

THE INSTITUTE FOR THE STUDY OF INTERNATIONAL EXPOSITIONS



SYMPOSIUM 2023

BEST PRACTICES IN INTERNATIONAL EXPOSITION DESIGN

MARCH 23-24

**BOOK OF ABSTRACTS**

**Institute for the Study of International Expositions’  
Second Annual Online Symposium  
Best Practices in International Exposition Design**

**Book of Abstracts**

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## Foreword

*Dr. Lisa D. Schrenk*

The Institute for the Study of International Expositions (ISIE) is a global interdisciplinary network of researchers interested in the design, promotion, reception, and consequence of world's fairs and expositions held since 1851. Still a young organization, ISIE was born in 2020 after an online meeting I had with James Fortuna at the University of St. Andrews, Scotland and Flavia Marcello at Swinburn University of Technology, Melbourne, Australia. From our different academic vantage points, we each perceived the great need for exposition scholars to be able to find and connect with each other across distances and areas of study and to share more easily our expo-related research. ISIE welcomes the participation of all those interested in exploring the many intersecting aspects of international expositions, including members of the exposition profession and enthusiasts. The 2023 ISIE Symposium *Best-Practices in International Exposition Design* forms the first steppingstone in building a strong bridge with our professional colleagues.

International expositions are incredible events, offering vertical slices in the timeline of modern history that allow for interdisciplinary explorations at specific points in time. They also allow for the study of developments over time, and, as the theme of this symposium suggests, provide us with the opportunity to learn from the past to help shape a better future.

The 2023 ISIE Symposium grew out of a conversation I had with co-chair Charles Pappas a reception held at Expo 2020 in Dubai. Charles had spent many weeks at the fairgrounds. It did not take long, however, for our exchange to progress from my asking advice on which of the pavilions and exhibits were not to be missed to the great need for an event that would provide opportunities to explore exposition-related design lessons learned from both the distant and recent pasts that have the potential to contribute to the creation of future world expos.

After countless emails and many online meetings, the symposium became a reality in March 2023. This publication provides a textual record of the incredible presentations by scholars and professionals at the online event that addressed an array of issues and design solutions that chronologically spanned from the nineteenth-century expositions to upcoming world expos. Presentation topics on the first day of the two-day symposium ranged from housing fair workers and visitors to various design solutions for representing nationhood to best practices in designing more accessible 21st-century expositions. Day two included panels of designers involved in Expo 2020, Osaka's Expo 2025, bid teams for Expo 2027 and Expo 2030, and World Horticulture Expos discussing design processes and solutions.

Symposium highlights include the conversations that took place at the end of each day. It was wonderful to see dialogs spanning bridges between academics, practicing designers and planners, activists, politicians, and enthusiasts. Day One discussions included reflections on the incredible impact of low-tech designs at Expo 2020, including the colorful Post-It Notes expressing visitors' hopes and support that decorated the interior of the Ukrainian Pavilion and the wonderful exhibit of miniature scenes created through the practice of *mitate* (using everyday objects to represent something else) in the Japanese Pavilion. Both experiences were unexpected and stood out from the many digital screens that covered the fairgrounds. Problematic design issues at the Dubai expo were also noted, including accessibility issues with dark areas in several exhibits, such as at the beginning of the Mobility Pavilion, and the need for better line management at some venues. The discussion ended with several participants noting that world expos too often are perceived as "one-off events," leading to the loss of knowledge gained from experiences at previous fairs, such as those mentioned above, and the great need for the gathering and dissemination of data, observations, and insights from past events.

The wrap-up discussion at the end of Day 2 built upon the ideas conveyed on Day 1. Participants expressed hope that the symposium will be the starting point of a larger effort to help future designers become more aware of successful (and not so successful) design solutions and practices from past Bureau of International Expositions (BIE) events, including the large World Expos, the smaller Specialized Expos, and the World Horticulture Expos. There was a shared belief that explorations should also include lessons from additional types of large public events, including Olympic Games and other global sporting competitions, but also Disney parks and happenings such as South by Southwest and Ted Talks. Participants noted several areas where information could be particularly beneficial. These included individual building designs (especially national pavilions), behind-the-scenes logistics and operational elements (including transportation to the fairgrounds, shipping and receiving of goods and materials, security, and safety), and legacy issues (how the event fits into the larger physical context and long-term goals of the host city). Also raised was the growing importance of not just focusing on what happens at the fairgrounds and how the event might benefit fairgoers and the host city, but to use expos as venues to generate creative activities and experiences with the potential to benefit the entire global community.

Like an expo, the 2023 ISIE Symposium brought together an incredible group of people from around the world to share knowledge and connect with each other to produce an outcome greater than the sum of the individual presentations. This *Book of Abstracts* is the first of hopefully many steps to keep the conversation going in meaningful and productive ways.

Our sincere thank you to the amazing participants and to you for taking the time to explore this document.



