

Aga Khan Award for Architecture

Shortlisted Projects 2016

Project Descriptions



New Power Station

Baku, Azerbaijan

Architect: Erginoğlu & Çalışlar Architects

Client: Pasha Construction

Design: 2010-2011 Completed: 2013 Site area: 10'000 m²

As part of the regeneration of an old industrial area, a new building echoes a recently restored power station beside it.

The original brief asked the architects to demolish the old, late-19th century power station located on a natural harbour in the Bay of Baku, and build a new events hall in its place, but after a site visit, the architects proposed two new buildings linked by an enclosed bridge to house event spaces, while preserving the old power station as an exhibition space. The resulting New Power Station references the old through its placement and form, and the courtyard outside connects the former industrial site to its surroundings, the expanding green zone on the city's waterfront. The design, with a simple geometric mass, use of zinc and wood for the large sloped roof and the facade, reflects the industrial spirit of the site and enables it to serve as a flexible, multi-functional space. The restaurants, jazz club and the concert area all have access routes to each other to form a dynamic circulation between the two buildings. The New Power House design reflects what defines an industrial building in the collective memory and yet has a contemporary style as well.



Bait Ur Rouf Mosque Dhaka, Bangladesh

Architect: Marina Tabassum

Client: Sufia Khatun Design: 2005-2006 Completed: 2012 Site area: 754 m²

Ventilation and the play of light make this neighbourhood mosque a refuge for spirituality.

After a difficult life and the loss of her husband and near relatives, the client donated a part of her land for a mosque to be built. A temporary structure was erected. After her death, her grand-daughter, an architect, acted on her behalf as fundraiser, designer, client and builder to bring the project to completion. In an increasingly dense neighbourhood of Dhaka, the Mosque was raised on a plinth on a site axis creating a 13-degree angle with the *qibla* direction, which called for innovation in the layout. A cylindrical volume was inserted into a square, facilitating a rotation of the prayer hall, and forming light courts on four sides. The hall is a space raised on eight peripheral columns. Ancillary functions are located in spaces created by the outer square and the cylinder. The plinth remains vibrant throughout the day with children playing and elderly men chatting and waiting for the call to prayer. Funded and used by locals, and inspired by Sultanate mosque architecture, it breathes through porous brick walls, keeping the prayer hall ventilated and cool. Natural light brought in through a skylight is ample for the daytime.



Friendship Centre

Gaibandha, Bangladesh

Architect: Kashef Mahboob Chowdhury / URBANA

Client: Friendship NGO
Design: 2008-2010
Completed: 2011

Site area: 9'210 m²
Built area: 2'897 m²

A rural training centre inspired by one of the country's oldest urban archaeological sites

The Centre was created to train staff of an NGO working with people inhabiting nearby *chars*, or riverine islands. Offices, a library, meeting rooms, and prayer and tea rooms are included in pavilion-like buildings surrounded by courts and pools. The Centre is also rented out for meetings, training, and conferences for income generation. The local hand-made brick construction has been inspired by the monastic aesthetic of the 3rd century BC ruins of Mahasthangahr, the earliest urban archaeological site yet found in Bangladesh. Structural elements are of reinforced concrete and finishes also include timber and stone. The naturally ventilated structures have green roofs. The Centre is located in an agricultural area susceptible to flooding and earthquakes, and whose low-bearing soil has a low bearing capacity. As a result, an embankment has been constructed with a water run-off pumping facility. Constructed and finished primarily of one material - local hand-made bricks - the spaces are woven out of pavilions,

courtyards, pools and greens, corridors and shadows. The Friendship Centre is divided into two sections, the outer *Ka* block for the offices, library and training classrooms and the inner *Kha* block for the residential section. At a time, 80 people can be trained here in four separate classrooms. Simplicity is the intent, monastic is the feel.



Micro Yuan'er Children's Library & Art Centre

Beijing, China

Architect: ZAO/standardarchitecture / Zhang Ke

Client: Dashilar Investment

Design: 2012-2014 Completed: 2014 Built area: 190 m² Site area: 350 m²

A small-scale project that enriches bonds amongst communities and revives Hutong life.

