The age of the tall building as a single iconic piece of sculpture, standing in isolation from its surroundings, must now come to an end. We have a responsibility to ensure that these permanent urban structures engender a future-oriented urban response to the greatest challenges of our time: unprecedented population growth; mass urbanization; climate change; environmental degradation; social, political and economic change; and the rapid advance of myriad technical innovations.

The future of humanity on this planet relies on the collective benefits of urban density; reducing both land consumption and the energy needed to construct and operate the horizontally dispersed city. Tall buildings must now be the vehicles for creating increased density not just through sheer height, but by connecting multiple layers of the city. Physical urban infrastructure, circulation, greenery, and urban functions traditionally restricted to the ground level would all, ideally, continue up and into the building, such that the buildings themselves become an extension of the city: a part of the two-dimensional horizontal urban plane flipped vertical.

This collection of abstracts serves as a gateway to the presentations given at the CTBUH 2017 Conference, which took place across Sydney, Melbourne, and Brisbane, Australia, from 29 October to 3 November, 2017. The presentations upon which these abstracts are based inquire far beyond the tall building as an icon, to debate a new set of guidelines and responsibilities toward skyscrapers becoming “connectors” in the city. This is reinforced by the on-site visits and detailed design presentations of projects embraced in the conference program. The discussion embraces every discipline, from urban planning to cost consulting, architectural design to vertical transportation, real estate development to curtain wall design.
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Connecting the City: 
People, Density, & Infrastructure

Introduction

The age of the tall building as a single iconic piece of sculpture, standing in isolation from its surroundings, must now come to an end. We have a responsibility to ensure that these permanent urban structures engender a future-oriented urban response to the greatest challenges of our time: unprecedented population growth; mass urbanization; climate change; environmental degradation; social, political and economic change; and the rapid advance of myriad technical innovations.

The future of humanity on this planet relies on the collective benefits of urban density; reducing both land consumption and the energy needed to construct and operate the horizontally-dispersed city. Tall buildings must now be the vehicles for creating increased density not just through sheer height, but by connecting multiple layers of the city. Physical urban infrastructure, circulation, greenery, and urban functions traditionally restricted to the ground level would all, ideally, continue up and into the building, such that the buildings themselves become an extension of the city: a part of the two-dimensional horizontal urban plane flipped vertical.

Of course, all buildings need to be considered for their sculptural qualities, but the form and aesthetics should result from a consideration of the local culture and climate, and a desire to create a new, locally relevant, high-rise vernacular, rather than stand out as attention-seeking entities. We must put the development of the city as a menagerie of self-canceling iconic gestures, each competing for attention, behind us, and also reject the standard commercial “box” template for skyscrapers, which has been homogenizing cities around the world. Above all, it needs to be remembered that these buildings are built to accommodate people, in multiple modes of activity, and a new, more humanized model for the skyscraper needs to develop; a softer model incorporating human scale, communal spaces, and nature.

Why Australia?

Sydney, Melbourne, Brisbane, and indeed, all major Australian cities are in the process of transforming through the combined power of infrastructure and density. Since the 2008 global financial crisis, Australia has enjoyed unrivaled economic growth on the back of a mining- and infrastructure-led boom. This growth has led to Australian cities investing in infrastructure projects, especially transport, to support the next generation of urban development. In Sydney, the Metro rail is the second-largest transport infrastructure project in the world after London’s Crossrail. Melbourne Metro, likewise, creates a vast extension of the city’s public transport network. In Brisbane, two new projects, Brisbane Metro and Cross River Rail, are underway simultaneously. These projects will greatly enhance the connectivity of Australian cities, transitioning them from suburban car-oriented cities to denser polycentric urban conglomerations, and as they develop, a wider debate about city form, density, and height will continue.

The dynamics between the skyscraper boom and the cities that contain them can be observed in the Tall Buildings in Numbers data study, “Rising Up Down Under”, on the next pages. If anything, the skyscraper boom has preceded the major infrastructure changes; it is clear that the future sustainable development of high-rise districts and infrastructure must go hand-in-hand.

