The Linear Element. The Relationship between Tradition and Design in the Architecture of Liu Yuyang

Luigi Spinelli

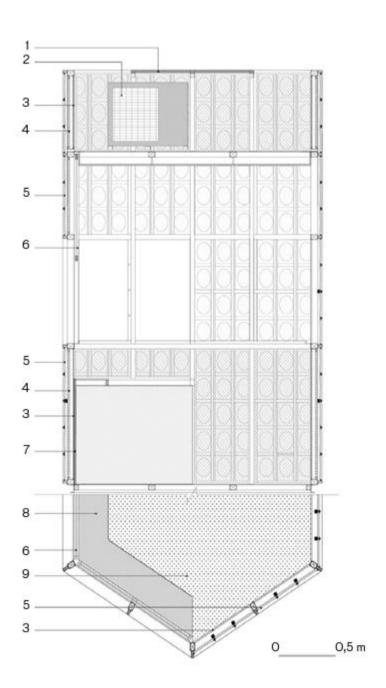


Atelier Liu Yuyang Architects, Nanjing Road Pedestrian Kiosks in Shanghai, 2008-09.

Nanjing Road is the pedestrian street of commerce par excellence; this ally crosses the city center of Shanghai from East to West, in the Huangpu district, for a kilometer. This place, where the most prestigious hotels and elegant shops are concentrated, is traveled by more than a million people every year. Nanjing Road is not only the most famous and popular shopping area in the city — the «Number One Street of China» —, it also represents a century of China's modern history and the last phase of its globalization, as shown by the famous Italian bar *Tazza d'oro*, located on the corner with Fujian Road. At the eastern end of the street, the large bronze statue of Chen Yi, the first communist mayor of the city, marks the confluence of the path with the Shanghai Bund, along the Huangpu River. The architectural, social and historical tensions that are condensed in this place generate a multiple and sometimes disordered urban landscape, characterized by the absence of a coordinated idea.

This is the reason why in 2008, within a wider urban improvement plan, the Shanghai Huangpu District East Nanjing Road Program Development Office promoted the realization of new street furniture elements, twelve pedestrian kiosks placed along the road at about one hundred meters away from each other. The kiosk is an architectural object which relates to the human scale, with an hexagonal or elliptical plan, characterized by its own language; it can contain multiple functions, and enhance the activities within the pedestrianized commercial street, both for citizens and tourists; in addition to the communication of commercial brands, it can provide information, telephone top-ups, ATMs, or sell comfort products, tickets or souvenirs automatically ...

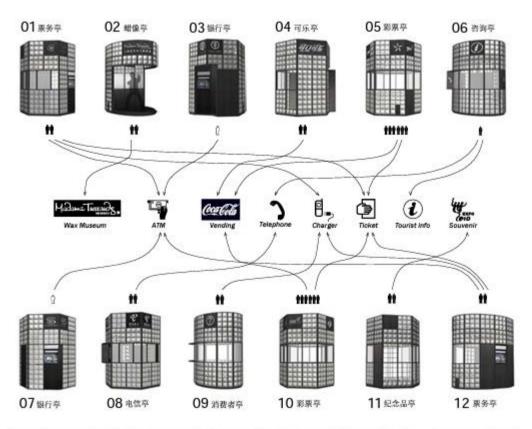
The formal language of this volume recalls the architectures that made the modern history of the district, with the adoption of translucent glass square tiles — that were commissioned to a local manufacturer — framed by steel profiles, as in an Art Deco composition. Each kiosk is susceptible to variations in the design and the shape, and thus proposing twelve variants that are an exercise of organization of the minimum space (4.5 square meters wide, and about 3.5 meters high). From the environmental point of view, these objects can also be considered as prototypes for a new urban lighting system



