

RIO TIETÊ

SCHINDLER
GLOBAL
AWARD
2017
SÃO PAULO



Schindler

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SCHINDLER GLOBAL AWARD 2017 SÃO PAULO

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FOREWORD

**Andre Inserra, CEO Schindler Americas
Member of Executive Committee**

Over the past decade infrastructure has become increasingly prominent in the discussion of urban development. Public awareness of infrastructural systems, along with interest in their form and function is rising. From important long-range development plans from the United Nations to academic discussion, the large-scale systems that enable our urban and urbanizing world are recognized as both historical drivers and future agents of change. Power grids and street networks shape our world – and mobility systems move it.

At Schindler, we work in mobility infrastructure. Since 1874, we've built, installed and maintained building-scale mobility infrastructure. We're active across the world. While we work at the scale of the building, the core of our thinking is both urban and global. Understanding the urban environment and our role in its development is a priority, which is why we established the Schindler Global Award. We see it as our responsibility to contribute knowledge about urbanization, both through our expertise and by supporting the work of students, experts and practitioners who shape the world through design and planning.

The students of today will shape the cities of tomorrow. This insight has guided us to support the coming generations of urban designers, planners, architects and landscape architects. There is perhaps nothing more important than education in ensuring that we all recognize our shared responsibility to create sustainable places for everyone to live full and healthy lives. The students who participate in the Schindler Global Award become part of a worldwide dialogue about the potential to improve our existing cities – and it prepares them to build the new cities of the coming century.

The 2017 Schindler Global Award marks the second time that the award has taken place as an urban design competition open to students from around the world. In 2015 students were asked to tackle a complex site in Shenzhen, China. In 2017 the Schindler Global Award site was in São Paulo, Brazil. The Shenzhen and São Paulo of today are the result of rapid urbanization processes in the 20th century. We challenged students to look at how these cities could provide better quality of life to their inhabitants in the 21st century.

In São Paulo we asked for holistic urban design strategies, encompassing spatial, social and economic factors, using mobility as a catalyst. We wanted participants to consider environmental issues along with local heritage and culture. The benefit of requiring students to consider multiple entry points to urban development is the breadth of thinking that results. Students are exposed to a multifaceted problem, and come to understand the need for a multifaceted approach in response.

Schindler is a Swiss company, and we understand the value in global approaches suited to their specific location. A building, a city neighborhood and a global product strategy all share the need for integration into their specific context – and all benefit from a diverse team of collaborators. The Schindler Global Award demonstrates our commitment to sharing knowledge globally and applying it locally.

In this book essays by practitioners and experts, based in Brazil and also throughout the world, will illuminate a selection of the issues that the competition used as focus points. The presentation of the winning projects demonstrates the diversity of responses to the challenges posed by the competition. Taken together, the projects and the essays reflect cutting-edge thinking about how our cities are designed and understood. Through the Schindler Global Award we have found a way to connect everyday infrastructure with the urban systems and populations it supports.

We are proud to present the Schindler Global Award 2017.

GLOBAL SCHINDLER AWARD 2017 SÃO PAULO INTRODUCTION

Kees Christiaanse

The Schindler Global Award addresses the reciprocal impact of mobility and urbanization, using the format of a student urban design competition. The Schindler Global Award is hosted by Schindler Group, with my Chair of Urban Design and Architecture at the ETH Zurich as the academic partner. Schindler focuses on vertical and horizontal mobility systems, along with traffic management. My chair the ETH Zurich focuses on airport cities, railway hubs, high-density, mixed-use environments and the transformation of former harbors, railway and industrial yards. 2017 marks the second edition of the award since it expanded to have a global focus and urban design basis for the competition.

In this book we present a series of essays related to the Schindler Global Award 2017, along with the twelve winning projects, selected from entries submitted from around the world. The presentation of the competition and concurrent thinking is intended to stir the debate about the relationships between urban design, mixed-use, transit oriented development and new trends, like the return to the city of industrial activity and logistics in emission-low forms.

The Schindler Global Award 2017 focused on São Paulo, Brazil. Brazil's typical urbanization is characterized by a strong tradition of larger cities with extensive industrial, agricultural and, last but not least, wilderness-like hinterlands. São Paulo currently struggles with the transition from an industrial and financial focus to the post-modern condition of the network economy, which has a far-reaching impact on the transformation of the urban fabric due to its rapidly changing multi-directional chain-structures. In Brazil, São Paulo is certainly at the vanguard of this urban change, in which production and logistics facilities, the relation between living and working, and the influence of digital networks condenses into new urban and building typologies, connected by mobility systems. As a test-bed for these changes we chose the CEAGESP wholesale market and its surroundings as the competition site for the second Schindler Global Award.