Cha'er Hutong is a quiet spot one kilometre from Tiananmen Square in the city centre. Number 8 in this neighbourhood, located near a major mosque, is a typical *da-za-yuan* (big-messy-courtyard) once occupied by over a dozen families. The courtyard is about 300-400 years old and once housed a temple that was then turned into residences in the 1950s. Over the past fifty or sixty years, each family built a small add-on kitchen in the courtyard. Almost all of them have been wiped out with the renovation practices of the past years. In redesigning, renovating and reusing the informal add-on structures instead of eliminating them, it was intended to recognise them as an important historical layer and as a critical embodiment of Beijing's contemporary civil life in Hutongs that has so often been neglected. In concert with the families, a nine-metre-square children's library built of plywood was inserted underneath the pitched roof of an existing building. Under a big Chinese scholar tree, one of the former kitchens was redesigned into a six-metre-square miniature art space made from traditional bluish-grey brick. Through this small-scale intervention in the courtyard, bonds between communities have been strengthened and the Hutong life of local residents enriched.



Superkilen

Copenhagen, Denmark

Architects: BIG- Bjarke Ingels Group, Superflex,

TOPOTEK 1

Client: Copenhagen Municipality

Design: 2009-2010 Completed: 2011 Site area: 30'000 m²

A public space promoting integration across lines of ethnicity, religion and culture.

A meeting place for residents of Denmark's most ethnically diverse neighbourhood and an attraction for the rest of the city, this project was approached as a giant exhibition of global urban best practice. In the spring of 2006 the street outside the architects' Copenhagen office erupted in vandalism and violence. Having just gone through the design of a Danish mosque in downtown Copenhagen, BIG chose to focus on those initiatives and activities in urban spaces that work as promoters for integration across ethnicity, religion, culture and languages. Taking their point of departure as Superkilen's location in the heart of outer Nørrebro district, the architects decided they would approach the project as an exercise in extreme public participation. Rather than a public outreach process geared towards the lowest common denominator or a politically correct post rationalisation of preconceived ideas navigated around any potential public resistance, BIG proposed public participation as the driving force of the design. An extensive public consultation process garnered suggestions for objects representing the over 60 nationalities present locally to be placed in the area. The750-metre-long scheme comprises three main zones: a red square for sports; a green park as a grassy children's playground; and a black market as a food market and picnic area.



Manouchehri House

Kashan, Iran

Architects: Akbar Helli, Shahnaz Nader Client: Saba Manouchehri Kashani

Design: 2008 Completed: 2010 Site area: 1'380 m² Built area: 1'160 m²

The combined reinvigoration of the architectural and craft-work heritage in an old city has sparked a broader revitalisation.

A boutique hotel and textile centre located in the historic quarter of Kashan, in the province of Isfahan, the project entailed the restoration of a 19th century merchant home, typical of the historic residential buildings of the area which have for the most part fallen into complete disrepair. The initial purpose that informed the undertaking was threefold: the revival of historically significant hand-woven textile traditions of Kashan which were on the brink of extinction; the renovation, restoration and revitalisation

of a historic house and its surrounding neighbourhood in order to draw attention to the vast treasury of this architectural heritage in danger; and raising awareness of the cultural, artistic and technological traditions embedded in the Islamic architectural traditions of this region. It houses not only the textile workshops for brocade, silk, cotton and velvet weaving, but also features the city's finest dining establishment, a contemporary art gallery, a handicraft shop, and a subterranean movie house adapted from the original cistern of the old structure The project has met with so much success that it has drawn thousands of people from across the world, and has triggered many similar initiatives across the city.



Tabiat Pedestrian Bridge

Tehran, Iran

Architects: Diba Tensile Architecture / Leila Araghian,

Alireza Behzadi

Client: Nosazi Abbassabad Co.

Design: 2009-2010 Completed: 2014 Bridge length: 270 m Site area: 46'000 m²

Infrastructure that connects two parks has become a popular urban space.