## ISIE Committee

Dr. Lisa D. Schenk, *Professor* | *University of Arizona*

James Fortuna, *PhD. candidate* | *University of St. Andrew*

Dr. Flavia Marcello, *Professor* | *Swinburn University of Technology*

Constanza Robles Sepúlveda, *PhD. candidate* | *Boston University*

Charles Pappas, *Senior Writer* | *Exhibitor magazine*

Joseph Siml, *Student* | *University of Arizona*



## Symposium Chairs

Dr. Lisa D. Schrenk

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Charles Pappas

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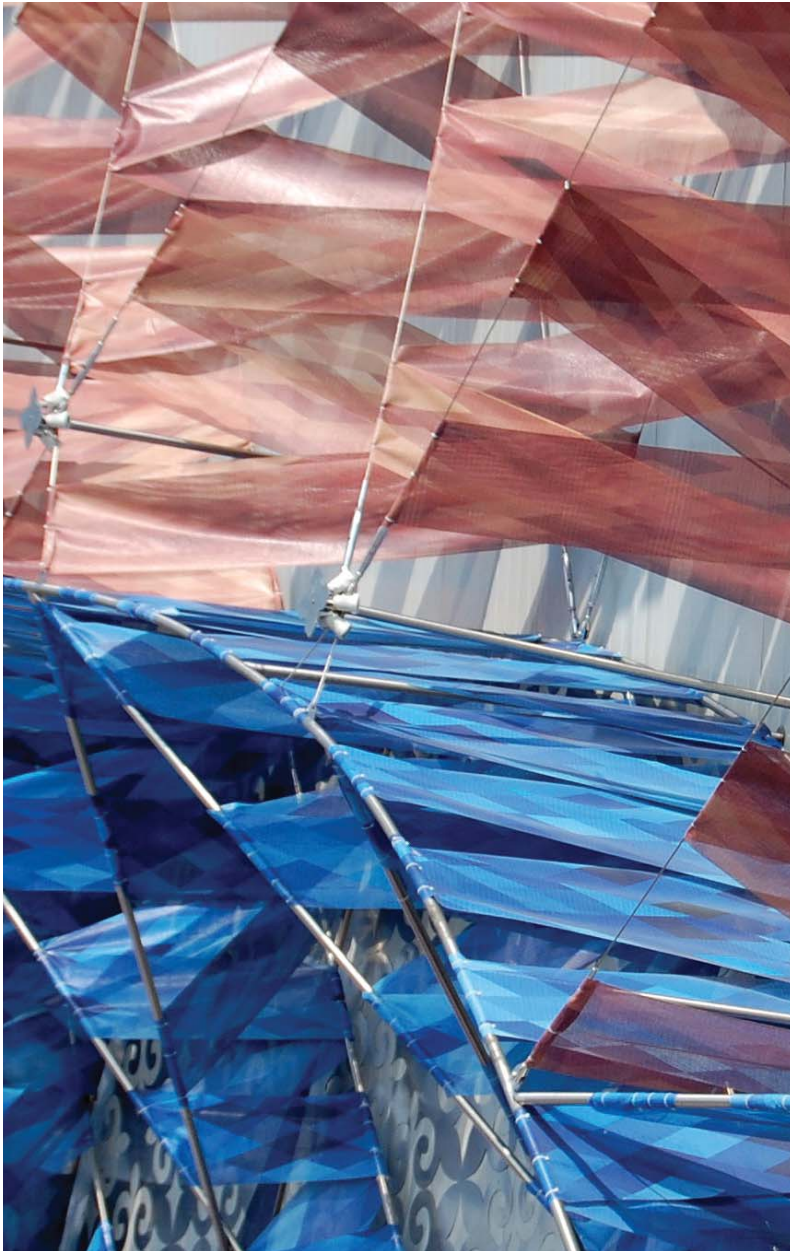
## Program

<b>Thursday, March 23th 2023</b>		EDT
10:30-10:40 am	Welcome and Introduction: Dr. Lisa D. Schrenk. Professor of Architectural History, University of Arizona, USA Dr. Nancy Pollock-Ellwand, Dean, CAPLA, University of Arizona, USA	
Paper Session # 1. Transforming the City: Early Expo Development and Housing Session Chair: Dr. Sarah Moore		
10:40-12:10 am	Housing the Working-Class at International Expositions During the Second Half of 19th Century (Lucie Prohin)	
	What Were World's Fairs for? Catalysts for Modern Urban Development in the Second Industrial Revolution (Miriam R. Levin)	
	The 1929 Ibero-American Exposition at Seville. The Role of New Hotels in the Transformation of the City (Eduardo Jiménez Morales & Guido Cimadomo)	
	Session discussion	
Paper Session # 2. National and Corporate Identity and Design Session Chair: James Fortuna		
12:10-1:40 pm	Lessons Learned: Relevant Design Practices from Chicago's 1933-34 Century of Progress International Exposition (Lisa D. Schrenk)	
	Representing Postcolonial Identity in Philippine Pavilions in International Expositions, 1958-1992 (Edson G. Cabalfin)	
	The Strategy to Represent the Diversity of Indonesia in Indonesia Pavilion for International Expositions (Harry Kurniawan)	
	Session discussion	

Paper Session # 3. Innovations: Food & Design Session Chair: Constanza A. Robles Sepúlveda	
1:40- 3:10 pm	Blurring the Pavilion at Expo '70 Osaka. The Festival Plaza Framed Under an Urban Performative Canopy (Zeila Tesoriere & Renzo Lecardane)
	Vernacular Design for the Development of Sustainable Strategies on Expos Pavilions after Expo Hannover 2000 (Rafael Ortiz)
	Food Logistics and Mundane Governance at the Shanghai World Expo (Van Troi Tran)
	Session discussion
Paper Session # 4. Recent & Future Expos: Goals, Labs, & Challenges Session Chair: Dr. Guido Cimadomo	
3:10- 4:40 pm	The SDGs and the World Expo – Bureau International des Expositions (BIE) Across the Corporate Social Responsibility (CSR) Analysis: Towards a... (Patrice Ballester)
	A Trip Through Tomorrowland: The World Expo as Futures Lab (Toby Shulruff & Levi Wyman)
	Interaction of Politics and Design - Exploring the Political Dynamics That Shaped the Minnesota 2027 Expo Bid (Mark Ritchie)
	Session discussion
Panel Session # 1. Doing It Right Session Chair: Charles Pappas	
5:00- 6:30 pm	Sarah Manning – On the wayfinding and signage of Expo 2020 Dubai
	Kathy Johnson – How Expo 2020 Dubai approached disability issues
	Victor Torregroza – On reducing the reliance on screens to convey information and deliver experiences
<b>Social Gathering</b>	

