Academic Partners

The Schindler Global Award is a leading urban design competition for students. This publication presents the 2019 award, sited in the Indian megacity of Mumbai. The competition brief and results are accompanied by expert views and analysis of contemporary urbanism, including Kees Christiaanse, Rahul Mehrotra, Nathalie de Vries, and Shipra Narang Suri.

www.schindleraward.com

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INTRODUCTION

Schindler has built, installed and maintained building-scale mobility infrastructure since 1874. Our work has contributed to constructing urban environments around the world for almost 150 years.

We established the Schindler Global Award because we see it as our responsibility to foster knowledge about sustainable urbanization by supporting the work of students, experts and practitioners who shape the world through design and planning.

The students who participate in the Schindler Global Award become part of a worldwide dialogue about the potential to improve existing cities – and it prepares them to shape future cities. The architecture, landscape architecture, urban design and planning students of today will shape the cities of tomorrow. Education must ensure the recognition of the shared responsibility to create sustainable urban areas for everyone.

2019 marks the third time the Schindler Global Award has been held as an urban design competition open to students from around the world. In 2019 the Schindler Global Award moved to Mumbai, India, following competitions in Shenzhen, China in 2015 and São Paulo, Brazil in 2017. Over the years we have challenged students to look at how these cities could provide better quality of life, enabled by urban mobility, in the 21st century.

We are proud to present the Schindler Global Award 2019.
LEAPFROGGING DEVELOPMENT:

URBAN TRANSFORMATION IN MUMBAI, INDIA

The Schindler Global Award (SGA) is a student urban design competition with a focus on mobility. It is an ideas competition, intended to engage students in formulating a response to complex conditions in cities across the globe.

The 2019 competition site is in Mumbai, India. An estimated 22.8 million people live in the city’s catchment area including the Mumbai Metropolitan Region.

In an exciting turn of events, Mumbai will soon have about 725 hectares of space open up for development in the coming years, in an area known as the Eastern Waterfront. It is the biggest section of land slated for development in the city’s central peninsula in the past decades by a wide margin. The future of the Eastern Waterfront is the focus of the SGA.

The theme of the 2019 SGA is “Leapfrogging Development: Urban Transformation in Mumbai.” The theme asks students to submit their ideas about how to leapfrog, or skip over, steps or phases of urban development that are demonstrably unsustainable, from social, economic, environmental, and structural perspectives. Many cities in transition, along with new and certainly future cities will face this question.

On that basis, the competition is looking for overarching ideas about how the Eastern Waterfront could be developed and what its role could be in the city and in the context of the Mumbai Metropolitan Region. These ideas should be elaborated in greater detail within a specific zoom-in area with the help of plans, sections, drawings, renderings, etc., at a variety of scales.

The project should be described using a comprehensive narrative structure that explains the logical coherence between analysis and design. An underlying concept and logic for the design should be clear. The choice of a focus for the design is essential, but the comprehensive nature of the competition means that a multifaceted response is required. A range of scenarios can be tested with impact assessments of their possible spatial, social, economic and environmental consequences.

This is a condensed version of the full competition brief.

Improvements to the mobility networks and their impact on everyday life of all of Mumbai was focused through the lens of sustainable development.
Views along the stretch of the Eastern Waterfront, part of a set of photographs provided to student teams.

Central Mumbai peninsula including Eastern Waterfront site boundary and zoom-in area.
(Map sources: UDRI, GIS Data, LoginMUMBAI)
Kees Christiaanse has been working for over three decades in urban design and architecture as a practitioner and academic. Since 2013 he has been the academic partner of the Schindler Global Award through his professorship at the ETH Zurich.

INTERVIEW WITH
KEES CHRISTIAANSE

What has become clear over the years since the Schindler Award went global?
The Schindler Global Award is an attractive competition for students precisely because it addresses global problems in urbanism. In addition to the prizes awarded, there is a considerable chance that participants will have an impact in the real world by virtue of participating in the competition. This is the role that the SGA should have. It acts as a hub for ideas but also a hinge between students and a larger network of people working on urbanization problems – it helps to prepare students for the reality of working as architects and urbanists in practice.

What are the benefits of having a global urban design competition?
The most fundamental problems in architecture and planning are urbanistic, and related to mobility and sustainability. This is the reason why the award exists: to engage students in the challenges we face in an urbanizing world. In my experience, more than half of professional projects are acquired through competitions and tenders. The earlier students have exposure to this better prepared they are for this reality later.

The SGA also functions to help Schindler position itself as a general mobility firm, something that we need as it becomes clear the public and private partnerships are part of achieving the goal of making cities more sustainable and livable. More and more companies are thinking about the interface between the core of their business and urban settlements. That’s a positive movement with a lot of potential.

What are the significance of the competition title “Leapfrogging Development: Urban Transformation in Mumbai”?
The title was selected because we would like to stimulate a kind of thinking that leads Mumbai to deviate from the development patterns we’ve seen in many places that have unsustainable aspects. We assume that cities follow a certain trajectory that comes from the 20th century. There is no reason, given technological and societal change, that there is a certain path for urban growth and development. To consider that a city in the 21st century could skip over basic things like poor water management or high greenhouse gas emissions mobility and building systems is a powerful line of thought. This could lead to equally powerful ideas about future urbanization processes.

