range of services on the topics of media, Safer Internet and stays abroad. They can learn, work together on projects, attend events or organise some themselves. They receive support in finding information and with questions about smartphones or tablets.

Solarlux Choice

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Solarlux Choice 2021

Prisma – Schorndorf Station

Planning and construction period: 2016 – 2019

Typologies: Cultural buildings

Service phases: 1-8

Typologies: Cultural buildings

Form of award: Direct

Client/Owner: Remstal Gartenschau 2019 GmbH/City of Schorndorf

Project Architect: Till Schneider

Project Management Planning: Gordan Dubokovic

Structural design: Bollinger + Grohmann Ingenieure

Photo credits: Jörg Hempel

Description:

The spatial sculpture „Prisma“ – prism in German – is schneider+schumacher's contribution to the city of Schorndorf as part of the Remstal Garden Show 2019. The design focuses on the special landscape space of the Remstal and, with the geometric minimal body consisting of four points and six lines, forms an accessible place to discover, linger and gaze into the distance. In the midst of the linear structure of the vines, halfway up the slope, the tetrahedron-shaped prism rises on a found bastion, which, in order not to compete with nature, is constructed of glulam panels. It takes up two opposite references to the landscape: The horizontal opening is oriented towards the valley with a view towards the Schorndorf church. The vertical opening creates the entrance and faces the vineyard path, vineyard slope and the forest above.

Access to the interior – initially hidden from visitors coming from the valley – is from the west side. Exterior and interior effects are formulated as contrasts and underlined by the materiality and colorfulness. To the outside, the room sculpture presents itself as a widely visible landmark with a comparatively ordinary wooden boarding, while inside it creates intimacy and warmth with a red coating. The space is lit through the two slits, which, like picture frames, focus the views of the landscape and thus emphasize the perception of the framed sections.

Awards ceremony

During the 2020 edition, there were multiple lectures given by distinguished architects and designers such as Vinu Daniel, Davide Macullo, Anastasia Elrouss, Kilian Kada, Richter Musikowski, Theo Jansen. For the information about this year's edition, due to the ongoing situation, please follow updates about the final dates of the event on the official website: <https://architektur-im-foyer.com/en/> and <https://designeducates.com/>

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Organizer and partners

The host of the Design Educates Awards is Laka Foundation (a nonprofit and nongovernmental organization). The strategic partner of the awards is Solarlux GmbH, a German manufacturer of bifolding glass doors, winter gardens, and façade solutions. The program is possible thanks to the kind support of the members of the jury, advisers, participants, partners, media sponsors: Archdaily and v2com newswire, media partners: World Architecture Community and Global Design Awards Lab. Contact the organizer at hello@designeducates.com