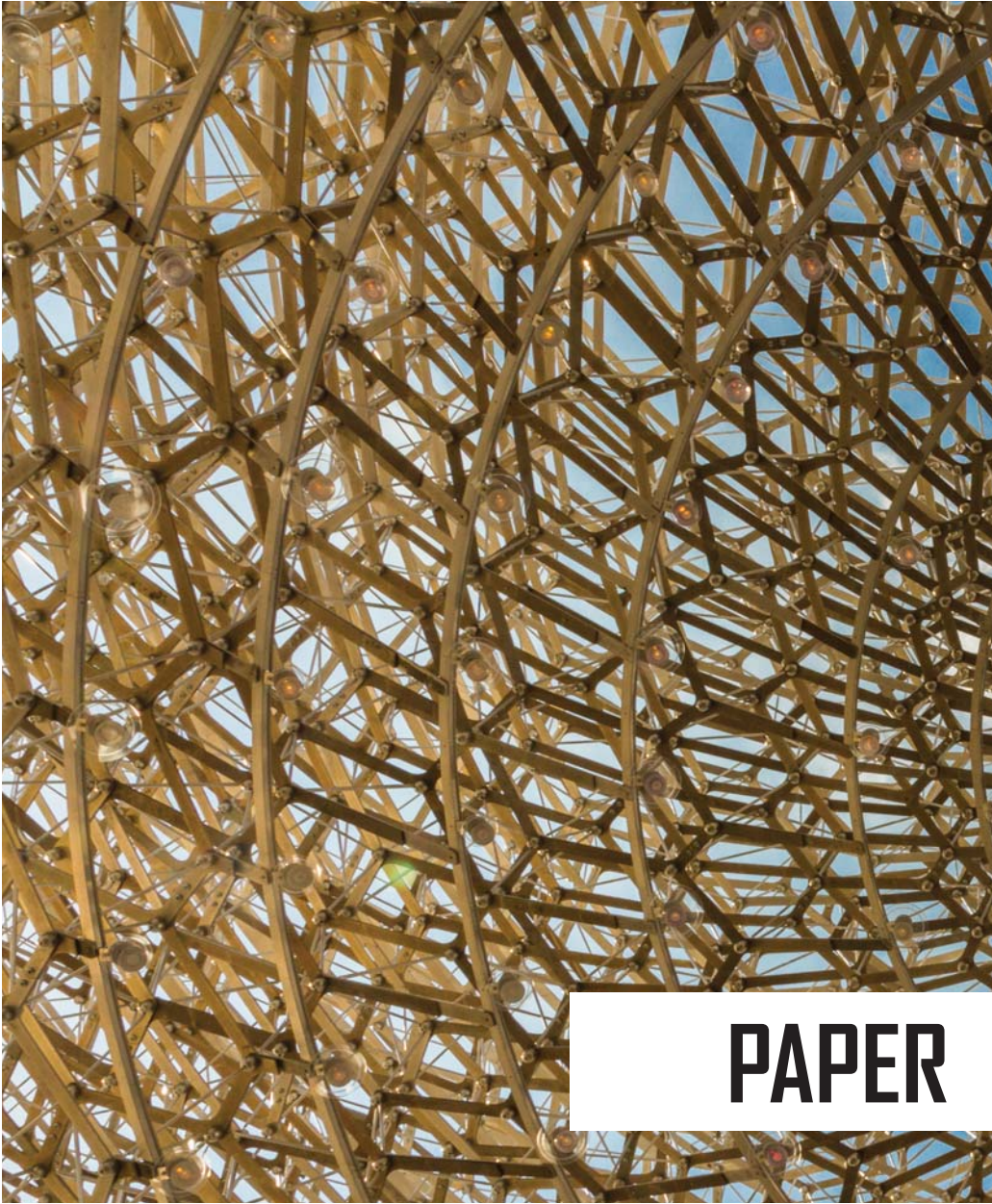
<b>Friday, March 24th 2023</b>		EDT
Panel Session # 2. Back to the Future I Session Chair: Charles Pappas		
10:05- 11:45 am	Harald Dosch – On the designs of the Austrian and Kazakhstan pavilions for Expo 2020 Dubai	
	Lara Captan – On the design of the calligraphy benches with Asif Khan at Expo 2020 Dubai	
	Sahera Bleibleh – On how youth perceived Expo and may shape future development of UAE, and futuristic cities in general	
	Marta Sękulska – Wrońska and Michał Czerwiński – On Poland Pavilion at Expo 2020 Dubai	
	Carmen Bueno – On curating the Spanish Pavilion for Expo 2020 Dubai	
	Session discussion	
Intermission: Photo Show of Expo 2020 Dubai		
Panel Session # 3. Back to the Future II Session Chair: Charles Pappas		
11:45- 1:30 pm	Alvaro Torrellas & León Carlos Álvarez – On the Vision Pavilion at Expo 2020 Dubai	
	Alvaro Torrellas & León Carlos Álvarez – On the Opportunity Pavilion at Expo 2020 Dubai	
	Serina Hijjas – On the Malaysia Pavilion at Expo 2020 Dubai	
	Oliver Poole – On the use of storytelling and design in the Gabon Pavilion for Expo 2020 Dubai	
	John Boon – On masterplanning guidelines for world and horticultural exhibitions	
	Session discussion	
Panel Session # 4. Things to Come Session Chair: Guido Cimadomo		
1:45- 3:30 pm	Javier Pérez de la Fuente – On the design of Malaga's Expo 2027 master plan	
	David Loehr – On the design of Minneapolis' Expo 2027 master plan	
	Roman Grygoryshyn – On the design of Odesa' Expo 2030 master plan	
	Matteo Gatto – On the design of Rome' Expo 2030 master plan	
	Session discussion	
<b>End of Symposium – Social Gathering</b>		

Kazakhstan Pavilion, Expo 2010 Shanghai





UK Pavilion, Expo 2015 Milan



**PAPER**





# SESSIONS ABSTRACTS



**Paper Session # 01**

**Transforming the City:  
Early Expo Development and Housing**

**Session Chair: Dr. Sarah Moore**  
*University of Arizona, USA*



## Housing the Working-Class at International Expositions During the Second Half of 19th Century

*Lucie Prohin*

*École Nationale Supérieure d'Architecture de Paris-La Villette, France*

During the second half of the nineteenth century in Europe, working-class housing gradually asserted itself—albeit in a non-linear fashion—as a subject of interest in the numerous exhibitions that punctuated the period in Europe. On several occasions, workers' houses were exhibited in many ways, through architectural and iconographic documents but also reduced or life-size models. Beyond ephemeral objects and models, these exhibitions also saw the erection of actual dwellings, designed to outlive the events—for instance, at the 1867 Paris World's Fair on the initiative of Napoleon III, or the 1905 Liège Exposition, as part of a design competition for low-cost housing organized in parallel with the fair.

If these lasting dwellings were designed with the intent of being exhibited, others were erected for more utilitarian purposes. Indeed, these exhibitions attracted large numbers of workers who contributed to their conception, as well as hundreds of thousands and sometimes millions of visitors—among which many were part of the working class. This paper investigates different initiatives to house these populations, drawing from examples from five international exhibitions between 1851 and 1913.