After working for over 35 years in the profession, how do you feel urbanists might impact the urban realm?
The profession is becoming increasingly actual and important. It is not tied narrowly to the aesthetic notion of design, but tied to transport, waste, water, human living conditions, the design of environments. Urbanists must work with integrated projects, and this is happening more and more. I believe that one cannot do this as an individual; it is a collective affair. It isn’t about setting out to design or shape a city – it is more like seeing where you can effectively “adjust the screws” and begin a process of change.

What were your impressions of Mumbai?
The contrasts Mumbai presents are stark: on one hand it is kind of an urban quagmire, on the other hand some things in the city are fundamentally sustainable. Millions of people commute daily by public transport. A lot of waste is recycled and reused in the slum areas where the treatment of resources is very interesting.
JURY MEMBERS

SCHINDLER GLOBAL AWARD 2019, MUMBAI, INDIA

1. MR. PETER BEARD
   Landscape Architect, Visiting Professor at Politecnico di Milano, Italy; Principle of LANDROOM, Domodossola, Italy

2. PROF. MOMOYO KAIJIMA
   Architect, Professor of Architectural Behaviorology at ETH Zürich, Switzerland; Principal and Co-Founder of Atelier Bow-Wow, Tokyo, Japan

3. PROF. RAHUL MEHROTRA
   Architect, Professor of Urban Design and Planning at Harvard University; Founder Principal of RMA Architects, Mumbai + Boston

4. PROF. JAGAN SHAH
   Architect, Urban Designer and Architectural Historian & Theorist, Director of the National Institute of Urban Affairs, New Delhi, India

5. PROF. EM. IR. DIRK SIJMONS
   Landscape Architect, Co-founder of H+N+S Landscape Architects, Amersfoort, Netherlands, Emeritus Professor of Landscape Architecture TU-Delft

6. MR. ROMI KHOSLA
   Architect, Founder of Romi Khosla Design Studio, New Delhi, India

7. MR. UDAY KULKARNI
   Managing Director at Schindler India Pvt Ltd.

8. PROF. IR. NATHALIE DE VRIES
   Architect and Urbanist, Founding partner of MVRDV, Rotterdam, Netherlands, Professor for Architecture at the TU Delft, Netherlands

9. MR. NEIL RUNCIEMAN
   Head of Employee & Customer Communications Schindler Group

10. MS. JUDIT CARRERA
    Director of the Centre for Contemporary Culture of Barcelona; Director of the European Prize for Urban Public Space

11. PROF. DR. STEPHEN CAIRNS
    Director, Future Cities Laboratory (FCL), ETH Zürich

12. PROF. EM. IR. KEES CHRISTIAANSE
    Founding Partner KCAP Architects & Planners, Chair of Architecture and Urban Design at ETH Zurich (2003–18), Programme Leader (2011–15) and Project Leader (since 2011) at the Future Cities Laboratory in Singapore

13. PROF. PETER STAUB
    Rector (ad interim), University of Liechtenstein, Chair of Architectural Design and Theory, University of Liechtenstein
Rahul Mehrotra served as jury president for the 2019 Schindler Global Award. He is Professor of Urban Design and Planning at the Harvard University Graduate School of Design. The jury was held in Mumbai over the course of three days.

JURY STATEMENT
RAHUL MEHROTRA

The range of competition entries surfaced two primary issues in urban design. The first is the importance of using landscape as an instrument to mitigate the potential impacts of climate change. Various schemes demonstrated anticipatory strategies to absorb tide surges, but more importantly to created new imaginings in terms of urban form and infrastructure and their interface with the water’s edge. The second issue is the competition challenged students to think across scales and negotiate the small scale or fine urban grain with questions of regional dynamics. These issues are primary to the development of Mumbai’s Eastern Waterfront, but also in many cities around the world.

The relevance of the competition in the context of the contemporary debates in Mumbai about the development of the Eastern Waterfront lies in the spectrum of propositions that emerged through the competition. These include extreme provocations about catastrophic climate-driven change in the landscape of the city, along with those that are more realistic and challenged specific aspects of the present governance and policy structure for urban development in the city. These range from questions of participatory governance to specific housing typologies as well as propositions for form-based code.

Schemes of particular potency were those that suggested the generosity by which land could be shared through the idea of the commons, for the greater good and the betterment of citizens. The jury commends the entrants who challenged the business-as-usual presumptions about urban development and in particular interrogated the popular notion of monetizing land as an asset of the city through real estate development.

The potential impacts of the competition could occur at many levels. Most importantly the competition interrogates and challenges current norms and practices of urban development. The provocations present in the range of winning entries could hopefully shift and perhaps transform the conversation about this crucial postindustrial land asset for Mumbai. More importantly the imaginings, the propositions in the competition could facilitate the discussion about creating a new commons along the Eastern Waterfront. In fundamental ways this could alter the structural perception of the city, its relationship to the water and the metropolitan landscape beyond. Specifically and operationally the competition surfaced some crucial suggestions for the modification of policy and regulations. These have the potential of being productively embedded within the conversation about renewing regulations and building code in the city, a crucial discussion for the future of the urban form of Mumbai.