CEAGESP is a wholesale market for perishable goods, including vegetables, flowers, grain, meat and fish. Its main trade venue is a gigantic pre-stressed concrete pavilion, designed and built in 1964 by Figueiredo Ferraz, within which in an amazingly disciplined choreography flowers, vegetables and fruits are traded. This vibrant urban place, in which the structure is permanent, but the activities it contains are fluid, will change; relocation of the market to another, more remote site within the São Paulo metropolitan area and close to the new belt highway is planned. This immanent transfer will free up a large, strategically situated area near the city center, for which a careful redevelopment policy is needed.

According to recent urban theory, the complete relocation of the market is not necessarily a prudent thing to do. We have seen a renaissance of the compact city model, in which inner-city logistics hubs are required, in order to avoid the delivery of goods over unfeasibly or unprofitably long distances via mobility systems already running at or over capacity. The rise in thinking about more compact cities has

also brought up the need for new forms of mixed-use zoning and structures, combining trade, logistics, living, production and services. Sites like CEAGESP offer excellent conditions for testing these tendencies.

The area around CEAGESP is already gentrifying with business parks, urban amenities and residential complexes. In an effort to help prevent speculative mono-functional development of this valuable site, the Schindler Global Award team selected CEAGESP as the competition site. This was done to collect ideas about how to redevelop the area and direct the development of its context in a sustainable way, to provide a vibrant environment that embodies a new urban condition in the future network economy.

The essays in this book tackle a broad range of topics from diverse perspectives. While some ideas, such as participatory planning or smart cities, might be familiar to most readers, their individual application is explained here to present how urban concepts have been realized in real-world situations. Other ideas, drawn from cutting edge practice and research on urban mobility, such as the inclusion and integration of shared mobility and technology in public transport, are explained. Finally, new ideas in response to shifting urban economies and social structures, such as my essay on the return of urban manufacture, offer a space of contemplation both for academics and professionals how to make these ideas operational.

The essays are a counterpoint to the presentation of the competition brief and prize-winning projects. Insight into the student engagement of the Schindler Global Award offers the chance to understand how teams from around the world interpret a specific site and task. Vastly different cultural backgrounds and educational regimes inform responses that are both deeply embedded in their origin but also reaching for a global form of responsible urban engagement. Over 150 projects were submitted for the Schindler Global Award 2017. They are substantial evidence of student interest in responding to the challenges inherent in constructing the cities of the future. In times of societal change and with the backdrop of constantly increasing world urbanization, this is a testament to the need for a stronger focus on academic urban design programs, tailored to produce specialists that can engage in the world's urgent urbanisation challenges.



SCHINDLER GLOBAL AWARD 2017

COMPETITION BRIEF

Dimitri Kron, Fabienne Hoelzel, Jessica Bridger and Andrea Murer

The Schindler Global Award 2017 competition site was located in São Paulo, the main economic engine of Brazil and most populous city in South America. With a population of twelve million¹ and more than twenty million people in the metropolitan region,² the city is well established and embedded in global flows of resources, people and power. The city faces challenges at all scales, and the competition asked students to address them using urban design frameworks and strategies. The competition site was centered on the CEAGESP (Companhia de Entrepostos e Armazéns Gerais de São Paulo) wholesale market, along with its surrounding neighborhood and infrastructures. CEAGESP will be relocated by the city in the coming years, freeing up a substantial part of the city for redevelopment and change. Its location in the center of São Paulo offers the potential for forward-thinking approaches to the creation of a new centrality within the city, connected and integrated into the local and regional context.

Participants in the Schindler Global Award 2017 were given the following information as part of the competition brief, to introduce the task and competition site. The brief included information about urban development in São Paulo, from both historical and contemporary perspectives. A set of maps and diagrams, along with a site plan, were provided as base materials for all participants. Teams were asked to submit two A0 sized presentation posters and a booklet of additional drawings and research.

Transforming the urban core: Urban design for coexistence

The task of the 2017 Schindler Global Award is to make a comprehensive urban design proposal to address the existing and future challenges on the CEAGESP wholesale market site. The locally focused urban design strategy should be embedded into its context, strengthening the city and the region as a whole. The central themes of the competition are connection and integration, using public space, mobility infrastructures, housing and workplaces as catalysts. Participants are asked to design a sustainable portion of the city by taking a comprehensive look at these topics.