First, we would discuss the attention paid to housing conditions during these events—using documents from the British National Archives regarding the Great Exhibition from 1851 and the 1913 Ghent Exposition. We would then examine several examples of housing initiatives: the “Mechanics' Home for 1851”, the Singel Barracks at the 1869 Domestic Economy Exposition in Amsterdam, and the “Royal British Commission Workmen's Cottages” built for the 1873 Exposition in Vienna. Finally, we would also study some additional facilities built for the workers on the exhibitions—such as the Notre-Dame-du-Travail Church in Paris, erected in view of the 1900 Paris World's Fair. Our study would echo recent scholarship on the management of population flows and physiological needs at international expositions. A reflection on housing at these fairs appears particularly topical in a context where the living conditions of workers at international events are the object of increased scrutiny and discussion.

## **What Were World's Fairs for? Catalysts for Modern Urban Development in the Second Industrial Revolution**

*Miriam R. Levin*

*Case Western Reserve University, USA*

This presentation proposes that rather than ephemeral vistas, local elites, representing manufacturing, banking, transportation, scientific and technical education, and real estate investment, organized pre-World War I expositions primarily to help realize plans for urban development supporting economic growth and innovation on a long-term basis. The fairs drew funding that assisted modernizing agendas through construction to remain as permanent features. These included: exhibition buildings specially designed for research museums, technical schools and universities; parks, sewerage, paved streets, transport/communication facilities, lighting, etc.

The vision of the future city and the fair's landscaping, architecture, spatial organization coincided. The focus here will be on the vast Louisiana Purchase 1904 Exposition in Saint Louis, Missouri's Forest Park. Organizers used the fair to effect a cluster of long-term integral plans for developing residential real estate, a museum, botanical garden, large urban park, research university, and a rail-based network including Union Station. Such was the Clayton suburb abutting Forest Park on the former site of the Philippine Village. Washington University was a model of mutually beneficial exchange. Fair directors, including university board members, built six buildings (including a chemical laboratory) and installed 6,500 ft of water pipes on the new campus across from the park in exchange for their rental during the fair.

## **The 1929 Ibero-American Exposition at Seville: The Role of New Hotels in the Transformation of the City**

*Eduardo Jiménez Morales & Guido Cimadomo*  
*University of Malaga, Spain*

World Expositions are, as German architect Frei Otto said, a unique opportunity to experiment and show new ways for the future. They can be studied as laboratories for innovative architectural typologies and city models that transcend the life-cycle of these international events. The 1929 Ibero-American Exposition held in Seville (Spain) was no exception. It prompted a major transformation of the city and its southwards expansion of the existing urban fabric.

The promotion of new hotels, subsidized by the municipality who foresaw its possible restructuring as housing, acquired capital importance in this urban operation, establishing landmarks for future city growth. In fact, they became germinal pieces of new urban areas as well as modernization existing city proposals. In this paper we analyze the most relevant hotels built for this international event, through cartography, newspapers of the time, and second hand sources in order to understand their role in the urban transformations of the early 20th century Seville.

**Paper Session # 02**

**National and Corporate Identity and Design**

**Session Chair: James Fortuna**

*St. Andrews University, Scotland*

## **Lessons Learned: Relevant Design Practices from Chicago's 1933-34 Century of Progress International Exposition**

*Lisa D. Schrenk*

*University of Arizona, USA*

Realizing that constructing an exposition reminiscent of the design of Chicago's first world's fair, the neoclassical World's Columbian Exposition of 1893, would be a financial and cultural disaster, designers for the 1933-34 Century of Progress International Exposition strove to create an event that would look and feel significantly different, and particularly modern. Instead of borrowing architectural forms from the past, they hoped to create an exciting, relevant fair using new materials, structural ideas, and building forms. They also built upon novel display techniques used in recent European expositions and large public events held in the United States. After the fair closed, many of these techniques and other lessons learned were published in the book *Fair Management*, authored by Century of Progress Exposition president, Lenox Lohr, a must-read text for anyone involved in planning a future international exposition.

This paper explores ideas and concepts introduced or featured at the Century of Progress still relevant in the 21st century, including building layouts, transportation to and through the fairgrounds, exhibition techniques, and the use of color, materials, and sound.

## **Representing Postcolonial Identity in Philippine Pavilions in International Expositions, 1958-1992**

*Edson G. Cabalfin*

*Tulane University, USA*

National pavilions in international expositions are important symbols of a nation's aspirations and identity. These are condensations and physical manifestations of particular notions of the status of the country in the world stage as well as constructions of how the country wants other nations to perceive it. Using the Philippines as a case study, this paper attempts to illustrate the strategies by which these pavilions serve as emblems of postcolonial nations. Specifically, the paper poses the following questions: How was the Philippines and Filipinos represented through architecture after World War II within the context of international expositions? How is the discourse of postcolonial national identity articulated in the architectures of the Philippine pavilions in international expositions?

To examine these phenomena, key Philippine pavilions and exhibits in international expositions during the post-colonial period including 1958 in Brussels, 1962 in Seattle, 1964 in New York, 1970 in Osaka, and 1992 in Seville are compared and analyzed. These post-colonial pavilions are also connected back to colonial era representations of the Philippines, such as those in 1887 in Madrid, 1901 in Buffalo, and 1904 in St. Louis. These temporary or ephemeral architectures are studied according to themes of negotiations between colonial and postcolonial identity, mediations of exoticism and self-orientalism, and commodification of identity. In the final assessment, these pavilions not only emerge as symbols of the post-colonial nations but also document the continuities and transformation of conceptions of self and national subjectivities.

## **The Strategy to Represent the Diversity of Indonesia in Indonesia Pavilion for International Expositions**

*Harry Kurniawan*

*Universitas Gadjah Mada, Indonesia*

Pavilion at International Expo, since their early establishment, have become instruments for delivering messages. For a country, its pavilion will be the representative of its whole country. It can show the richness of a country or its vision as part of the world. Both were found in Indonesian Pavilions. The objective of Indonesian pavilion involvement in expos was consistently described as a way to promote what Indonesia has, and what it is both doing and envisioning. As a single object that comes with a high degree of responsibility attached, the design of Indonesian pavilions is always a challenge and should be done carefully. One of the reasons for this is the richness, diverseness, and uniqueness of Indonesian culture.

Indonesia is a home for 300 ethnic groups with 600 native languages and hundreds traditional or vernacular architectural forms. The question about how to represent or negotiate this diversity in the architecture of the Indonesian Pavilion should be in the mind of architects who work on Indonesian pavilion projects. Therefore, the objective of this paper is to reveal the strategy in designing Indonesian pavilions—especially the strategy to handle the diversity—from expo to expo.