By taking part in the competition, the students have clearly gained a greater understanding of urban design processes and projects, but also provided valuable ideas for Mumbai’s Eastern Waterfront. The jury commends the hard work and participation of all students in the Schindler Global Award 2019.
Project Description
Rather than seeing water as a threat when there is too much of it and pouring significant investments in flood defenses, a systematic transformation is envisioned where a permeable topography would allow water in and out through controlled floodable areas.

The project reconciles the duality city/waterfront with a bottom-up strategy defining a new urban vision from Colaba to Wadala. A canvas of appropriation is laid out for Mumbaikars to take ownership of their urban environment, fostering an inclusive community. The “Green Sanctuary” cutting through the Eastern Waterfront is a clear expression of this open potential. It sets a backbone for mobility infrastructures acting as economical clusters, logistical substructures and above all as social inclusion catalysts. At the heart of this new ecosystem, reminders of the industrial heritage are preserved, enhanced and reused, creating a resilient framework toward Mumbai’s urban renewal.

Jury Comment
The jury found this project stood out among entries with similar strategies using water as a basis, which elevated it into the top tier early during the jury sessions. Further serious debate over the course of the final sessions saw it rise to first place. Jurors commended the creation of a reclamation zone and provided an “answer to the lack of open space in Mumbai.” Further examination and debate led to its selection for the top prize in a close final round. It was recognized for “taking transport mobility issues seriously” and furthermore that it “made leapfrogging but believable mobility moves.” The “sophisticated program and form” were mentioned, and in particular the provision of a “stacked and dense system.” The graphics were appreciated as simple yet evocative.

FLOOD ME IF YOU CAN!
WATER AS STARTING POINT. WATER AS CITY-PLANNER. WATER AS RESOURCE.

First Prize
Team 57
FLOOD ME IF YOU CAN!
Water as starting point. Water as city-planner. Water as resource.

Students
Soufiane Chibani, Lucie Perrier

Academic Supervision
Fred Guillaud,
École Nationale Supérieure d'Architectures de Grenoble (ENSAG), France

Prize Amount
US$ 25,000
**THE VISION**

The Eastern Waterfront as a transitional machine

The duality city/waterfront is to be reconciled in the site through an urban structure integrating both the qualities and the challenges of its environment.

1. **Bottom-up Planning Strategy: Flood Network**

Water management is the project’s starting point. Rather than seeing water as a threat when there is too much of it, we develop a strategy to gain back control through a networked system of flood-areas, wet lands and urban infrastructure. The water flow is then helping us shaping the city.

2. **Sanctuarizing the Public Corridor**

Coupled with the water strategy and in response to the much lacking public spaces, we develop the green “sanctuary”. A public urban heart at the scale of Mumbai, where the industrial heritage merges with the new functions: from water treatment & storage, agriculture to sports and culture.

3. **Loop mobility: Connecting the city through the EW**

Taking advantage of the geometry of the site, an infrastructural axe is overlaid over the pre-existing waterfront fabric connecting south to north and providing a safe and fast transportation system. With its elevated rail lanes, the “Spine”, cuts travelling time by more than 70%.

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**ANALYSIS**

The Eastern Waterfront articulates multiple interactions along the city. This diagnosis allows us to understand the logistical planning as well as the urban dependencies that shapes or had shaped the site.

**Attractivity behind the Eastern Waterfront**

The eastern Waterfront rests against the major attractive hubs of the city. It sits as a common factor for an heterogeneous Mumbai. The linear shape of the site offers the potential to maximise the urban mobility and fluidity its flows.

**Water transit**

The East-West connectivity is relatively “weak” due to the suburban harbour rail line, the underdeveloped accessibility system and high walls. There is clearly an infrastructural rupture within the city along the stripe, expressing a lack of porosity.

**Spatial Interactions Infrastructural Mobility**

- Train Station + Individual Housing
- High-rise Housing + Skyscrapers
- Maintenance + Freight
- Train stations
- The city > To the bazar
- Mumbai Terminus Main station
- Fort (Old City)

**A PARALLEL NETWORK**

The complementarity between the “Belt” and the “Spine” creates a circulation loop to the city.

It is linking South to North through a parallel network that extends itself to mobility rods, open spaces, dense residential areas and slums in the back-city. Its flexible configuration enhances the mixed-uses possibilities. It serves as much mobility, as logistics. It is as much an economic cluster as a social inclusion infrastructure.
MASTERPLAN – AN URBAN MOSAIC

Preserve and enhance
In the Colaba Reef, small interventions are carried out along the shoreline by defining a more inviting waterfront. The existing slums are also upgraded and the local fishing industry is sustained.

1. The Pocket – City-center attractor
Like a negative to the highly densified city center, we operate a smooth transition to the waterfront, creating a retreat zone. The mixed-use area proposes: housing, commercial shops, offices, administrative buildings, sport and leisure facilities. It is ideal for workers and inhabitants taking a break, having lunch and relaxing after work.