The competition site, situated west of the old center of São Paulo, is located in close proximity to one of the functional gateways to the city, a strategic position, through which hundreds of thousands of commuters from outlying urban areas pass daily, on their way to and from work. The site is northwest of the current centralities of mostly high-paying jobs. This offers the potential to divert development in the city away from a southward direction by presenting an alternative in the northwest. The CEAGESP area could become a new centrality in a network of other new and existing centralities. Changes to the mix of uses on the site could offer new economic and housing opportunities.

The CEAGESP area has been functioning for many decades as a wholesale market for perishable goods. It is an important local employer. Within a radius of approximately one kilometer are numerous commercial businesses, specialist retailers,

Warehouses in the CEAGESP area next to the Pinheiros River, with newer residential developments in the background.
(Credit: Fábio Knoll)



and service companies that are directly associated with the CEAGESP, such as plant nurseries, garden furniture retailers, and event agencies. The city government of São Paulo wants to relocate the commercial activity in the near future, moving it from the 640,000 square meter site to the periphery near the Rodoanel Mário Covas beltway. The primary reason for relocation is the high level of traffic associated with the CEAGESP, which significantly contributes to congestion in city.

Consequently, for the purpose of the competition, the vision for the existing industrial and commercial area is to develop a lively district with a dense mixture of living, working and services, uniting urban and economic considerations. Locally based economies contribute to the diversity, stability and identity of neighborhoods. The mix of uses is therefore of great importance, as are questions of mobility to define where and how residents and workers from the designed neighborhood commute and access their needs in greater São Paulo. This can substantially impact quality of life, and includes everything from employment and living to leisure. For example, well-designed neighborhoods with varied uses and good mobility connections could significantly improve commutes for a portion of the population, by reducing transit distances and the time people need to reach essential destinations in their daily lives.

New, contemporary forms and modes of mobility, such as car-sharing concepts, should be part of the thinking behind the design. There is an urgent need to develop alternatives to problems related to individual transport in car-dependent São Paulo. The role and function of public transportation is a key part of addressing these concerns.

The urban fabric of São Paulo is divided by massive road and rail infrastructures, many of which severely fragment the city. The question is whether – and how – infrastructure can support more diverse uses and functions. Infrastructure could enable more interfaces between uses and users, and become an integrated part of the public realm, rather than a mono-functional element that often isolates neighborhoods. The competition site contains the train station Ceasa, part of the CPTM (Companhia Paulista de Trens Metropolitanos) network. The station is segregated from the urban fabric and is only accessible from one side of the adjacent Pinheiros River. Changes to its range of uses and design could potentially create a new urban hub. The relationship of infrastructure elements to public space and how infrastructure functions as public space should be assessed. The design of the network of open spaces, roads and pathways, within and adjoining the competition site, should be planned and incorporated into the overall design.

The urban design should indicate how new buildings connect to public spaces, and address density along with urban form. São Paulo's urban development, driven largely by the real estate market and informed by security concerns, has mostly resulted in walled high-rise towers. These self-contained living environments abandon the street as unattractive residual space. This should be looked at critically. For city residents the fear of robberies and burglaries is high, and this is reflected in the building typologies. Building setbacks, the relationship of public, private and semi-private areas, as well as outright security measures, such as fences, gates and guards, should be examined. Alternatives that better integrate public space with the tower-based typology should be tested.

(Opposite page, top)

The Pinheiros River with the often-congested Marginal highway on either side.
(Credit: Fábio Knoll)

(Opposite page, bottom)

Heavily used cargo-handling areas and warehouses in the CEAGESP area.
(Credit: Fábio Knoll)



Adjacent to the site boundary, some of the plots of land have already changed in use, as industry has shifted away from the area. The site was a place of active industry starting in the late 19th century, but this has been in decline since the mid-20th century. This is due in large part to shifts in the economy, technological progress and changes in land prices. The industrial past is still visible, evident in the large-scale plot configurations and former industrial buildings. This gives the area a strong spatial identity. New and interim uses, including film studios, event halls, car dealerships and residential towers should somehow be included or addressed in the design. These new uses have attracted service industry businesses, such as restaurants and bars, which cater to workers and visitors. This progressive change is key to designing an area that can evolve over time, to become an increasingly complex and integrated part of the city. The residual space along the river, polluted and disconnected, is also a relic of the area's industrial past. This dividing element could attain its full potential as a new connecting open space and recreational area.