The objects studied in this paper are five Indonesian pavilions built as Indonesia's own building—at 1964-1965 New York World's Fair, 1970 Osaka World Exposition, 2010 Shanghai World Expo, 2015 Milan World Expo, and 2020 Dubai World Expo. In addition, there will be three pavilions during Netherland's colonization in Indonesia as comparison and also enrichment for this paper. Those are Netherlands/Netherlands East Indies pavilion at 1931 Paris Colonial Exposition, 1937 Nagoya Pan Pacific Peace Exposition, and 1939-1940 San Francisco Golden Gate International Exposition.

**Paper Session # 03**

**Innovations: Food & Design**

**Session Chair: Constanza A. Robles Sepúlveda**  
*Boston University, USA & Chile*



## **Blurring the Pavilion at Expo '70 Osaka. The Festival Plaza Framed Under an Urban Performative Canopy**

*Zeila Tesoriere & Renzo Lecardane*

*University of Palermo, Italy*

Osaka's Expo '70 aimed to break all boundaries, to question the role of technology in the lives of human beings, in a space of encounter and exchange that designer Kenzo Tange defined as a meeting place for the wisdom and culture of humanity.

Innovations and technological contaminations were a priority at the Osaka Expo, the first world exposition that took place on the Asian continent, in a period of great economic growth for the country. The lecture analyses issues and methods related to the urban and architectural layout of the Osaka '70 Universal Exposition, through a critical reading of Arata Isozaki's Festival Plaza pavilion: a large and emblematic canopy occupying the Expo's main square and recalling the great buildings and urban spaces of the European utopia of the 1960s Metabolist culture, in a *mixité* of approaches that look to Japanese tradition, the story of past Expos and the contemporaneity.

## **Vernacular Design for the Development of Sustainable Strategies on Expos Pavilions after Expo Hannover 2000**

*Rafael Ortiz*  
*O+R Studio, Spain*

Since Hannover 2000, the promotion of sustainability values is at the central point of debate for the development of Expo masterplans and pavilion projects, introducing a paradigm shift in the understanding of the Expo project in all its scales. After two decades, the guidelines and design proposals for sustainable projects in subsequent Expos had evolve and adapted according to thematic approaches and socio-cultural contexts.

On the other hand, we have witnessed the proliferation of sustainable practices not only on Expo projects but also in a global architectural framework thanks to the impulse of paradigms and the ideological agenda of Expo Hannover. This research is particularly focused on Expo pavilion projects of the last two decades that have brought strategies, systems and materials from the vernacular to support the development of sustainable practices for Expo projects. Thus, through relevant examples, the role of vernacular design and construction will be explored from different perspectives including: (1) The recognition of vernacular design solutions as operative design strategies from a present perspective, (2) The value of cultural research for the implementation of design and construction solutions on Expo projects, (3) The hybridization of high tech and low tech through the incorporation and adaptation of vernacular design in contemporary architectural design and construction practices, (4) Reconceptualization of vernacular solutions from different design backgrounds for the configuration of architectural solutions on Expo projects.

Expos are a unique platform for experimentation and practical testing of new design and construction solutions both from conceptual and technological approach. Thus, there is an intrinsic impact of these projects on the future implementation and generalization of new architectural projects. Inside this particular context, this research provides a reflection about sustainability from the adaptation of cultural design values and traditions and its impact in terms of materiality and materialization of architectural projects.

## **Food Logistics and Mundane Governance at the Shanghai World Expo**

*Van Troi Tran*

*École des sciences de la gestion Université du Québec à Montréal,  
Québec*

In the aftermath of the melamine crisis that broke out during the 2008 Beijing Olympics, Chinese authorities, such as the Shanghai Municipal Center for Disease Control and Prevention, implemented a package of severe measures designed to address the public health risks involved in the organization of an exceptional mega-event. The transport, circulation, storage, preparation, sale and consumption of food products on the World Expo site was thus closely monitored at every stage in order to curtail cases of disease or food poisoning. This work of daily surveillance or “mundane governance” was however very messy on the ground, with food safety regulations evolving on a regular basis and inspectors often applying the rules inconsistently.

This paper will explore these tensions between the strict food safety regulations on the Expo site that were elaborated by the Chinese administration, and their application on the ground, that was often perceived as irregular and inefficient from the participants who had to interact with bureaucrats and food inspectors on a regular basis. It will draw on administrative documents, ethnographic observations and interviews with restaurant managers who operated a venue at the World Expo. First, it will present the array of food safety measures and regulations applied by the Chinese authorities. Second, it will describe the logistics and practicalities involved in the management of a restaurant at the World Expo, as the restaurateurs were constantly subjected to this cumbersome framework of regulations, controls and daily inspections. Third, a quick comparison with food safety logistics in various past and present world’s fairs will be provided.

**Paper Session # 04**

**Recent & Future Expos: Goals, Labs, & Challenges**

**Session Chair: Dr. Guido Cimadomo**  
*University of Malaga, Spain*

## **The SDGs and the World Expo – Bureau International des Expositions (BIE) Across the Corporate Social Responsibility (CSR) Analysis: Towards a New Paradigm of Mega-Events?**

*Patrice Ballester*

*Euridis Business School, France*

This paper focuses on the role of business tourism and meetings, incentives, conferences, and exhibitions (MICE) within national pavilions, including those of France for twenty years. The paper is based on an observation and a questioning on the scale of contemporary universal and international expositions: does the development of business tourism and MICE transform the structure of national pavilions? Concretely, for more than 20 years, more and more, the national pavilions see the soft power of a nation declining through many BtoB demonstrations, making it possible to accompany the economic growth of the countries and often of the large companies as well as local authorities. As the structure of the expositions buildings changes, often a dichotomy is observed between appearance, being, and identity in the face of “selling” a country and its industrial production through know-how of a business class. Under these conditions, it is necessary to think differently about national pavilions and show the capacity of a pavilion to allow the coalescence between leisure, cultural and business tourism. Methodology is based on a series of interviews coupled with photographs of the French Pavilion at Expo 2020 in Dubai to show two types of possible spaces for a modern fair pavilion. Then we will highlight five possible spaces to accommodate an audience of professionals alongside visitors. Adaptation, modulation, landscape and digital will be the watchwords of these new spaces dedicated to professionals. Sources include the architects of the pavilion and archival documents on the history of the architecture of French pavilions since New York 1939. In addition, it should be emphasized that the destiny of the French Pavilion is to be a removable and reusable pavilion. following the Leed Gold certification through the primary vocation of architects and French authorities: to serve after the closure of the 2020 Expo at the Center National d’Etudes Spatiales, in Toulouse. In conclusion, the design and “destruction” of the French Pavilion was conceived from the outset to serve as a new MICE congress center more than 7000 kilometers from Dubai, attesting to a notable change in the ability of national pavilions to be sustainable and an emblem of Agenda 21.