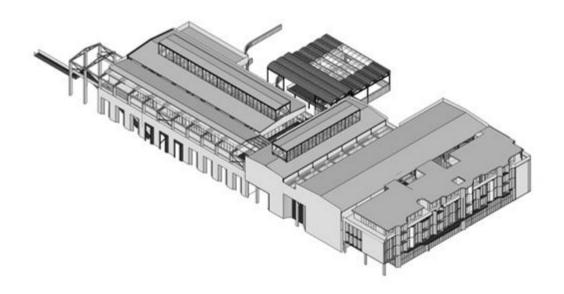
- Monocrystalline silicon solar panel
- 2. Air conditioner external machine
- Metal frame
- 4. LED strip
- Precast hot-melt glass
- 6. Double-hung window
- Side fender (15 mm blockboard + double-sided fire-proof board
- 8. Working surface
 - (dark-greyed German board 837)
- Silver-grayed skid-proof aluminium plate

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Atelier Liu Yuyang Architects, Nanjing Road Pedestrian Kiosks in Shanghai, 2008-09.









43 44 Atelier Liu Yuyang Architects, Shenyao Art Centre Phase I, Shanghai, 2014-18.

which uses «clean energy», thanks to a solar panel located on the roof, that is capable of generating 180 watts of electricity per hour for external LEDs. The hybrid features of this object allow for a coherent insertion in the urban landscape and a recognizable character, ensuing from a recurrent formal theme and a careful control of its variations, and a regular collocation along a linear pavement **51 22**.

The author of this «micro-urbanism» intervention — as he himself defines it — is Liu Yuyang, an architect in his fifties who was born in Taiwan and obtained his Master's Degree in Architecture in 1997 at the Graduate School of Design at Harvard University. Here he cooperated with Rem Koolhaas, who was his thesis supervisor, and with whom he developed the *Great Leap Forward*, the publishing project on the Pearl River delta's urbanization. In recent years, Liu Yuyang has hold professional and academic positions in the United States, in Hong Kong and in Shanghai, and he has become one of the most interesting architects in China. This role started to arise through the project for the Shanghai Museum of Contemporary Art MoCA in the People's Park, and has been recently enhanced by the China Pavilion in the 2018 Venice Architecture Biennale.

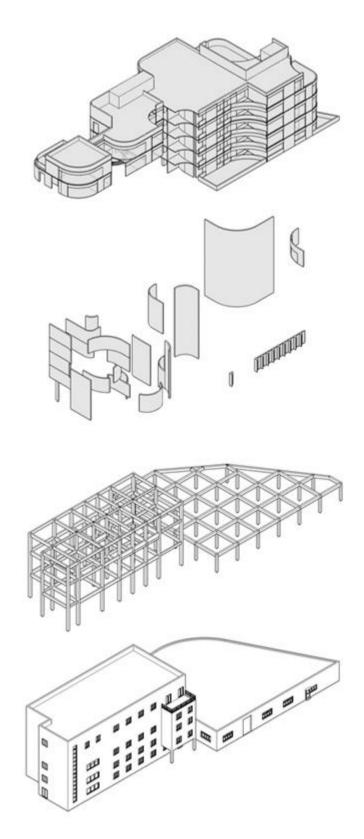
Atelier Liu Yuyang Architects, that opened in Shanghai in 2007, now has 26 employees. The four very young associates of the firm — Wu Congbao, Yi-Fong Kuo, Mavis Fan, Wang Jue — combine skills that range from the presence in professional associations, the teaching of landscape design, and the management of various aspects related to tourism.

In the last decade, the group has carried out many projects, especially focused on the redevelopment of urban spaces. Among these, it is important to mention the 2014 intervention in a shopping center in the North area of the city — on Janghyua Road, in the Jiading district — the Shanghai Shanyao Culture Art Development co. Ltd., where the studio was in charge of the renovation of a large block, almost 13.000 square meters wide, characterized by the presence of pre-existing industrial buildings. The goal is the realization of the Shenyao Art Center, for ceramic works, a cultural center containing a museum, spaces of different sizes for exhibitions and fashion shows, classrooms for courses, offices, adjacent to a commercial area



Atelier Liu Yuyang Architects, Shenyao Art Centre Phase I, Shanghai, 2014-18.





