



The Research themes of si-architecture + urban design:

Rethinking Cities and Space
for the Age of Global Warming

Urbanisation is one of the defining challenges of our times. Our understanding of the urban, whether in theory or in practice, has reached a turning point, with cities across the world facing new, complex and challenging conditions that require resilience and adaptation to the impacts of environmental, economic and social change.

RESEARCH AND INNOVATION: IMPACT AND LEADERSHIP

si_architecture's interdisciplinary research is structured in a program of eight research themes that are central to driving urban innovation – and in which we engage in collaboration with the world's leading engineers and scientists:

- Future Low-Carbon Cities and Sustainable Urbanism
- Sustainable High-Performance Architecture and Urban Form
- The next Generation of Smart Mixed-use Neighbourhoods
- Principles of Sustainable Urban Design
- Urban Transformation: The Workplace of the Future
- Future Interdisciplinary Practice of Architecture
- Green Campus Planning and Mobility
- Urban Infill, Resilience and Mass-Timber Construction

Both partners, Steffen and Igor have a long-standing deep involvement in applied research and the integration of scientific evidence in architectural and urban design practice. Both are internationally recognised designers, educators, authors and strategic leaders of large complex projects. Their work deals also with a rapidly changing profession and transforming society. As Founding Directors of research centers, they were instrumental in pioneering sustainable architecture and urbanism through applied research and industry collaboration, delivering positive impact.

Steffen and Igor are particularly interested how the PRACTICE OF ARCHITECTURE intersects with the RESEARCH and TEACHING agendas. The nexus between teaching, research and practice is an area of growing importance, with research themes being closely integrated into the practice of si_architecture.

When you work with si_architecture, the design of your project will be based on solid research.

LECTURES

To request a lecture, please send a request to:
press@si-architecture.com

Professor Steffen Lehmann, Ph.D., Assoc. AIA, RIBA, is a prolific researcher who combines his research with the activities in teaching and practice.

Steffen is a tenured full Professor of Architecture & Urbanism, and former Director of schools of architecture, including the UNLV School of Architecture in Las Vegas (USA), and the large School of Design & Built Environment in Perth (Australia); and the former Chair of the Department of Architecture at the Queensland University of Technology in Brisbane (Australia). Steffen is currently Director of the interdisciplinary Urban Futures Lab, and CEO of the Future Cities Leadership Lab (see link below), where he is translating a strategic outlook into programmatic initiatives and impact.

He is an award-winning researcher and innovation consultant working with leading companies, cities and various governments from around the world. Since 2002, he has been a full professor, with tenure on three continents: in the U.S., the UK, and in Australia.

He has held senior executive leadership appointments at four research-intensive universities in three countries, and in each role, he was able to gain different experiences: as Executive Director of a School of Architecture, Head of School, Research Institute Founding Director and Departmental Chair.

In addition, he has held visiting positions in several leading universities across Europe, Asia and the US. He was full Professor of Research and Innovation at the University of Portsmouth (UK), and at the University of South Australia, where he led the university-wide research theme 'Sustainable Cities'. He was Founding Director of the Cluster for Sustainable Cities (UK), an internationally awarded, multidisciplinary research center with a membership of 40 researchers that focuses on urban sustainability and resilience related to the built environment.

Steffen has published 22 books with prestigious publishers (Routledge, Taylor & Francis, Springer, ORO Editions, Jovis, Hatje Cantz, Palgrave MacMillan), and has published over 400+ research publications, articles and papers on architecture and sustainable urban development. In the 1990s, he coined the concept of Green Urbanism. His research is in the field of sustainable architectural and urban design, and his pioneering work is best known for its holistic view of urbanisation and for actively promoting sustainable design principles. His work has been devoted, over the last 25 years to understanding and unraveling the principles of the modern metropolis and its urban systems. His authored books 'The Principles of Green Urbanism' (2010), 'Low Carbon Cities' (2015), and 'Urban Regeneration: A Manifesto' (2019) have become standard works used by numerous educational programs worldwide. His Google Scholar h-Index is 27, with over 3,000 registered citations (in Jan. 2021).