## **A Trip Through Tomorrowland: The World Expo as Futures Lab**

*Toby Shulruff<sup>1</sup> & Levi Wyman<sup>2</sup>*

*<sup>1</sup>World Privacy Forum, USA, <sup>2</sup>Independent researcher, USA*

World Expos have long promoted visions for the future. The upcoming 2025 Expo in Osaka, Japan is promised to be a “space where 8 billion people from around the world will not only view exhibits but will co-create our future society”. To shape futures in which we all flourish, we need visions crafted by a broad range of voices and account for the creativity, ingenuity, and place-based knowledge of communities around the planet. The World Expo space can be a robust forum for discussing futures and hosting dialogue between a plurality of participants, all with unique visions.

We argue that by implementing the concept of Futures Labs as plural, interactive, relational, cross-temporal, and immersive spaces, World Expos and individual pavilions can be spaces for crafting, experiencing, and deliberating the futures we need. Based on our experience at Expo 2020 in Dubai, which includes research and analysis of the Germany, Morocco, Perú, New Zealand, and the Philippines pavilions, we will discuss how aspects of World Expos already meet the criteria of a Futures Lab. We will also make proposals for ways to iterate this “lab” and enhance the role of World Expos in shaping global futures ahead of the upcoming 2025 Expo.

## **Interaction of Politics and Design - Exploring the Political Dynamics That Shaped the Minnesota 2027 Expo Bid**

*Mark Ritchie*

*President – Minnesota’s World’s Fair Bid Committee Educational Fund, USA*

When the founders came together to take the first steps towards hosting a world’s fair in Minnesota there were realities that stood in the way of definitive design work. Top of the list was the fact that the U.S. was not a member of the international body that would need to approve a bid from Minnesota—and this would require a change in US law and, more importantly (and significantly more difficult) changing the view of key policy-makers in Washington DC.

This paper will examine the dynamic political forces that impacted the bid development process, with an emphasis on the ways that this process intersected with design elements including location, thematic considerations, evolution of site shape and structure and overall emphasis on the key elements of the chosen theme.

It is also an opportunity for placing the current Minnesota Expo bid into the historical context from the 1853 World’s Fair hosted by New York City, where Minnesota was represented by William Le Duc, appointed and financed by a \$300 appropriation by the Territorial Legislature. Le Duc came by boat and rail with a buffalo, birch-bark canoe, wild rice, and other Native America agricultural items that he believed would convince New Yorkers to move to Minnesota.

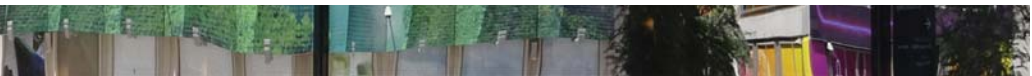
Mobility Pavilion, Expo 2020 Dubai







# PANEL SESSIONS



**Panel Session # 01**

**Doing It Right**

**Session Chair: Charles Pappas**  
*Exhibitor magazine*

## On the wayfinding and signage of Expo 2020 Dubai

*Sarah Manning*

*Director – Spaceagency Design, United Kingdom*

We knew that Expo 2020 Dubai would be the first expo in the Middle East, and was a prime opportunity for the United Arab Emirates to showcase their culture [...] we started on the fairground signage project, as we always do, which is to do a deep dive into the traditions, the culture, the artistic heritage, the language of the culture, and to try to understand the place and to unearth something about the place.

[...]we started looking into crafts, and one of the client team very kindly brought me into the desert to a site called Dhaid, essentially a marketplace[...] The Sadu is a Bedouin craft that's existed for centuries. It's used traditionally, and it's been a way that women weavers within the village would get together and share stories and passed down traditions and news. It's been used for their tents, for saddles, for internal furnishings, and it just seemed like a great tradition to weave into the wayfinding and signage of the expo.

So we had ribbons that were woven through the signage that were printed and kind of manufactured. [...]we contacted the Al Ghadeer Foundation, a charitable foundation which supports over 200 women weavers to empower them to support their livelihoods, and also to protect the UNESCO intangible heritage craft. We talked to them about this collaboration. They were really excited about it until they heard that we had 4,000 signs to weave Sadu into, so they knew they were going to be very busy as they were for about a year.

[...]we worked with the weavers first of all to differentiate the color scheme, and we decided to use cotton for various technical reasons, and worked with them to bring together this local tradition with our international design. It was a really fruitful collaboration, and we think it's something that becomes part of the narrative that follows people around as they move throughout the Expo.

## On how Expo 2020 Dubai approached disability issues

*Kathy Johnson*

*Co-director – St. Cloud State University’s Center for International Disability Advocacy and Diplomacy, USA*

I am a disability advocate, a very strong one. It’s embedded within my heart and soul and blood. And so I’m bringing that to the table today to think about what that means advocacy and the accessibility and inclusion for world expos and world events in general. There are approximately 1.8 billion people in the world with a disability, representing 17% of the world’s population.

I was able to visit Dubai 2,020 Expo three times throughout the course of the event. It was my first time in the Middle East, and I’ll share what our team learned.

[...]we have to have somebody from the disabled community be on this panel. Oh, yeah, we need to have an event to focus on people with disabilities. Our goal is to have them be just fully integrated into the overall programming and planning within the events [...] How do we have that impact?

We celebrated the UN International Day for persons with disabilities. But I want us to think that’s only one day. Why can’t we do this every day throughout an Expo? So we did celebrate November 30th women with disabilities, because women with disabilities are even more marginalized.