The architects first conceived the two-to-three level, 270-metre-long curved pedestrian bridge of varying width, a complex steel structure featuring a dynamic three-dimensional truss with two continuous deck levels that sits on three tree shape columns, with a third where the truss meets the column branches. It was an imaginative leap beyond the basic competition brief of designing a bridge to connect two parks separated by a highway in northern Tehran, without blocking the view to the Alborz Mountains. The structural elements are based on a latent geometrical order rotated and repeated in three dimensions. The result is a spatial structure large enough to create an inhabitable architectural space, where people congregate, eat and rest rather than just pass through. Multiple paths in each park were created that would lead people on to the bridge. Seating, green spaces and kiosks encourage people to linger on a site where greenery has been preserved by the minimal footprint of the bridge, whose curve offers a variety of viewing perspectives.

40 Knots House



Tehran, Iran

Architects: Habibeh Madjdabadi, Alireza Mashhadi Mirza

Client: Alireza Zahed

Design: 2012 Completed: 2014 Site area: 245 m² Built area: 1'370 m²

Innovative low-cost techniques that reinterpret traditional brick facades.

Persian carpets are world renowned, and bricks have a strong relationship with Iranian historical architecture. Here they are fused into a contemporary facade that appears as a collection of intricately interwoven modules. Creating a small and low budget apartment building in Tehran does not leave much space for creativity, yet an architect can try to do something with the material, textures, outer envelope and light. In light of that, a modern interpretation of the ancient *mashrabiyya* was conceived by using the bricks available on the local market. In order to reduce costs in the construction of this five-storey building, unskilled workers, unable to read technical drawings, were employed instead of master craftsmen. All the construction data was transformed into simple instructions to be recited by the supervisor during every fixing, resulting in a protruding irregular geometry, designed brick by brick, a system invented by watching carpet weavers in traditional workshops. The building has been entirely covered with a mesh of bricks impaled on rod bars as contiguous pearl necklaces. The distances between the bricks have been adjusted to create an opaque effect, through which light does not pass, while when there is a window behind the mesh, it becomes a transparent grid.



Royal Academy for Nature Conservation

Ajloun, Jordan

Architect: Khammash Architects

Client: Royal Society for the Conservation of Nature

Design: 2009-2011 Completed: 2014 Site area: 156'780 m² Built area: 3'600 m²

An abandoned quarry serves as catalyst for an imaginative intervention providing educational programmes and visitor facilities.

The project for an Academy was originally proposed to be on a site inside a nature conservancy reserve, but the architect convinced the client to use an adjacent abandoned quarry which is outside the reserve.

The basic philosophy was that the building would use the parts of nature which have been injured in the past, instead of adding a new intervention on virgin land. Encompassing an academy that provides educational programmes on environment and features a high-end restaurant and craft, the Academy follows a quarry cliff cut-line, creating a linear addition of constructed stone to the bedrock. Arrival is via a stone bridge spanning 30 metres and the longest in Jordan to the mid-point between the restaurant and the Academy. The massive southern facade consists of very small windows with giant vertical blade-like stone cracks shearing into zero width. Corridors are defined by a crack in the ceiling that lets natural sunlight in. On the opposite side, the Academy touches the forest. The project illustrates how to use abandoned quarries that are found in the surrounding mountains in large numbers of 100 or more.



Bunateka Libraries

Various locations, Kosovo

Architect: Bujar Nrecaj Architects

Client: Royal Norwegian Embassy in Prishtina

Design: 2007-2008 Completed: 2009-2012 Ground floor area: 24 m²

A series of public libraries for disadvantaged youth in rural areas.

Bunateka is a word play from the Albanian words *biblioteka*, or library, and *bunar*, meaning well or source of water. The architect, living in Kosovo until the age of 12, grew up and was educated in Switzerland, Nearly 17 years later, as he returned to his home town of Lutogllavë, he saw nothing had changed; there was no library and there were no books. So the idea for the Bunateka emerged from the aspiration to establish libraries in Kosovo's rural areas in order to provide disadvantaged youth with opportunities to access books and educational materials. A 4 x 6 metre wood and glass box on a concrete foundation and fully covered with a solid roof has glazed sides to enable the books within to be seen from all sides, with exterior horizontal louvers and an alignment to protect them from the sun. Although contemporary in style with its clear lines, it hearkens back to the *majlis* of traditional rural houses. It is an inviting infrastructure serving as a location for students to gather, learn, and broaden their knowledge. Until now, eight have been built. In addition to educating students, the Bunatekas also have successfully become vibrant neighbourhood hubs. "The idea is that books are a source of knowledge just like water is the source of life," says the architect.