2. The Node - Productive center
The largest of the three entities driving the masterplan’s dynamics. Sitting next to Colaba Green and Sewri East, it is the heart of the new agricultural industry. It is set to be a new center where the Eastern Waterfront acts as a productive cluster, while providing affordable housing to Mumbaikars and working migrants.

3. The Hook – Supportive infrastructures
Wadala region is characterized by its abundance in residential areas and is a door to the large slum concentration starting from Khorba Mithi Ghar. To democratize the area, we improve mobility by reducing its impact on people’s life, we develop large sport facilities, educational and healthcare infrastructures, along with employment possibilities to shift the center of gravity from an already congested South.

ROAD MAP
A comprehensive strategy at multiple scales
Project Description
This project examines form-based code as a potential model that has the ability to address three major deficiencies in the current Slum Re-development Authority (SRA)’s housing policy currently being implemented in the city today: displacement of the poor; an imbalanced relationship between density vs. open space; and income segregation. By dictating the larger form-based coding of the block, the model allows for a multitude of housing, lifestyle and architectural scenarios to take place, while a rigorous relationship to a subdivided set of open spaces (from the neighbor to the entire district) is strictly maintained. In doing so, a gradient of building typologies, from the tower to the single-family home, can successfully coexist on the same parcel of land, while dually ensuring that a wide range of unit sizes can accommodate household incomes of all ranges. Fundamentally, the project shows how alternative models, both financially performative and urbanistically humane, can exist without resorting to the severe developments that SRA schemes default to. In doing so, it both critiques the current SRA housing policy but also offers a new model of urban housing development for a city with such dire affordable housing needs.

Jury Comment
Early in the jury sessions this project rose to the top in recognition of its complex approach to building code issues in Mumbai. A close debate ensued in the final round, centered on the top two contenders. It was noted that “the reality is if you go to governance, this could be done,” and that it properly “acknowledges value of land,” yet it was also remarked that it was “a bit housing centric.” It was admired for its feasibility in proposing “simple moves,” and “setting up a different systematic.” The project was commended for its urban-scale “machinery for thinking about diversity in a different way.” The representation was appreciated for its appealing detail and rigor.

FORM-BASED CODING
AN ALTERNATIVE URBAN DEVELOPMENT MODEL ADDRESSING THREE MAJOR DEFICIENCIES IN THE CURRENT SRA HOUSING POLICY

Second Prize
Team 158
FORM-BASED CODING
An Alternative Urban Development Model addressing three major deficiencies in the current SRA housing policy

Students
Evan Shieh

Academic Supervision
Prof. Joan Busquets, Harvard Graduate School of Design, USA

Prize Amount
US$ 15,000
PHASING

to mitigate displacement of existing families

EXISTING CONDITION
Empty Plots (Parking Lots) & Current Informal Dwellings

PHASE 01
relocation of existing families on vacant land

PHASE 02
establish primary arterial axes

PHASE 03
establish secondary & tertiary open spaces

PHASE 04
complete block clusters

TRADITIONAL EUCLIDIAN ZONING
+ regulates & segregates land use
+ regulates FSI
+ regulates setbacks

TRADITIONAL ZONING + “DESIGN GUIDELINES”
+ regulates & segregates land use
+ regulates FSI
+ regulates setbacks
+ regulates “facade articulation” via design guidelines

FORM-BASED CODE
+ regulates density via min/max
+ regulates facade-facing public right-of-way
+ regulates block pattern/configuration
+ does not regulate use

MASTERPLAN ORGANIZATION
open space axes hierarchies and cluster distribution

INTERMODAL TRANSPORT & COMMERCIAL CORRIDOR
PRIMARY ARTERIAL OPEN SPACE AXES
SECONDARY VEINS OF SEMI-PUBLIC OPEN SPACE
TERTIARY CAPILLARIES OF PRIVATE COMMUNAL SPACE

OPEN SPACES SAFEGUARDED by GUARDIAN INSTITUTIONS
VEHICULAR ACCESS between BLOCK CLUSTERS
ZONES of BLOCK DIS-AGGREGATION (POTENTIAL DEVELOPER SCENARIO)
CLUSTER VARIATION & ORGANIC ORGANIZATION

EASTERN WATERFRONT STRATEGY
an urban model with the potential for expansion & growth
UNIT DIVERSITY
creates a large spectrum of unit typologies & sizes that provide an opportunity for mixing of all income ranges.

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MASTERPLAN SITE & BLOCK CLUSTER MODELS
MASTERPLAN SITE (1:2500) / BLOCK CLUSTER MODELS (1:500)

fully aggregated
partial aggregation
dis-aggregated
Project Description

The Urban Metabolism is the answer to infrastructural problems and offers the basis of livelihood for the people of Mumbai. The city’s extension along the Eastern Waterfront provides good living conditions in a dense city with a small ecological footprint.