Atelier Liu Yuyang Architects, Shenyao Art Centre Phase II, Shanghai, 2014-17.

In the first phase of the intervention, the major efforts were dedicated to the delicate theme of the transformation of a building of an artisanal nature; the new architectural elements move around and inside the modularity of the reinforced concrete skeleton of the old factory, which appears, disappears and reappears, once again involved in different points of the composition ...

Outside, architectural episodes reorganize functional occasions; inside, the spaces are characterized by shades of white with translucent and reflective surfaces. At a later stage of the intervention, and up to 2018, an existing guesthouse building at the southern end of the lot has been transformed to house spaces for accommodation and administrative offices. Here the architectural envelope moves following the alignment of the structure with concave or convex volumes, soliciting a dialogue with the surrounding urban landscape.

A little further south, in the same years and in the same district, along Aite Road, Atelier Liu Yuyang Architects with the collaboration of Chora has experienced an intervention in an environmental protection intervention on behalf of the Shanghai Jiangquiao Agricultural Development Co. Ltd., on an area of 1.3 hectares called Suzhou Creek, shaped like a lens, defined by a slight curve of the Wusong River. Designed and realized between 2014 and 2015, Riverfront Aite Parkwas to constitute a new open space for the Jianqiao Township community, offering opportunities for gathering and recreational activities such as jogging and cycling, demonstrating and promoting and the same time environmental awareness. The desolating land-scape of a landfill of building materials characterized only by waste objects deriving from demolitions, at the foot of a district of blade buildings of social housing, was redesigned using its own material.

The proposal was based on the reuse of these materials, which were integrated in the construction process. The fragments of concrete, bricks, stones, tiles that were found on the site were packaged to fill up metal gabion baskets in galvanized mesh . These modular elements (2 x 1 x 1 meters wide) can be attacked spontaneously by the climbing vegetation, and construct the new installations which contain and protect the new topography of the place, providing it with varied perspectives and slopes .





47 49 Atelier Liu Yuyang Architects, Riverfront Aite Park, Shanghai, 2015.

The refounding element of the area is the Gabion Wall, an embankment built with these gabions to protect the park from the traffic of the Aite Road **50 61**. The embankment is crossed by two white concrete artefacts, a penetrating underpass and a staircase that climbs on it. The new interventions include an asphalt route for bicycles, a play area equipped for children, winding concrete paths for visiting the space, which contain the green areas, square basins that host new plantings, flanked by a bench, in a linear arrangement underlined by the pavement. In the gathering space, a very light pavilion — realized with laminated bamboo profiles structure, founded in the ground with soft stone plinths and covered with sheets of translucent polycarbonate — offers protection to those sitting on stone benches **52 53**.

The intervention is included within the North Hongqiao Waterfront Landscape Masterplan; with its new planting, which seems to be highlighted as a civil tribute to its users, the park adds a new piece to the linear system of green areas distributed along the river.

This realization in the peripheral area of the city seems to have been a useful experience in preparing the most significant and important intervention by Liu Yuyang in Shanghai, started the following year and just concluded: the design of the open spaces of the Huangpu River East Bund Riverfront, in the Pudong district.

The project focuses on an area of 27.000 sqm, characterized by the piers of the Minsheng Wharf, an industrial sector almost a kilometer long between the terminal of the Minsheng Ferry to the west and the last internal channel before the Yangpu Bridge, which crosses the river to the East; this complex site is the result of different historical phases. The oldest structures date back to 1908, expanded with the completion of the last docks between 1920 and 1924; between 1974 and 1976 the four docks were rebuilt; the two large silos (strong presences which will soon be interested in a reuse intervention) are from the 1990s.