Issam Fares Institute for Public Policy and International Affairs

Beirut, Lebanon

Architect: Zaha Hadid Architects

Client: American University of Beirut

Design: 2007-2008 Completed: 2014 Site area: 7'000 m² Built area: 3'000 m²

A new building, radical in composition but respectful of its traditional context, "floats" above an exterior courtyard.

The American University of Beirut (AUB) held an invited competition for the design of a structure to accommodate a modern-day think tank on its lush middle campus, one that was in harmony with the rest of the university, especially mindful of the surrounding greenery, and to preserve, as far as possible, existing sightlines to the Mediterranean. The building had to fit into another stage in the implementation of a master plan for AUB, whose upper campus overlooks the water, and whose lower campus is located on the seafront. The architect responded to the project brief by producing a design that significantly reduces the building's footprint by "floating" a reading room, a workshop conference room and research spaces above the entrance courtyard in the form of a 21-metre-long cantilever in order to preserve the existing landscape. The 3,000 square metre building is defined by the routes and connections within the university; the building emerges from the geometries of intersecting routes as a series of interlocking platforms and spaces for research and discourse. The massing and volume distribution fits very well with the topography, and the nearby Ficus and Cyprus trees are perfectly integrated with the project. The building's construction is a continuation of the 20th century Lebanese construction culture of working with fair-faced concrete.



Guelmim School of Technology

Guelmim, Morocco

Architects: Saad El Kabbaj, Driss Kettani, Mohamed

Amine Siana

Client: Université Ibn Zhor d'Agadir

Design: 2008-2010 Completed: 2011 Built area: 6'883 m² Site area: 41 ha

A powerful architecture, playing with the contrast between inside and outside, achieves the dignity essential to educational institutions.

Situated in Guelmin, 200 kilometres south of Agadir and known as the "door of the Sahara", the School was conceived in line with a policy of decentralisation and making education more accessible to those living in remote areas. Comprising a 250-seat lecture hall, classrooms, laboratories, study rooms, library,

offices, sports grounds and staff accommodation, the campus is connected by a series of canopies that create sheltered walkways and seating areas along the north/south axis dividing the campus into two. This organisation makes for readability and clarity of the various elements of the project, while preserving the diversity of the programme. Principally rough-rendered reinforced concrete, buildings are linked by courtyards and partially covered walkways with metal and timber elements. Their volume is massive, yet this scaling finds balance with the projecting windows, louvers and narrow openings repeated throughout. Thermal considerations informed the design, including the orientation, window shading and natural ventilation. Low, massive and with varying volumes, the architecture is boldly contemporary but inspired by its context. Exterior walls are painted ochre, blending with the landscape and the town. In dramatic contrast, interiors are painted in immaculate white. Local stone was used for the terrazzo flooring. The landscaping minimises water use through a choice of local plants and natural ornamental rockeries.



Casa-Port New Railway Station

Casablanca, Morocco

Architects: AREP and Groupe 3 Architectes *Client:* Office National des Chemins de Fer

Design: 2007-2010 Completed: 2014 Site area: 2'500 m²

A dynamic transport hub that anticipates the needs of the city of the future.

This transport hub, designed to anticipate 25 million passenger trips per year in the future, comprises a large passenger hall opening onto a wide square to the southwest and the platforms to the southeast, a shopping centre located on the lower level of the hall, an underground car park and an office building. The dimensions of the vast concourse and the walkways leading to the transverse platform are designed to deal with commuter travel and peak time loadings occurring over the same periods during the day. The architecture of the station hall is characterised by its hypostyle roof, a wide canopy of wood and steel extending beyond the facades to jut out over the square, and thin supporting columns, the upper part of which split into eight branches to filter sunlight through the skylight. The hall's glass facades enable travellers to grasp the organisation of the station and its walkways and, on the west side, a contemporary *mashrabiyya*-like system filters the strong afternoon sunlight. In anticipation of future transformations, the hub has been devised in a way that allows its future connection with a potential regional express line station. In its spaces, volumes, materials, lighting and geometry, the station carries on the heritage of Moroccan palaces and public buildings, while paying tribute to the modernity of Casablanca.