A selection of his recent research books and articles is listed here: http://city-leadership.com/assets/pdf/recent%20publications_Aug_2020.pdf

In 2021-2022, he is publishing three new books and editing one peer-reviewed journal:

- 'Urban Informality' Di Raimo A., Lehmann S., Melis A. (eds) (Routledge, Jan. 2021)
- 'Trans-Atlantic Engagements' Lehmann S. (authored book, ORO Editions, Jan. 2021)
- Journal of Sustainability, Special Issue Editor (co-edited with Prof Mike Jenks, UK): 'Pathways to Sustainable Urban Form: Compact Cities Re-Imagined'
- 'The Changing Role of Public Buildings and Civic Space' Lehmann, S. (authored book, ORO Editions, Jan. 2022)
- Director of the School of Architecture, University of Nevada Las Vegas (USA)
- Head of School of Design & the Built Environment, Perth (Australia)
- Chair, Department of Architecture, Queensland University of Technology, Brisbane (Australia)

S T E F F E N
L E H M A N N



Steffen has led and transformed *schools of architecture* and established **research centers** in the **U.S. and in Australia**

Steffen and his team of researchers have recently been awarded a Euro 1.5 mill. research grant, where he is leading an international multi-disciplinary team with 20 partners from six countries. The main research focus is in the field of 20th century urbanism, urban resilience, and sustainable architectural and high-performance urban design. His work has received funding from the NSF, ESRC, Innovate UK, AHRC, Belmont Forum, British Council, and other prestigious funding bodies.

Steffen was founding director of two successful research centers at the University of South Australia, and Principal Investigator of several large multidisciplinary grants. His centers generated and managed over total \$15 million in research funding in a wide range of grant categories. He has been a lead or co-investigator on over 20 research projects, including:

- Lead-PI for 'Crunch - The Food-Water-Energy Nexus' \$2 mill (funded by the Belmont Forum, ESRC, AHRC, NSF).
- Lead-PI for 'Urban Microclimates: Sydney, Melbourne, Adelaide' \$ 1.5 mill (funded by the CRC for Low Carbon Living and the participating cities).

Changing the way we understand and design cities, the following research centers and institutes were established and led by Steffen:

- Founding Director, Centre for Sustainable Design & Behaviour, University of South Australia (funded by the Government of South Australia)
- Founding Director, China-Australia Centre for Sustainable Urban Development, Tianjin University and University of South Australia (funded by the Chinese and Australian Governments)
- Founding Director, Research Cluster for Sustainable Cities, University of Portsmouth (UK)
- Funding Director, Future Cities Leadership Lab
- Founding Director, Urban Futures Lab, University of Nevada Las Vegas

In recognition of the international significance of his work, he was appointed in 2008 as chair holder of the inaugural UNESCO Chair for Sustainable Urban Development in the Asia-Pacific.

He is currently a member of 5 editorial boards of academic journals, the editor of a Routledge book series, and a reviewer of large grant applications for major funding bodies (including the EU-Commission). He has been appointed to the board of various public organisations, including the UN ESCAP's reference group for the formulation of the Sustainable Development Goals. He is a member of professional organisations, including:

- Assoc. Member, American Institute of Architects (2018-)
- Member, Resilience Network, American Institute of Architects (2018-)
- Member, Research and Scholarship Committee, Association of Collegiate Schools of Architecture, ACSA (2019-20)
- Member, International Advisory Board for the Italian Pavilion, International Biennale of Architecture in Venice, Italy (2019-21)
- Board Member and Education Liaison, AIA Las Vegas Board of Directors, Nevada (2019-20)

He held a Ministerial appointment for the urban renewal of the city of Newcastle (NSW), and was a Board Member of various boards, including the American Institute of Architects Las Vegas Board of Directors. In 2016, he was appointed as member of the UK's Academy of Urbanism. Steffen was one of the first urban designer introducing low-carbon master planning to Australia, in 2003.

Prior to entering academia, he worked for ten years as Founding Principal with his own successful studio, Steffen Lehmann Architekten & Stadtplaner GmbH in Berlin, contributing significant large-scale projects to the 'New Berlin'. As lead architect, he delivered over Euro 1 bill. in construction budget.



Most of si_architecture's built work is the result of winning design competitions

Over the last 25 years, Steffen has advised over a dozen of cities on sustainable urban development, including Berlin, Stuttgart, Shanghai, Singapore, Sydney, Melbourne, Adelaide, Brisbane, Abu Dhabi, Ho-Chi-Minh City, Oslo, Helsinki, Brighton, Southend-on-Sea, and Reno.

In 2020, he co-founded si_architecture with headquarters in Dubai (in partnership with Prof. Igor Peraza). As Founding Principals and thought leaders of the practice, Steffen and Igor provide the overall vision and project leadership to the firm.

Most of Steffen's built work is the result of winning design competitions for historically significant places, including large mixed-use complexes at Potsdamer Platz, Pariser Platz, and the Quarter at the Museumsinsel Berlin. Steffen's buildings and project designs have been published extensively, and the firm has been the subject of two monographs (published by Junius Verlag and AEDES Gallery).