This area is also characterized by a scenic panoramic condition open on the two banks of the river. Southwest, the backdrop of the skyline of skyscrapers in the Lujiazui Financial District: the Shanghai Futures Building by Langdon Wilson, with its steel crown, the Shanghai World Financial Center by Kohn Pedersen Fox and the recent



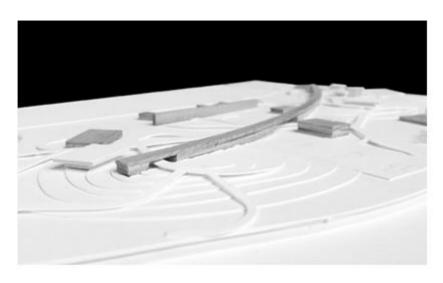
Atelier Liu Yuyang Architects, Riverfront Aite Park, Shanghai, 2015.

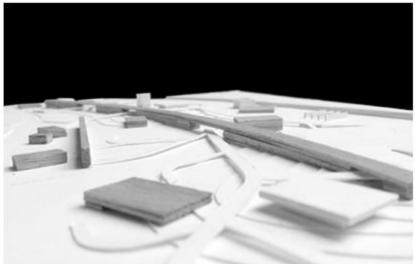
Shanghai Tower, the Jin Mao Tower by SOM with its New York profile, the spire of the Oriental Pearl Tower at the bottom. Beyond the river, on the west bank, one of the major industrial complexes of the city, formed over time starting in 1882 with the first mechanical factory for paper production and, in the following year, with the Water Plant, which at the beginning of the 20th century led to the construction of the Thermal Plant in 1913 and of the Gas Plant in 1933 **55**.

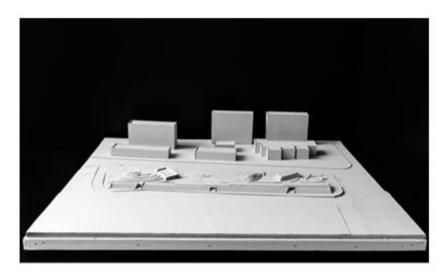
The initiative, promoted by the Shanghai East Brand Investment Group Ltd., is part of a general intervention that regards the banks of the river and that involved six design studios, organized into national groups: for China, Atelier Liu Yuyang Architects, Atelier Deshaus and Atelier Z+; for Japan, Yasuda Atelier and the Nikken Sekkei; to conclude, the Dutch studies OMA/AMO. The assignment was developed through an initial phase, based on shared research activities, and a second phase, which led to the parallel implementation of different proposals, that were later merged into a general masterplan.

Liu Yuyang has interpreted the continuity between the historical landscape and the new functional condition as the main theme at the core of the design concept, in order to give back to the city an area that is witness to a phase of its modern development. The imagery of the historical presence of the place, which is used for the new characterization of the area, involves the large silos and the long deposits covered with lowered metallic vaults, a horizontal industrial landscape that cannot and does not want to cancel the previous vocation of the area. The big orange objects curved over the water - the tower cranes for the movement of the goods from cargo ships to warehouses, hinged on the track line along the edge of the shore - reflect the scale of the city behind them. The linear track on which they rests also constitutes the physical edge of the new place with respect to the river. The 150-meter-long Yangjing Bridge, also called «Huihong Bridge» (due to the helical and then curvilinear shape that resembles a comet that descends on water), crosses the mouth of a canal and connects the Riverfront with the green areas of Yangjing to the east, through paths with a geometrical design 53.

Three linear and parallel paths — «colorful slow-traffic» spaces, designed for new everyday or festive situations, and modulated on their mode and speed of travel — move autonomously along the shore,







Atelier Liu Yuyang Architects, Riverfront Aite Park, Shanghai, 2015.

intertwining and climbing over where necessary, moving around and above the existing structures. These elements provide the route with the occasions to change the rhythm and the view, both in the short and long distance. Moving next to the water, by passing under the tower cranes and the new infrastructure of the cycle path, those who walk can view the river or turn their curiosity to the opposite side, where several different existing structures characterize the riverfront. A red mineral carpet supports the pedestrians and leads those who perform the activity of jogging along the river, at an intermediate level, alternating the path of those who walk and those who run or exercise. In some stretches the gangway for the cycle path runs next to the jogging track, although it is raised to a higher altitude. A metal helical ramp quickly mediates the difference in height in the middle of the path .