Makoko Floating School

Lagos, Nigeria

Architect: NLÉ - Shaping the Architecture of

Developing Cities / Kunlé Adeyemi

Client: Makoko / Iwaya Waterfront Community

Design: 2011-2012 Completed: 2013 Site area: 100 m² Built area: 220 m²

An alternative building system that provides space for education and cultural programmes in Africa's coastal regions.

Some 80,000 people reside in Makoko, in a stilt settlement south of Lagos, built over water, served by only one English-speaking primary school on reclaimed land susceptible to flooding. The Floating School is a prototype structure whose main aim is to generate an alternative building system and urban culture for the populations of Africa's coastal regions. The triangular A-frame or pyramid (10m high with a 10m x 10m base), built from locally sourced wood and bamboo and buoyed by recycled plastic barrels, is an ideal shape for tall floating objects on water. The structure has three levels: an open play area and community space; an enclosed space for two classrooms for 60 pupils, connected by stairs to the play area; and a semi-enclosed workshop space on a third level. It is scalable and adaptable for other uses, such as housing, health clinic, market, an entertainment centre or an infrastructure hub. The prototype's versatile structure is a safe and economical floating triangular frame that allows flexibility for customisation and completion based on specific needs and capacities.



Doha Tower *Doha, Qatar*

Architect: Ateliers Jean Nouvel

Client: Sheikh Saud Bin Mohamed Bin Ali Al-Thani

Design: 2002-2003 Completed: 2012 Built area: 110'000 m² Site area: 13'000 m²

The varying patterns of the exterior envelope of this office tower evoke mashrabiyya, and serve as protection from the sun.

Sheikh Saud bin Mohammad Al Thani had met Jean Nouvel on the occasion of the retrospective exhibition of the work of the architect at the Centre Pompidou in 2002 and invited him to design a tower to fit into the vision for the development of Doha. The Tower is a cylindrical volume that measures 45 metres in diameter. The steel and concrete structure follows a diamond-shaped grid that bends along the virtual surface of the cylinder. The facade uses a double-skin system. The unique exterior skin is

composed of four "butterfly" aluminium elements of different scales and evokes the complexity of the *mashrabiyya*, while serving as protection from the sun. The pattern varies according to the orientation and respective needs for solar protection. The internal layer is a slightly reflective glass skin that completes the solar protection. The tower is accessible by a landscaped garden sloping down to the large lobby under a glass awning surrounding the building. This bias suggests that the tower is deeply rooted in the earth. Vegetation and glass canopy overlap so to erase the boundaries between nature and the environment created by man. A monumental atrium rises from the ground floor up 112 metres to level 27.



King Fahad National Library

Riyadh, Saudi Arabia

Architect: Gerber Architekten International Client: Arriyadh Development Authority

Design: 2004-2006 Completed: 2013 Site area: 59'558 m²

An imaginative expansion that doubles available space and provides a new skin for an existing structure.

The cuboid shape of the new building surrounds the old 1980s library building on all sides, thus giving the National Library a new appearance in the cityscape. It is clad by lozenge-shaped textile awnings, which playfully combine revelation and concealment. White membranes, supported by a three-dimensional, tensile-stressed steel cable structure, act as sunshades and reinterpret the Arabian tent structure tradition in a low-energy way. One particular challenge for the facade is the wide range of temperatures in Riyadh. In summer the steel cables can heat up to a temperature of 80°C and will expand while in winter they can shrink because of night time temperatures sometimes below zero. These effects had to be taken into account in optimising the tension of the cables. Thermal comfort was increased and energy consumption significantly reduced by layered ventilation and floor cooling for the first time in the Arab world. The old building is now an internal stack, forming the centre of knowledge within the new library. Its dome has been reconstructed in steel and glass to bring in daylight and the former roof of the existing building now provides a well-lit reading landscape. The main entrance hall is on the ground floor, and a separate area for women is provided on the first floor.