The implementation process of top-down and bottom-up is designed to give the protagonists – the people – the possibility of participation and self-development. Thereby a healthy city climate, affordable and accessible infrastructure and flexible living space emerge through the people who also guarantee their functionality. The framework consisting of mobility, water, recycling and energy guarantees their livelihood. Green Open Space and the connecting Activity Space are the basis of this framework.

This new urban organism is a complex structure of interconnected strategies on different levels. Decentralized systems organized in Neighborhood Organizations and centralized systems run by the Eastern Waterfront Organization complement each other, thus creating a resilient and flexible urban system – the Urban Metabolism.

Jury Comment

This project was quickly recognized for its “plausible, detailed methodology, with lots of thinking about stakeholders.” It was notable for being “attractive because didn’t try to seduce us with urban images, gives systems and methodology,” and it was found to be a nice contrast to more form-driven projects and representation strategies, and the strongest example of a participatory system based approach. A close debate in the final session saw it rise to claim third prize, with special emphasis on its “envisaging a transformation system” that was found to be both “rich and radical.”

Third Prize
Team 239
URBAN METABOLISM.
Mumbai

Students
Beatrice Bucher, Natascha Fakler, Victoria Johann, Verena Krappitz, Yannik Plachtzik, Eva Racz, Charlotte Raisch, Sara Schäfer, Regina Stolz, Christine von Raven

Academic Supervision
Prof. Fabienne Hoelzel, M.A. (AAD) Sebastian Schott, Dipl.-Ing. Ute Vees, Prof. Tobias Wallisser, State Academy of Fine Arts Stuttgart, Germany

Prize Amount
US$ 12,500
**ACTIVITY SPACE**

**The Protagonist – Walker and Biker**

The Activity Space is created by people and their needs. Today’s average living space of 4–6 m² per person as well as the tropical climate leads the people to spend their lives outside – on the streets. New Open Spaces like the Blue Green Network gives them an enormous frame to act in. The Building Holes lead to narrow shaded and ventilated streets. Additionally, trees all over the site contribute to a good microclimate. Architectural elements as the energy hub Parasol enhance these outdoor qualities. Different mobility categories like bicycle, bus, train or boat allow people to manage bigger distances in the city.

**DIVERSITY**

**Cultural, Religious and Economic**

The Building Rules and materials are defined according to the sustainable and future-oriented idea of the Urban Metabolism. Building roles ensure the vibrancy of the Open Space thus the room for small businesses. Building lines are set to create the necessary room for the wind aisles to ventilate the city. Densely built structures are self-shading and create a good microclimate outside. Climate appropriate building structures lower the need of cooling and airconditioning. Nowadays existing building materials, as concrete will be returned in the metabolism by mobile waste construction plants.
**FREEDOM FOR PARTICIPATION**

In Neighborhood Organisations

Besides the Eastern Waterfront Organisation accountable for the main strategies the Neighborhood Organisation works as administrative and organizing organ on the level of the Neighborhoods. It establishes the application and awarding process and the framework of Building Rules within the protagonists develop their living space. Therby the few and precise defined Building Rules guarantee the urban qualities but also the freedom of temporal self development. The Neighborhood Organisation controls this development, the maintance of the extension of the city and most important the urban metabolism.

**In Mumbai Eastern Waterfront Organisation**

The Urban Organism is a complex structure of linked strategies in the need of a functional and interconnected Implementation. Therby the process of top-down and bottom-up is designed to give the protagonist, the people, the possibility of participation and self-development in a framework which guarantees their livelihood - mobility, water and energy.

Thus the Mumbai Eastern Waterfront Organisation is founded which is responsible to implement with the expertise of the organisation the Blue/Green Network, the Activity Space and Hubs of Livelihoods for mobility, energy and recycling.

**PEOPLE**

As one of the fastest growing megacities in the world Mumbai and the Project on the Eastern Waterfront Project can become a sustainable role model for the new urban world. The cities extension provides good living conditions in a dense city with a small ecological footprint. How do we get there? The Urban Metabolism is the answer to the infrastructural problems that offers the basis of Livelihood for the people, the Protagonists. Therby a healthy city climate, affordable and accessible infrastructure and living space emerges through the people who also guarantee their functionality.

**WATER INSTITUTE**

Treatment of Water

The Water Institute is a Hub of Livelihood showing the process and the principle function of water treatment in the Blue/Green Network. This explanation is complemented by two defined programs, which are surrounded by a flexible structure with barrier-free spaces.

The building is located in one of the old docks. It is the headquarters of the Mumbai Eastern Waterfront Organisation (MEWDO). The Development of the MEWDO is in the need of a functionable and accessible Water Supply. Therefore, the building was selected and financed by the Government. The Blue/Green Network is fed by 100% renewable energies. The Mumbai Parasol provides the Public Space with energy and Wi-Fi for a modern society.