Before establishing his own practice Steffen Lehmann Architekten & Staedtebau GmbH in 1993 in Berlin, he worked with Pritzker-Prize winners James Stirling in London and Arata Isozaki in Tokyo. He became a licensed architect in Berlin in 1993 and has a deep understanding of architectural practice. In January 1993, he founded Steffen Lehmann Architekten & Staedtebau GmbH as a collective interdisciplinary practice engaged in design research. Under Steffen's leadership, the firm has built a construction budget of over \$1b. His work was the subject of various group and solo exhibitions throughout the world, including a solo exhibition installation at the Bauhaus in Dessau, at AEDES Gallery in Berlin, at Plan'99 in Cologne, and at QUT in Brisbane.



Links:

Future Cities Leadership Lab:

<http://city-leadership.com/>

Food-Water-Energy Nexus:

<http://www.fwe-nexus.eu/>

Cluster for Sustainable Cities:

<http://city-futures.org.uk/>

Google Scholar Profile:

<https://scholar.google.co.uk/>

Wikipedia:

[https://](https://en.wikipedia.org/wiki/Steffen_Lehmann)

en.wikipedia.org/wiki/Steffen_Lehmann

UNLV, Las Vegas:

[https://](https://www.unlv.edu/people/steffen-lehmann)

www.unlv.edu/people/steffen-lehmann

Recent Publications:

<http://city-leadership.com/>

si_architecture:

<http://si-architecture.com/>

Professor Igor Peraza, Ph.D., is an active researcher and his field of interest includes architectural and urban design methods, and technical architectural detailing and materials.

Since 2000, he is a licensed architect with the Architecture Association of Catalonia COAC, Spain. Igor is a member of the International Association of Structures and Architecture, Spain. Some of his most recent peer-reviewed research publications include (selection):

- Peraza, Igor (July 2019). Structure and Architecture: Bridging the Gap and Crossing Borders, in: Proceedings of the Fourth International Conference on Structures and Architecture, ICSA 2019. Lisbon, Portugal. <https://doi.org/10.1201/9781315229126>
- Peraza, Igor (May 2018). Dubai Creek Maritime Museum, Comprehensive Architecture Studio, Spring 2017, A Tectonic Study, in: Arquitectonics and Josep Muntanola (eds.), Proceedings of the 16th International Conference, Arquitectonics Network Mind and Society (pp 15-17). ISBN-13978-84-09-02652-4.

He has curated numerous exhibitions and recent peer-reviewed activities include:

- Peraza, Igor (2018). Curator and Designer: 'Barcelona: Place, Culture and Architecture', Fall Semester Abroad Program 2018. CAAD Main Gallery, American University of Sharjah, UAE, 2018- April 2019.
- Peraza, Igor (2018-19). Curator and Designer: 'Beginnings, Middle and End', Enric Miralles Foundation, Barcelona, Spain, November 2018-April 2019.
- Peraza, Igor (2018). Curator and Designer: 'Beginnings, Middle and End', CAAD Main Gallery, AUS Sharjah, UAE, April 2018.
- Peraza, Igor (2017-18). Curator and Designer: 'Barcelona: Place, Culture and Architecture', Fall Semester Abroad Program 2017, CAAD Main Gallery, American University of Sharjah, UAE, April 2018.
- Peraza, Igor and Mc Clean, Arturo (2018). Curators and Designers: 'Beginnings, Middle and End', University of Nottingham, Department of Architecture and Built Environment, EEC Studio, UK, March 2018..

Other synergistic activities include:

- Organised summer workshop as international link for architectural students (RCR La Vila Workshop, Olot) Spain, 2018
- Organised Fall Semester Abroad Program in Barcelona, Spain, in 2017 and 2018
- Organised Summer Study Abroad Program in Japan, 2017
- As a Professor of Practice, Igor connects students with the best international practices for their internships abroad.

In 2020, Igor co-founded *si_architecture* with headquarters in Dubai (in partnership with Prof. Steffen Lehmann). As Founding Principals and thought leaders of the practice, Steffen and Igor provide the overall vision, research and project leadership to the firm.

I G O R P E R A Z A



Links:

Personal website:
<http://igorperaza.com/>

Cluster for Sustainable Cities:
<http://city-futures.org.uk/>

American University of Sharjah, UAE
<https://www.aus.edu/faculty/dr-igor-peraza>

si_architecture
<http://si-architecture.com/>