Thread Artist Residency & Cultural Centre

Sinthian, Senegal

Architect: Toshiko Mori Architects

Client: Josef and Anni Albers Foundation

Design: 2013 Completed: 2014 Built Area: 1'048 m²

Site area: 6'232 m²

An ecologically sensitive meeting place demonstrates how art and architecture can be part of rural life.

Thread is a socio-cultural centre that houses two artists' dwellings and studio space for local and international artists. Nicolas Weber, of the Josef and Anni Albers Foundation, had been supporting the efforts of a Senegalese doctor, Magueye Ba, in running a medical centre and elementary school programme serving an isolated network of rural villages in the Tambacounda region. When Ba and Weber wanted to add elements of cultural exchange and support for the arts to the work in Tambacounda, the project of creating an artist residency and cultural centre formally began under the pro-bono stewardship of Toshiko Mori, who had previously held workshops in the area. It is a hub for Sinthian and surrounding villages, providing agricultural training on the area's fertile land and a meeting place for social organisation which is, in rural Senegal, the crucial mechanism for sustainable development. A parametric transformation of the traditional pitched roof achieved through a process of inversion collects rainwater, creating a viable source for new agricultural projects during the eight-month dry season. Thread exists at a crossroads between (inter)national artist residency, agricultural hub, community farm, water source, exhibition and performance venue, cultural centre, local library, children's play gym and village cell phone charger. The success of its atypical plurality proves why art and architecture should be the right of all people.



Nasrid Tower Restoration

Huercal-Overa, Almería, Spain

Architect: Castillo Miras Arquitectos

Clients: Junta de Andalucía, Ayuntamiento de Huercal

Overa

Design: 2005-2006 Completed: 2010

Ground floor area: 78 m²

Site area: 3'484 m²

A restoration enhanced by modern design elements and sensitivity towards its built and natural environment.

The project explores the dichotomy between the solid, ageless construction of the existing 13th century Nasrid Tower, made by anonymous craftsmen, and the provisional, light, degradable nature of the contemporary. The additions to the original building are conceived as future ruins, removable, temporary objects placed directly onto the ground without foundations and made with contrasting materials. The

restoration of the Tower itself involved the preservation of original materials where possible, removing modern additions and resurfacing the original mud wall and interior brick fabric. To restore the original entry to the tower, four metres above ground level, a new pre-rusted steel staircase tower and toilet and office container were built. The space was adapted for use as an exhibition space but a range of events, including weddings, have taken place. The landscaping of the area adjacent to the tower re-uses the existing topography to minimise ground alteration. A careful, sensitive restoration project has been undertaken which has restored the presence and meaning of the historic Tower, while at the same time a modern design project produced which demonstrates great flair and a sensitivity towards its built and natural environment. The main achievement has been to transform a derelict building into a symbol of the village and its past, and it has become a powerful tourist attraction.



Ceuta Public Library

Ceuta, Spain

Architect: Paredes Pedrosa Arquitectos Client: Spanish Ministry of Culture

Design: 2007-2008 Completed: 2013

Archeaological site area: 600 m²

Site area: 1'200 m²

Incorporating an archaeological site as a key feature of the building, this library has become a cultural landmark.

An original 14th century Marinid archaeological area is at the core of the reading spaces of the Library. The excavations were included in the interior space of the public building, and the architects worked with the supervising archaeologist to creating a sense of openness and transparency between the Library and the Marinid centre. The project programme is organised vertically on seven levels, three of them overlooking the archaeological remains. The building consists of many different components and the architects wanted to give it a sense of uniformity, to cover it all with one unifying surface. So they developed the idea of a "veil" (a perforated screen) in order to link it all together. The double-skinned facade cut with windows is built with lightweight perforated metal panels in order to filter the strong light and to protect the interior from the strong Straits winds. It also proved to be a good way to hide maintenance galleries. They wanted to identify good views of the sea and the city and to make sure that these became an important component of the design. Cutting through the veil to highlight these was all the more important given that the steep topography of the site meant that the building would be very visible and effectively had no "back". The Library caters to a wide range of people in this autonomous Spanish city close to Morocco and incorporates a range of cultural events into its programming.