**Recycling Network**

All utilized materials are getting reprocessed into raw materials. The different materials require different treatment processes. The Waste Treatment Plant is a Good Producer as Energy and Biogas. The Water Treatment Storage and Filtration is a good Producer for Drinking Water. The Grey Water Tanks and Plants are treated as Usable Water. Usable Water is used in the Blue/Green Network for Drinking Water, Water Supply, and Open Space as a basis for life. The Blue/Green Network ensures the water supply and creates Activity Space for everyone.
SCHINDLER GLOBAL AWARD 2019

FURTHER PRIZES

HONOURABLE MENTIONS

1ST HONOURABLE MENTION

HYDROHOODS OF TO-MORROW

Students (Team 54)
Rehmai Asghar, Joseph Giambri, Naymah Hashmi,
Christopher Long, Sean Rackowski, Chau Tran,
Bo Zhang, Catherine Brito, Kassandra Castillo,
Rebecca Morales, Melissa Nieves
Academic Supervision
Prof. Georgeen Theodore,
College of Architecture and Design,
New Jersey Institute of Technology, USA
Prize Amount
US$ 7,500

2ND HONOURABLE MENTION

MUMBAI’S WATERS

Students (Team 74)
Cyril Costes, Achille Pelletier
Academic Supervision
Frédéric Dellinger,
Ecole nationale supérieure d’architecture
de Grenoble (ENSAG), France
Prize Amount
US$ 7,500

3RD HONOURABLE MENTION

SPATIAL MEDIATIONS FOR MUMBAI’S URBAN AND ENVIRONMENTAL CHALLENGES

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Academic Supervision
Ignacio Cardona,
Harvard Graduate School of Design, USA
Prize Amount
US$ 7,500

CO-WATERING

Student (Team 98)
Marcin Bombacki, Zofia Kuczycz,
Mariano Olszewski, Monika Wegerek
Academic Supervision
Prof. Dr. hab. Ewa Kuryłowicz,
Warsaw University of Technology, Poland
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US$ 5,000

AMPHIBIOUS FUTURES

Students (Team 155)
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Academic Supervision
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FROM PORT TO PORT

Students (Team 180)
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College of Architecture and Urban Planning,
Tsinghua University, China,
Department of Urban Planning, School of Architecture,
Tsinghua University, China
Prize Amount
US$ 5,000

HERETICAL NATURALNESS

Students (Team 235)
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Youssef Rashid an
Academic Supervision
Assoc. Prof. Holger Gladys,
German University in Cairo,
Faculty of Engineering and Materials Science (EMS), Egypt
Prize Amount
US$ 5,000

TRAVEL GRANTS

SHARED SURFACES

Student (Team 51)
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Academic Supervision
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School of Architecture,
University of Virginia, USA
Prize Amount
US$ 5,000

MUMBAI CHRONOTOPIA

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Pierre Desriscourt de Lanux, Lea Guignard,
Guillaume Jacquot, Clémence Montigny
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de Nancy, France
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US$ 5,000

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Warsaw University of Technology, Poland
Prize Amount
US$ 5,000

TRAVEL GRANTS
The built environment has many actors and stakeholders who contribute to its growth and change, from everyday inhabitants to urban designers and government workers. Urban transformation is the result of design, finance, policy and many other discipline and system driven forces. Yet it is also the result of the actions of individuals and institutions. The following five perspectives present a range of individual approaches to changemaking in cities. We invited people from a diverse range of professional backgrounds to share their experiences and ideas, with special attention to Mumbai and to the role of a student urban design competition.

UN-Habitat facilitates sustainable urban development, following global frameworks and agreements, such as the Sustainable Development Goals, Agenda 2030, the Paris Agreement and so on. We work at many different levels and scales, ranging from policy and planning support at national, sub national, regional, city levels, to building houses and providing basic services and infrastructure, to renovating a small public space at the neighborhood level.

As a UN agency, our work is underpinned by the UN Charter, which means we have to integrate respect for human rights and inclusion of the most marginalized, in all we do. In this, the power of the blue flag, i.e. the convening power of the UN, should not be underestimated. The possibility we have of bringing together different stakeholders, especially the most marginalized groups, in decision-making processes that affect their lives and livelihoods, is unrivaled. In cities like Mumbai, achieving sustainability or resilience or inclusion is obviously a huge challenge – it will not happen overnight. It takes a combination of on-the-ground interventions with citywide planning support and national policy support to address large-scale problems. We believe that some level of “hotspot mapping” of most vulnerable areas is essential in order to prioritize and immediately address some critical problems, or people lose faith in the processes we’re trying to institute.

Competitions can help planning and design students understand they have a higher calling, more than just building buildings. International urban design perspectives can bring into relief levels of questions that often students don’t have an understanding of, including poverty, informality, disaster risk reduction, safety, climate resilience etc. It helps them understand that design at the neighborhood, community, or district scale has an impact on all these dimensions. Ultimately, this kind of exchange helps people appreciate that built environment professionals have a special, larger responsibility towards society.

Shipra Narang Suri is an urban planner who currently leads the urban planning and design branch of UN-Habitat. She has helped lead various international organizations focused on sustainable urban development over the past two decades.
NATHALIE DE VRIES

If you are an urban designer you can influence people’s decisions – across stakeholders and scales, on everyday life. I find it an exciting level of design. Urban design can be pretty basic by making a good framework for buildings and public spaces, and designing squares or street furniture, but at its best it also engages creating neighborhoods, streetscapes, and managing good quality densification by the optimization of uses and mixing of functions. My involvement in urban design began with looking at large scale housing projects, by simultaneously creating good “public realm”. It means creating nice neighborhoods by giving as much importance to the spaces between buildings, the public space, as buildings themselves.