So how do we build in training for decision making and empowering people, How do we all work together on accessibility and inclusion. So this is where we can make that transformative shift if we start thinking, and with pre-planning for accessibility and inclusive diplomacy [...] everyone with a disability is a unique human being. But there are certain avenues for addressing the larger, broader community accessibility as a priority from point of landing in the country to the point of departure from the host country. The whole ecosystem of an Expo is what we need to think about throughout all events, all activities. And it’s not just Expos, it’s world events where we see this happening.

## **On reducing the reliance on screens to convey information and deliver experiences**

*Victor Torregroza*

*Program manager – Intel corp., USA*

One of the first things I noticed stepping onto the trade show floor many years ago is the sea of sameness and sometimes mediocrity, compounded by the uninspired use of screens.

With strategy, a concise creative brief, and unique ideas you can achieve brilliant results. Screens are excellent channels to provide wayfinding and inspiration [...] Illuminated screens can excite and engage the eyes and hearts of our visitors, and provide everlasting memories from our conference, trade show, or a world expo.

All of us here today have one thing in common: we're all in the business of telling stories, whether it's for our brand, our agencies, our service, our countries, or our cultures. We are all storytellers.

Today I'll share a few examples of how we incorporated illuminated screens into the event experiences. I'll also share a few examples of how we went screenless [...] You can win the tyranny of screens by going screenless.

So a couple of key lessons I wanted to share, and I hope it was valuable for you today. It's okay to go screenless. It's a good way to win against the tyranny of screens. Consider bold architecture and making the screens part of the actual physical environment.

Before you begin any project, it's so important that you deliver your agency a concise, creative, brief. Remember, you want to design for the eyes in person, and for the lenses of those cameras we all carry. Think about arresting their senses, and it's always good to share some joy and beautiful moments.

**Panel Session # 02**

**Back to the Future I**

**Session Chair: Charles Pappas**  
*Exhibitor magazine*

## On the designs of the Austrian and Kazakhstan pavilions for Expo 2020 Dubai

*Harald Dosch*

*Director of business development – NUSSLI Group, Schweiz*

We built ten pavilions in Dubai, among them the Austrian and the Kazakhstan pavilions. They show a totally different approach from the client, from the execution, and from the way to build them.

The Idea behind the Austrian Pavilion is that the building is the exhibition, and the exhibition is the building. Kazakhstan had a classical approach. There is a building, and there is the exhibition to show the world what Kazakhstan is.

It is clear for us that NUSSLI will as well participate or play an important role as a contractor in Japan. The area which is provided in Japan is an artificial island. So there is the channel to reach this island, a logistic issue. On the other hand, foundation works on an artificial island is as well a challenge.

The area is much smaller than Dubai, so that means the plot sizes are smaller for each country, and you have only a front facade to present your pavilion. In Dubai you had quite large areas. It's a little bit like in Milan, where we had this long *decumanus*, and you have only one front facade, and with this front facade the designers and the architects have to develop a good image and entrance to make their area and their pavilion attractive so that people want to visit their pavilion.

Everybody wants to have a unique building at the end of the day, with the Expo Osaka 2025 as innovative as the Expo 1970 was. I'm not sure if sustainability was such an important issue in 1970, but this is an issue for 2025. The Japanese started to implement in their rules and regulations with a real sustainability concept which you have to present with your concept design, with your detailed design, and for the whole lifespan of the building.

## **On the design of the calligraphy benches with Asif Khan at Expo 2020 Dubai**

*Lara Captan*

*Co-founder – Arabic Type Design, Lebanon*

This is a very special project for me, the Arabic script benches at Expo 2020 that I made in collaboration with Asif Khan. [...] I want to share a little bit about the relationship of Arabic script and architecture. Throughout history, Arabic letters have lived on architectural buildings. It was a common phenomenon that the letters in the Arabic scripted world, as in many of the Eastern cultures, didn't only have a linguistic aspect, but also a decorative one. [...] In the Arabic world in particular, most of the energy in art was actually given to the letter.

As a type designer, you don't really get this opportunity to work on letters going into the 3D world. Asif Khan had this vision of, instead of making just normal benches, to make Arabic script benches in order to be in line with the heritage, or to call upon something of the local identity of Dubai.

How do you cross over cultures? I tried to make sense of everything and putting things as a system. How do we place these benches in the space? How many do we have? How do they relate to the visitor? I wanted different experiences: at the entrance gates and, coming in, there was more dynamism, more shows, more entertainment. So maybe the form of the benches could also reflect this shift of dynamism. I thought the benches could have their special treatment for each of the three districts.

It's about creating a place with its own identity. It's about being proud about where the region has come from, and what makes it what it is, what makes its perspective unique. [...] The words were chosen by people. They were crowdsourced, and they became the values of people in the UAE that were most important to a certain group.

Later on, my 2D work had to be extruded, the curves rounded so that people could sit comfortably, and they don't hit sort of a corner, [...] most of them [the benches] are made of concrete, [...] but there are also some special ones that are made using different techniques.



## **On how youth perceived Expo and may shape future development of UAE, and futuristic cities in general**

*Sahera Bleibleh*

*Associate professor – United Arab Emirates University, UAE*

This was part of a small project funded by the University, and both graduate and undergraduate students were involved. What inspired and motivated me to work on this is that I wanted to understand the impact of an expo moving forward with the MIT Center for Transportation & Logistic (MIT CTL), and to see how Expo 2020 was not the first, and will not be the last. So we are transitioning and looking at lessons that we can take from this and looking back at the same time. The most interesting thing is how much this will affect sustainable development for me as a planner and architect, since we are talking about sustainability, and it was a factor in driving all Expo 2020 design in the different districts.

I wanted to think of it as something emerging from the experience of the different young people who were visiting the expo.

Then I felt that things are really changing in different ways. You are familiar with the three districts and the three themes of “Connecting Minds, Creating the Future”, which started to be a theme among the students who were volunteering in the United Arab Emirates University Pavilion. Actually, it affected the language and the terminology of them presenting sustainability or talking about sustainability, so that by itself was also another interesting observation.

But what attracted me is the youth involvement, and how much attention they were given during this event, in terms of having a pavilion for them, and the different calls from different pavilions to engage [youth], including the University, Bavarian, [and]MIT CTL. This affected them, but also directed us as planners to look at those spaces and differences [...] We need different designs, different walkability, and infrastructure on the site. So, how this is different, and how this is likely to be connected later to the main city of Dubai and the region.