As today's city of nearly twelve million people continues to grow,³ pollution will worsen. Exhaust emissions from motorized private transport are of particular concern. Deliberations about São Paulo's wastewater disposal and drainage problems should also be taken into account. The phenomenon of urban heat islands is common in São Paulo, where large portions of the urban surface are paved or covered by buildings, effectively sealing it. This means that evaporation is reduced and solar radiation is stored in buildings and road surfaces. Heat islands develop, raising surface temperatures significantly in certain areas. Additionally, because rainwater cannot percolate into the ground it immediately becomes surface runoff. This routinely overburdens the wastewater infrastructure, frequently leads to flooding and, even worse, to landslides. Consideration should be given to how the design of the new district can avoid exacerbating these negative environmental conditions and offer a high quality of life year-round.

Inherent in a holistic approach is the integration of found conditions into designs. Designs can draw on the historical identity of the CEAGESP site as they assimilate new ideas. These new ideas must engage the present-day situation and its requirements, to bring flexibility and adaptability for future development. The quality of life of the local residents should be a central concern and should be used to identify approaches that result in high quality urban development overall.

Topics

The choice of a focus for the design is essential, but the comprehensive nature of the competition means that a multifaceted response is required. Four essential topics are meant to guide proposals, and serve as the benchmarks for the evaluation of entries. Students are free to define additional considerations, but the following topics should be used to ensure holistic designs:

1. Regional and local urban design impact
2. Mobility and public space integration
3. Urban living, urban economy and creation of jobs
4. Cultural, social and architectural heritage

Designs should be grounded and linked to research and analysis. This allows a spectrum of pragmatism and imagination, generated from realistic starting points.

(Opposite page, top)
Market activity in the pavilion, built in 1964, at the center of the CEAGESP site.
(Credit: Fábio Knoll)

(Opposite page, bottom)
Cargo handling area between the CEAGESP warehouses, with residential developments visible in the background.
(Credit: Fábio Knoll)

Key Questions

The following questions are linked to the framework and topics of the competition. Designs should take each question into account. The Key Questions are the criteria by which the jury will evaluate entries. By taking a holistic approach urban design proposals should address the following aspects:

Regional and local urban design impact

- a) What implications and gains are proposed for the immediate neighborhood?
- b) How does the strategic gateway position of the site and its potential as a new centrality work in connection with other already existing centralities in the city and the region, in a condition of polycentricity?

Mobility and public space integration

- a) How are the design suggestions integrated into the city's existing public spaces and transportation network?
- b) How are the surrounding areas and mobility infrastructures on both sides of the river connected and made accessible?
- c) How is the expected increase in mobility demands met, and what is the spatial and functional integration of the existing CPTM train station, and any new mobility access points? What are the spatial and functional qualities of these transfer points and transport interface nodes?
- d) What new concepts and forms of mobility could help the site overall, such as those that result in lower emissions and traffic congestion?
- e) How can the design of a high-quality public street network help to avoid or reduce the effects of urban heat islands and help with storm- and wastewater issues?
- f) What are the green and open space concepts?

Urban living, urban economy and creation of jobs

- a) How can a diversity and density of people, uses and offers – a frequency and interaction density – be achieved, to avoid, for example, dormitory quarters and areas that are dead outside of shop and office working hours?
- b) How is safety and security balanced with the desire to improve public space and street relationships, especially considering the city's tendency toward walled towers?
- c) Mixed-use: How are local businesses integrated? How can integrating mixed-use concepts encourage the creation of jobs, such as those related to urban manufacturing or new forms of urban production?

Cultural, social and architectural heritage

- a) How is the existing urban fabric and the heritage of the site part of the design?
- b) How is the transformation of the existing industrial site treated?

¹ Estimated population 2015, IBGE (Instituto Brasileiro de Geografia e Estatística), accessed May 30, 2016, <http://cod.ibge.gov.br/493>

² Estimated population 2015 of the metropolitan region of São Paulo, SEADE (Fundação Sistema Estadual de Análise de Dados), accessed May 30, 2016, <http://www.imp.seade.gov.br/frontend/#/tabelas>

³ 1.08% average yearly growth rate 2011–2025, United Nations, UN World Urbanization Prospects: The 2011 Revision (New York: United Nations, 2011), 8.