At MVRDV we work in many different countries and our staff is very international. Yet we always focus on local aspects particular to each project. It is interesting to consider that many cities worldwide deal with the same issues. A city like Mumbai has issues like water management, traffic and transport, pollution, housing – and these are all universal themes around the world. By necessity all kinds of societal things are coming back into urban design and planning, which impact the way people live. The question is how you can influence all these things through design.

Participating in competitions sharpens your mind because you have to clearly focus on what you want and what it takes to make your vision viable. Typically it is tough because you need to do a lot of research and at the same time come with a strong vision to be noticed by a jury. You really can’t successfully do one without the other in urban design competitions. During the jury it was fantastic as a designer to see so many different promising solutions for complicated issues that have to be tackled at the Eastern Waterfront in Mumbai – it helps you to “leapfrog”.

Our work in Mumbai has always been fast paced and challenging. We work quite a bit in downtown Mumbai where population density is very high and demographics are diverse, this forces us to build vertically and keep in mind social structures while planning. We try to bring the necessary elements for community interaction into what we build, to keep people’s social lives intact, and support new social interaction.

Property developers get better conditions if they incorporate redevelopment of slum and tenement areas. In the past a lot of developers gave people houses outside the city, in very dense areas with narrow streets. This is not the case anymore, slum rehabilitation happens at the same location and a single project affects the entire community, benefiting all tiers of society. This in turn forms diverse neighborhoods.

We want to uplift people’s social and economic lives. People who had lived in slums or tenements can be rehoused, moving from a single room living situation to one with a sleeping area and a living area, with toilets inside the house. The in-house toilet is a huge change: before people had to go outside even in the middle of the night, it was a security problem. With housing improvements people are truly coming to the next level of life.

Mobility is key to development, no city can function without infrastructure. The Mumbai Metro was planned years ago, but only started in the past five years. But it should have been done underground.

Reza Kabul is principal and founder of Reza Kabul Architects (ARK), a comprehensive global design studio with more than three decades of proven expertise in project design and delivery.
Since 1973, Mumbai has issued regional development plans. This is done in 20-year plans, but the challenge has been implementation. From the last plan, issued in 1997, after a four-year delay, only about 15–20% was implemented. The major realizations were that the plan must come sooner and it should be actionable. About 50% of the city lives in informal housing, the highest percentage of any global city. Another 20% live in old tenements, so there are also questions about how to address urban renewal. This means that 70% of the city does not live in proper formal buildings. The current Development Plan is the first one to specifically address affordable housing. Prior to this housing was included in zoning.

The new metro is a major step in Mumbai, about 20 years behind where it could have been. Infrastructure provision, such as roads and rail is the responsibility of local government, but the metro came from the MMRDA and state government. The key for affordable housing is that it is connected to affordable transport. 90% of the city is dependent on the existing public transport, with a strong north south corridor, but weak east-west links. Last mile connectivity in the lower part of the peninsula is by walking, but as you move north this becomes problematic. The metro provides new north-south and east-west connectivity, including regional connections. As the city expands travel distances get longer and new affordable public transport is essential at the metropolitan scale.

The Eastern Waterfront now falls under a Special Planning Authority, run by the Mumbai Port Trust, which is the second largest landowner in Mumbai. The MBPT has funding, and now the Eastern Waterfront Development must follow the guidelines in the current Development Plan. Competitions like the Schindler Global Award can bring up or support development ideas related to the Eastern Waterfront.

KAPIL GUPTA

Serie Architects was founded in 2006 by Christopher Lee and me. We were in school together at the Architectural Association (AA) in London in the late nineties. Back then the world was waking up to the scale and speed of urbanization in Asia. In order to theorize about, and build in Asia at the same time, Chris set up the London office and went on to teach at the AA and Harvard GSD, while I set up the Mumbai office. The office soon grew to Beijing and now Singapore. I had a research directorship at the Urban Design Research Institute in Mumbai between 2004 and 2008.

The practice specializes in architecture, urban design and research on the city. The practice is known for its theoretical position, which emphasizes the study of building typologies and their evolution. New architectural solutions are based on the careful study of historical building precedents and the study of the city and its history.

Our portfolio has grown through significant competition wins in Asia, which have allowed for progressive dialogs with city governments, especially in Singapore. Working in India, however, presents significant challenges for architects and urban designers who are far removed from a state-led planning process. Urban planning remains a unilateral dikat by the state based more on the abstractions of numbers and FAR regimes rather than a shared imagination of city making and the quality of urban space and hence urban life. We need institutional platforms which allow for a productive and effective conversation about urban development with the public at large.