Linear tiers draw the different soil levels in section, arranged for leasure and for the outdoor activities, as in Aite Park. The upper level, which is that of the city, looks towards the opposite bank of the river, in the Yangpu district; here, within a program for the largest system of public spaces and linear parks involving a ring of opposite riverfronts extended for 45 kilometers, Original Design Studio has just completed an intervention, characterized by a scheme of crossings parallel to each other and perpendicular to the shore, connected by a light walkway. A parallel sequence of boundary lines, rows of plants and seats, paths and level changes, seems to be directed towards the distant view of the Lujiazui skyline. The illuminating elements (pole lights) are discreetly arranged according with the general order, and guarantee the possibility to use the area also at night; the recessed objects emphasize the structures with grazing light.

The site is equipped with specific furnishing elements, which include the stone benches, the traditional bollards of the piers, the parapets in steel bars with wooden handrails and screens in wire mesh, as well as the new large modular metal vases for planting, characterized by a shape and a material which allude to the industrial imagination, arranged along parallel lines drawn on the pavement and variously integrated with seats and green tubs **55**.

The choice of the plant species is linked to the tradition of the Chinese landscape design, and is in line with the ecological approach that distinguishes the project.



In all these interventions, designed and implemented within the last few years (from 2014 to 2018), the geography of the places is traced by the linear element of the river or by a new project alignment. This design theme — based on the realignment of objects and spaces according to a sequence that proceeds by parallel or overlapping lines — is a recurrent feature which highly characterizes the work and the attitude of Atelier Liu Yuyang Architects, and connects their experience to the architectural tradition of the country.

A linear reference to tradition can be traced in the so-called *Book of Mutations*, the *I Ching*, one of the five classical Confucian works dating back to the III or II millennium BC. Originally the oracle foretold the future by using wooden rods that, once launched, assumed certain configurations, interpreted with the help of the *I Ching*: a complete line (yang line) meant positive response, while, if the line was broken (yin line) the answer was negative. Especially in the close relationship between calligraphy and painting, starting from the Yuan era, the graphic sign of the line and its flow on the sheet, and the fundamental role given to the ink and the tool of the brush, the painters transmit emotional values, times and spaces. The objective or sensitive

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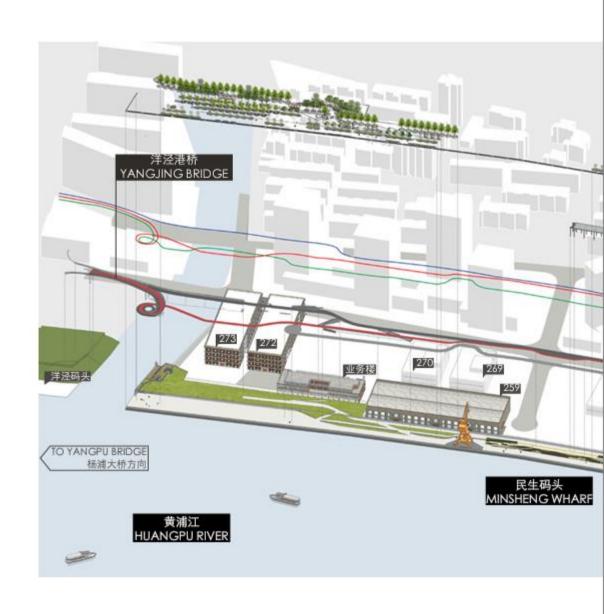
Atelier Liu Yuyang Architects, Huangpu River East Bund Riverfront Open Space Design Shanghai, 2016-18. description is mediated through the use of dry or more diluted inks, lighter or darker, with upward or downward direction lines, aimed at describing a particular atmosphere.