To delve into some specific examples, the busy Wynyard Station area is being transformed by Wynyard Place. At the heart of this transformational project is a grand urban room housing Wynyard Station’s new transit hall, opening up connections between the city’s commercial hub of George Street with the historic Wynyard Park, integrating the restored heritage buildings Shell House and 285 George Street. The transit hall will be flanked by prime retail amenity for office workers and visitors, and above will be a new Premium Grade commercial office tower.
On the western edge of Sydney’s CBD, a massive new international mixed-use precinct is being developed at Barangaroo South, supported by a new pedestrian tunnel to Wynyard Station and its own new Metro station. Within this new precinct, the International Towers have just opened and the Crown Sydney Hotel and Resort has commenced construction. The Barangaroo Central precinct will complete the $6 billion master plan.

Circular Quay, the city’s gateway and nexus of ferry, rail, and bus transport, is being redeveloped with the Quay Quarter, fusing a signature tower, a network of laneways and public spaces that will come together to create a vibrant precinct.

The upgrade of the Parramatta Rail Station has led to a massive civic redevelopment around a new civic square, Parramatta Square. The redevelopment has embraced taller, denser developments as a model of a future city, with high-rises planned up to 300 meters.

In Melbourne, a number of high-profile projects are similarly pushing the boundaries of high-rise design, contributing to the successful urban redevelopment of areas like Southbank and the Docklands, along with densifying the traditional CBD. New projects like the under-construction Australia 108 and One Queensbridge are adding unprecedented height to the city, while reorienting the skyline towards Southbank, which has developed over the course of almost 30 years from an industrial corridor to the city’s second CBD.

Meanwhile, Brisbane is taking advantage of its sub-tropical climate to produce extensively vegetated towers with a distinctive “Queenslander” vernacular, like 443 Queen Street, which features a green, urban veranda in the local style and vegetated high-rise corridors. Many of these new projects are located in developing areas like Kangaroo Point, where moderately scaled buildings are advancing Brisbane’s sub-tropical vernacular.

Australian cities thus find themselves at the nexus of much of the current debate about cities: density vs. suburbanization; modernity vs. historical preservation; infrastructure vs. urban life; the high- vs. low-rise realms.

About this Book

This collection of abstracts serves as a gateway to the presentations given at the CTBUH 2017 Conference, which took place across Sydney, Melbourne, and Brisbane, Australia, from 30 October to 3 November, 2017. The presentations upon which these abstracts are based inquire far beyond the tall building as an icon, to debate a new set of guidelines and responsibilities toward skyscrapers becoming “connectors” in the city. The discussion embraces every discipline, from urban planning to cost consulting, architectural design to vertical transportation, real estate development to curtain wall design.

We hope you enjoy reading through the abstracts, and are encouraged to visit the web link for each presentation, where you can find more information on the speaker, subject and the actual presentation and/or video.

CTBUH 2017 Conference Co-Chairs:
Connecting the City: Sydney

Synopsis

Sydney is in the midst of a transformative development cycle. Buoyed by the Sustainable Sydney 2030 plan, the city is implementing a series of improvements aimed at enhancing environmental performance, economic prosperity, and social wellbeing. Central to this objective is the role of new transit infrastructure in connecting disparate parts of the city, in addition to major projects like Quay Quarter Tower, Circular Quay Tower, and Wynyard Place that are transforming the CBD.

Session Chair

Philip Vivian
Director
Bates Smart
Sydney

Philip Vivian is a Design Director of Bates Smart, an award-winning architecture practice with studios in Sydney and Melbourne. He holds a Master of Science degree in Architecture and Urban Design from Columbia University in New York and a Bachelor of Architecture degree from the University of Western Australia. Vivian’s design leadership has secured numerous design excellence competition wins and awards, underpinning the successful growth of the Bates Smart Sydney studio over the past 17 years. His projects have received 20 AIA design awards ranging across Commercial Architecture, Interior Architecture, Urban Design, ESD, and Heritage categories.
Abstract

Adopted in 2007, after 18 months of extensive consultation, Sustainable Sydney 2030 expresses the community’s vision and the City’s commitment to the sustainable development of Sydney to 2030 and beyond. Sustainable development is not just about the physical environment. It is also about the economy, society, and culture. Addressing each of these areas, with bold ideas and good governance, will result in better outcomes for current and future communities. Sustainable Sydney 2030 is thus a plan for a city that is “Green, Global and Connected”.

The plan’s narrative describes the nexus between environmental performance, economic prosperity and social well-being. Updated every four years, it is Sydney’s highest level strategic plan, providing the overarching framework for everything that is undertaken at the City of Sydney and every resource that is allocated. In 2016, the City of Sydney processed over AU$5 billion of new development. The City’s major projects are the CBD Light Rail (now managed by Transport for NSW) and the AU$13 billion Green Square Urban Renewal site. In her presentation, Barone addresses the thinking underpinning the plan, and demonstrates its core content through examples.