Figure-ground plan



(Base map source: <http://geosampa.prefeitura.sp.gov.br>; site research ETH Zurich 2016)

- site perimeter
- CEAGESP area



Topography map

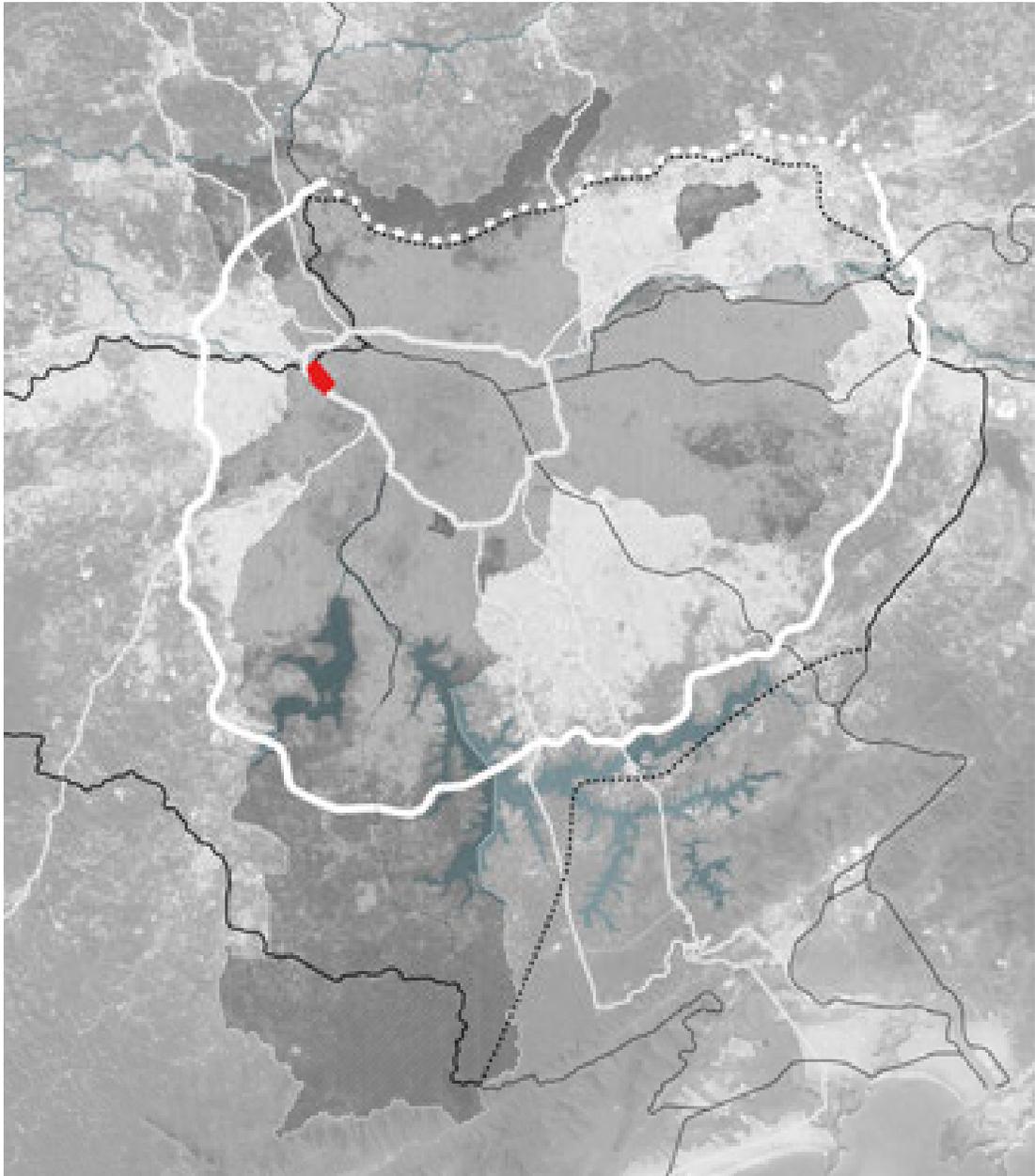


(Base map source: <http://geosampa.prefeitura.sp.gov.br>)

— site perimeter

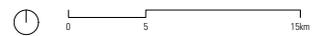


Road and railway network – metropolitan region



(Base map source: <http://geosampa.prefeitura.sp.gov.br>; site research ETH Zurich 2016)

-  beltway (Rodoanel Mário Covas, SP-21)
-  beltway under construction
-  street/ring road
-  existing train line
-  train line under construction
-  planned Ferroanel
-  civil aviation airport
-  site