If the work of Atelier Liu Yuyang Architects seems to have its roots in the tradition and in the relationship with history, we should not forget the background in which these proposals have been carried out. In the last twenty years, Shanghai has become not only the economic capital of China, but above all a spectacular metropolis, in continuous evolution, that has transformed its financial district with a skyline of science fiction movie. A city comparable to New York, which grows and transforms itself with an impressive speed, with a frenetic entrepreneurial activity that does not even stop at night, where you can feel yourself a citizen of the world in a state of security and freedom. A metropolis that, attentive to the West, is proving to know how to do something unique and different.

Within this complex and feverish globalized urban landscape, the philosophy that guides the work of Liu Yuyang is linked to an approach of a conscious sobriety and the sense of belonging to a community.

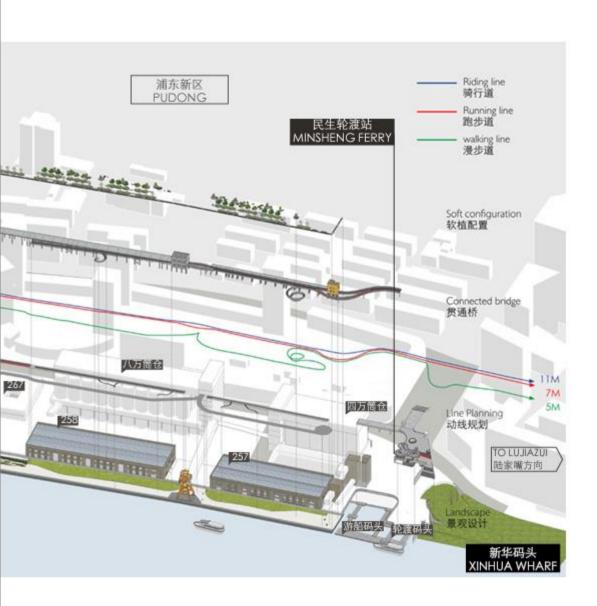
Aware that every project has its own specific narrative, not detached from its poetics, the architect aims to improve the built environment in an intelligent and measured way, offering the best solutions to customers and, in general, to society. This approach also includes a deliberate ecological research, which does not stop at solutions but seeks the optimization of every aspect of the project. The starting point of his vision is the community notion of physical space, and the necessary sharing of the experience of research, as a field and an opportunity for exchange and creative dialogue, focused on the enhancement of an intelligent community that evolves moving in the same direction. For this reason, the firm works in continuous exchange of ideas with a network of international experts and, in China, with a cloud of design offices, landscape designers and agronomist technicians, artists, producers and investors.

This is one of the most interesting and fertile aspects of the professional scene in Shanghai. Tongji University, for example, founded a design company, the Tongji Architectural Design Group Co. (TJAD), one of the largest ones in China; with its 424 million dollars in revenue, it occupies the tenth position in the national range of the enterprises



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Atelier Liu Yuyang Architects, Huangpu River East Bund Riverfront Open Space Design Shanghai, 2016-18.







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that control the real estate market. A range at the top of which is the state-owned China Architecture Design & Research Group, which, in its long history (that began in Beijing in 1952 as the Central Design Institute of the Ministry of Construction) now reached 991 million dollars in revenue and 3.000 employees. While this last group houses a series of ateliers directed by the most important architects, the Tongji University schools of architecture, engineering and design find in TJAD the opportunity to practice by participating in design competitions for professors, and the possibility for students of specializing at the end of the course of study. This dynamic, that widens the field of skills from the technical and functional aspects to the acquisition of a secure architectural language, has allowed numerous achievements along the last sixty years, ranging among new constructions and renovations, in relation to architectures of different types (from important public buildings to commercial structures, from civil infrastructures to cultural sites and institutions). The recent Fine Arts Buildings of the Art and Communications College of Anhui University (AHUAC), built between 2013 and 2018 in Hefei, in the Anhui district, is the testimony of the knowledge and modern interpretation of the building tradition of the country.

University research, with its experimentation and disciplinary transversality, works together with the real pragmatism of the national and international building market. It is on this basis that the new generation of architects was formed in China, which is showing to Western architectural culture its own international language that has roots in local tradition.