Keywords

Infrastructure, Sustainability, Urban Design
Panel Discussion

The Future of the Workplace

Synopsis

As companies continue to occupy dense urban centers, the workplaces therein must constantly evolve across numerous dimensions: tenant demands, overall market shifts, environmental standards, and technological advancements, to name a few. This panel discussion explores the trajectory of these influencing factors, offering a picture of the next generation of high-rise workplaces, with presentations from high-profile experts in the field.

Session Chair

Steve Watts
CTBUH Chairman-Elect;
Partner
Alinea Consulting
London

Steve Watts, Cost Consultant, is a Partner at London-based Alinea Consulting, and at the time of the conference, the CTBUH Chairman-Elect. He is an authority on the economics of tall buildings, having spent a professional career that is full of high-profile towers, including the HSBC headquarters at Canary Wharf, The Leadenhall Building, The Shard and currently 22 Bishopsgate in London – as well as a number of international projects. Watts is a longstanding active contributor to the Council, and has written and presented numerous papers on the commercial aspects of tall buildings and their impact on cities.
Panel Discussion
The Future of the Workplace

Anthony Henry
Head of Workspace Design
Macquarie Bank
Sydney

Anthony Henry is an Interior Designer with qualifications from the University of Technology in Sydney and the Royal College of Art in London. Anthony is a Division Director at Macquarie Group, having joined the organization in 2004 to lead workplace design and innovation as part of the Corporate Real Estate team. In this time he has directed the design on numerous projects including No.1 Shelley St, 28 Ropemaker St and 50 Martin Place. Prior to joining Macquarie, Anthony was a founding partner of the design consultancy ‘futurespace.’

Robbie Robertson
Partner – Experience Design
Deloitte Consulting
Sydney

Robbie is a global, award-winning customer experience strategist connecting retail, brand and digital experiences to tangible business solutions. With 19 years’ experience in London, New York, Singapore and throughout SE Asia as well as Australia, he is also an industry commentator and speaker (Good Design Australia’s Design as Strategy Forum, AIMIA, ADMA, Customer Experience Conference, numerous POPAI and Engagis events). His achievements include 3 B&T Awards for Experiential Design and Specialist Services, 3 POPAI Awards for Retail Excellence, 4 Melbourne & Sydney Design awards and, one of his proudest achievements, the Best Retail Design Asia Award in 2012.

Jennifer Saiz
Head of Group Property
Commonwealth Bank of Australia
Sydney

Jennifer Saiz is the Head of Group Property at the Commonwealth Bank of Australia, responsible for property strategies and portfolio planning, leasing and transaction activities, property operations and design and construction projects. Saiz leads a team of over 200 employees, providing retail and commercial accommodation for more than 45,000 employees, occupying nearly one million square meters of space. In this role, Saiz led the development of Commonwealth Bank Place, and is currently overseeing the development of a major new campus at Australian Technology Park. She holds a Bachelor of Science Degree in Engineering and a Master in Business Administration (MGSM).

Cameron Scott
Chief Operating Officer – Corporate Solutions
JLL
Sydney

Cameron Scott is COO for JLL Asia Pacific Corporate Solutions, which operates in 15 countries and has over 13,000 employees, working with clients and service teams across a diverse portfolio of retail, industrial, and commercial facilities. Scott is responsible for driving strategy development and execution, HR, Finance, Legal, IT, and Supply Chain divisions. He is currently launching JLL’s real estate technology consulting business, Technology Solutions, and is also executive sponsor for JLL’s Future of Work initiative.

David Malott
CTBUH Chairman
Founder and CEO, AI.
New York City

An architect of innovative supertall towers and future cities, David Malott created SpaceFactory to bring architects and technologists together in one company to transform the future of buildings. He is one of seven founding partners of AI., a global design collaborative focused on the integration of technology in urban environments.

Previously, as a design principal at KPF, Malott led the team behind the 599-meter-tall Ping An Finance Center, recognized for the smart and sustainable innovations that underscore its record breaking height. Malott has served on the CTBUH Board of Trustees since 2012 and as Chairman since 2014.

View the full presentation at:
2017.ctbuh.org/presentation/panel1
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