Jury, from left to right: Hubert Klumpner, Kees Christiaanse (moderator), Paola Viganò, Anna Dietzsch (president), Claudio Bernardes, Georgeen Theodore, Carlos Leite, Sandro Pincherle, Fernando Mello de Franco, Neil Runcieman, Adriana Levisky, Elisabete França, Jose Castillo, Ciro Biderman (Credit: Dimitri Kron)

SCHINDLER GLOBAL AWARD 2017 JURY

The Jury Schindler Global Award met in February 2017 in São Paulo, Brazil. The two-day process was filled with lively debate about the student projects and methods of urban intervention. Jury president Anna Dietzsch guided the jurors in selecting twelve nominees from over 150 qualified competition entries. A final ranking of the winners was conducted at the close of the final session. The jury members were:

Ms. Anna Dietzsch (President)

AIA, Architect, Managing Director, Davis Brody Bond Architects and Planners, New York, USA and São Paulo, Brazil

Mr. Claudio Bernardes

Chairman of the Advisory Board of Secovi São Paulo, São Paulo, Brazil

Prof. Dr. Ciro Biderman

Economist, Professor of Public Administration and Government at Fundação Getúlio Vargas EASP; Chief of Innovation Office at City of São Paulo, Brazil

Mr. Jose Castillo

Architect and Urban Planner, Design Critic in Urban Planning and Design at Harvard University, Cambridge, USA; co-founder of arquitectura 911sc, Mexico City, Mexico

Dr. Elisabete França

Architect, Director of Planning at CDHU, State of São Paulo, Brazil

Prof. Hubert Klumpner

Architect, Professor of Architecture and Urban Design at ETH Zurich, Switzerland; Partner, Urban Think Tank, Zurich, Switzerland

Ms. Adriana Levisky

Architect and Urbanist, Levisky Architects, São Paulo, Brazil

Dr. Fernando Mello de Franco

Architect, former Municipal Secretary of Urban Development, City of São Paulo, Brazil

Mr. Sandro Pincherle

Director of FIABCI Brazil, Advisor to Secovi São Paulo, São Paulo Brazil

Mr. Neil Runcieman

Communications Director, Schindler Group, Ebikon, Switzerland

Prof. Georgeen Theodore

AIA, Architect, Urban Designer, Director and Associate Professor at New Jersey Institute of Technology, USA; Principal, Interboro Partners, New York, USA

Prof. Dr. Dr. h.c. Paola Viganò

Architect, Professor of Urban Theory and Urban Design at EPF Lausanne, Switzerland and Università IUAV of Venice, Italy; Principal, Studio Paola Viganò, Milan, Italy



Jury President Anna Dietzsch (Credit: Dimitri Kron)

STATEMENT FROM THE JURY PRESIDENT

Anna Dietzsch

São Paulo, like many other urban centers around the world, greatly expanded its demographics and territory in a short period of time, in a pattern that directly reflected (and reinforced) its divided and unequal social structure. The result is striking difference: infrastructure, streets, sidewalks and public amenities that can be impressively bad, and give no hint to the manicured wealth and quality of private spaces, or “privatized” public spaces. The Schindler Global Award 2017 Competition Brief, “Transforming the urban core: Urban design for coexistence” asked students to respond to these divergent urban tendencies.

The task wasn't easy and the projects swept through a great range of topics and approaches, pushing the jury to steer towards important contemporary urban design issues: can we unilaterally define the complete development of such a big and complex territory? Where do we stand in terms of its history, should we consider its built (and not built) memories? Is urban design “big architecture?” Can architects work alone? Is the criticism of planning and design a valid response?

In the first day, the group first selected 58 projects out of 157 and finalized the day with 32 projects after a long discussion about the selection criteria important to each individual juror and to the group as a whole. The second day was spent choosing the 12 winning projects and defining the final ranking. At that point it was interesting to note that the discussion would evolve and come back to two different points of view: one that identified with solutions which could be more easily implemented by the status quo of our city's reality and forces, and another that was attracted by projects that somehow questioned this status quo, pushing for resolutions beyond the boundaries of the questions posed in the competition brief.

The winning projects reflect this important duality and give us a range of solutions that point to both tendencies. This is in hope of taking the discussion even further and giving back to all of those students who participated in the competition. It is also in acknowledgement of their efforts to achieve the difficult – but important – balance in their professional positioning as problem-solvers, revolutionary thinkers and participative citizens.