In India, we find ourselves increasingly working on projects for the private sector, be it institutional or housing projects. Through our work we are trying to engage the private realm to demonstrate and define what the positive social experience of public space could be. In Mumbai, similar to other cities in South Asia and in contrast to much of Europe, the City is seen as a place to escape from, to move through and not a space of shared habitation. This must change and only will when the discipline and profession of architecture and urban design takes up the challenge to re-imagine the south Asian city.

Kapil Gupta is a co-founder of Serie Architects. With offices in London, Mumbai and Singapore, the office is working on a range of public and private sector projects in Southeast Asia and India.
SCHINDLER’S 6 SUSTAINABILITY PRIORITIES

Enhance safety

Create value in communities

Pioneer smart urban mobility

Increase sustainability performance of suppliers

Attract diverse talents

Lower vehicle fleet emissions

Sustainability is a dual commitment for Schindler:
We want to fulfill our vision of leadership in urban mobility solutions and strive to minimize the use of natural resources, invest in people, and ultimately make a positive contribution to society. We want to create value for people and continuously improve the quality of life in cities. To achieve these objectives, our sustainability strategy focuses on six priorities to generate the greatest possible impact.
SCHINDLER AND THE SCHINDLER GLOBAL AWARD

Since 1874, when we began making our first elevators near Lucerne, Switzerland, we have seen the cities of the world rise and grow – and we have played a large part in helping to build them. The Schindler Group has more than 1,000 branch offices in over 100 countries worldwide, as well as production sites and research and development facilities in the USA, Brazil, Europe, China, and India.

In the 20th century we made it possible for buildings and people to rise vertically above the earth’s surface to heights inconceivable in any earlier age. In the 21st century our cities present a new kind of challenge, as growing urbanization and globalization catalyze environmental, social and other changes.

The experience of the Schindler Group is that urban planners, architects, and engineers have the necessary expertise and technologies to develop inclusive models of urban development. The designers of cities can have a powerful impact on the future of our urban environments, one that can transcend the political, economic, and social spheres. Fresh ideas are needed about how the protagonists of urban development can apply their knowledge and envision their objectives within a more holistic view of the possibilities available. That is exactly what the Schindler Global Award is doing.

The mobility problems confronting the world’s cities are undeniable, fundamental challenges to making cities more livable and sustainable. Demand for the provision of public transit and shifts in mobility modes due to climate concerns are merely two of the many issues that will require innovative approaches in the 21st century. Although no consensus exists on the solutions or the costs – financial and otherwise – the scale is unquestionably enormous. As the engines of global growth, cities are responsible for generating the lion’s share of the world’s wealth as well as the bulk of waste and emissions. There is significant potential for pioneering approaches and solutions on the part of all urban stakeholders.

The 2019 Schindler Global Award marks the third time that the award has taken place as an urban design competition open to students from around the world. Our future cities will be shaped in part by the people being trained today – and this is why we invest in a better tomorrow. 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.

Students are pushed to research and observe the dynamics of urban development in the context of a real-world example and to use design-based responses to a specific task. 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.

We are proud to have partnered with all the participants of every Schindler Global Award and thank them very much for their valuable contribution.

The Schindler Global Award seeks responses for vital questions about urban development. The third cycle of the global award was sited in Mumbai.
At their heart architecture and urban design have the ambition to improve living situations and thus people’s lives. We all see the world differently and have different points of view. But, as architects, urban designers as well as educators and students in these fields we have an intrinsic motivation to envision how conditions could be ameliorated through design, at any scale. However, architects and urban designers are often called into action once a problem has been identified (by others).

Therefore, we most often act as service providers and are only seldom drivers of change. Education has followed suit, developing problem based learning environments often discouraging students from investigating the bigger socio-economic and ecological picture. In order to educate architects and urban designers who take responsibility for their and others’ built environments through design, new methodologies and didactic formats must be provided. Within an academic setup students need platforms to test their ideas and experience how their designs can trigger a changemaking process.

The Schindler Global Award is such a platform, as it enables young designers to develop holistic, sustainable and visionary futures for urban situations within challenging social and economic conditions, pushing the boundaries and scope of the work normally produced in academic settings. Unlike most of the work emerging from a teaching environment the results of the Global Schindler Award are propelled into the public realm, thus provoking a productive debate not only among global experts but also with various stakeholders on the ground.

Grand ideas are crucial. But they are even more meaningful when they are discussed, tested and even implemented in order to have a real impact. Education in architecture and urban design is miles away from this goal, as most projects remain ideas on paper, without any ambition of implementing them in reality.

Future urban designers have to be able to engage with the city and urban settlements on various levels: from policy-making to the communities affected by it. This calls for urban designers to also be activists and mediators. The Schindler Global Award provides a great opportunity to support students to become urban designers who understand their role as responsible actors in urban environments.

There is great potential for the Schindler Global Award to successfully bridge the gap between the conception of grand ideas and their implementation on the ground. Any future edition will actively pursue this ambition – and we are very much looking forward to it.

Peter Staub is co-chair of the 2019 Schindler Global Award. He is Rector (ad interim) and Chair of Architectural Design and Theory at the University of Liechtenstein.
SCHINDLER GLOBAL AWARD 2019

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www.schindleraward.com

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