## On Poland Pavilion at Expo 2020 Dubai

*Marta Sękułska-Wrońska & Michał Czerwiński*  
*WXCA Architects, Poland*

World expos are about opportunities, and for architects they are a great opportunity to represent their country and also to build a great international pavilion.

We wanted to tell a story of Polish tradition and modernity, to manifest that we, the Polish community, want to participate in this global phenomenon of turning towards nature. We knew from the beginning that we wanted to talk about the beautiful Polish landscape and culture, to show Poland as a creative country inspired by nature. One of the main themes was creativity inspired by nature, which gave us a base to show the diversity of Polish landscape from different regions and also show our sensibility to get inspired by nature both in the past and now, when we create sustainable solutions for a better life in different fields, in architecture, science, and medicine.

During the project, we discovered that Poland is a key breeding ground for storks in Europe, which seemed like a beautiful history for us that could stand for a lot of metaphors and is a common motive in a lot of cultures, connecting Polish and European countries with Arabic culture. For us, a flock of birds stands for many different meanings and metaphors, representing international exchange of goods, culture, science, international cooperation, cooperation between people and societies, and even society itself. Birds work together to make this big journey from one country to another.

It was also very important for us to look carefully into the local Arabic culture and history of towns, like Dubai's old, historic Al-Fahidi district, trying to understand the sensibility of the colors, textures, and materials in this area that we would like to connect. We were searching for connections between our cultures, and we found we have very similar values, including family life. [...] So this is why, for example, our pavilion was so inviting to families.

## On curating the Spanish Pavilion for Expo 2020 Dubai

*Carmen Bueno*

*Expos, heritage & museum consultant, Spain*

The starting point was to think about how to present Spain, a country with a huge history, with many bridges to the Arab world. But we wanted to present a country that is innovative and future-oriented, and present the contributions from our country to global culture.

We started to work over basic key ideas. We needed a pavilion center theme: culture, and heritage. We needed a pavilion with a strong orientation towards innovation and sustainability, and we also wanted to have a strong artistic presence because art has been one of the big contributions of Spain to global culture. From there, we worked on different concept maps, trying to identify the different things we needed to talk about, and we came to the theme and the motto of our pavilion: “Spain: Intelligence for life, tradition, and innovation.”

Our program: we wanted the first area to develop an exhibition about our tradition while people were queuing. We called it “glimpses,” and the architects interpreted it, covering the cones with natural materials. This is the area under the cones where the visitors flow comes from the streets, and then they will access to the ramp to go downstairs. [...] It was an open space, a pre-queuing or waiting area, where people spent a long time playing chess. There were other glimpses devoted to see how Spain had participated in the globalization and the links with the Arab culture.

[...] From there a big door was open, and people accessed to the ramp where we made a strong connection between tradition and the future. [...] And then we come to the main exhibit, which was called the “Forest of intelligence” and it was a real, incredible space where we presented a selection of projects that we did all around the country, looking for innovative ideas, for improving sustainability that come from our country, but are useful for everyone.

**Panel Session # 03**

**Back to the Future II**

**Session Chair: Charles Pappas**  
*Exhibitor magazine*

## On the Vision Pavilion at Expo 2020

*Alvaro Torrellas & León Carlos Álvarez*

*Co-founders – Icaria Atelier, Spain*

The Vision Pavilion at Dubai Expo 2020 was one of our most complex and challenging design processes. The challenge was to create a visitor experience based on a very deep and complex storytelling until we decided to make a lot of things talking about architecture, interior design, and media production, everything mixed up to create a very attaching and emotional visitor experience. But it was a really complex design process, because we needed to make all the technology disappear behind the experience itself.

There was also a challenge in terms of the building. The building was one of the pre-made pavilions. It was a very small building, so we decided to get rid of the second floor, to have a more magnificent space, higher ceilings [...] we decided to create a very, very complex acoustic environment. We also decided to do everything of stone, because we were told that the pavilion was going to be permanent. So we wanted to give it a sense of legacy, yeah, basically we did everything that everybody tells you not to do when you are designing a pavilion. [...] So basically we did everything that we were not supposed to do, but in the end I think the experience was worthy all the efforts.

We were very lucky to have the possibility of designing the facade of the pavilion, so we could tell a narrative both from the outside and in the inside. [...] We were also quite worried of not making the pavilion very corporate, so we wanted to establish a narrative and a history and a story that people could feel empathy with, no matter their ages or or their ethnicities or where they came from.

One important thing was this history was told by the building itself [...] there is not a clear separation between architecture, interior design, exhibition, or design. Everything is mixed up to tell the history. And all that disappeared once the visitor enters the gallery, because it's a huge surprise. So we worked a lot with surprising the people [...] and that's a very good point, because surprising the people was very important.

## On the Opportunity Pavilion at Expo 2020

*Alvaro Torrellas & León Carlos Álvarez*  
*Co-founders – Icaria Atelier, Spain*

Opportunity was a very organic pavilion, very, very dynamic, very straightforward, very blunt. [...] This pavilion was very interesting, because basically it's an interactive experience for the visitor. The visitor is constantly engaged to take action [with the content ...] They are also allowed to play.

All the first part of the of the pavilion is interactive. First in groups, then also individually, and after all the interactive process they all gather [back together]. We didn't mention that at the beginning of the visit that the visitors are separated into three tracks. [...] The materials that we used in the fabrication of all the exhibits were also linked to the storytelling of the Pavilion. They were all natural materials that were very authentic. [...] for instance, the cork as a as a cladding material in the whole gallery. So the selection of all the materials were done very carefully to be part of the story. An element of what that was very important was the graphic design. It becomes part of the Exhibition design. [...] it was a huge part of the pavilion, and we made it informative, but entertaining at the same time, and very powerful.

We did also a lot of work on the management of the flow. because, being an interactive pavilion, and having three different groups at the same time going from gallery to gallery, and that they were all the time interacting with things, the flow of the pavilion was a huge challenge to keep the pace, to keep everybody moving from gallery to gallery at the right time and at the right moment. And we could achieve that also, using design tools and using the other visuals as a way to move the people around the pavilion.

## On the Malaysia Pavilion at Expo 2020 Dubai

*Serina Hijjas*

*Director – HIJJAS architects & planners, Malaysia*

The Malaysian pavilion at Dubai aimed to create the most ecosensitive ever pavilion, and managed to create the first ever Net-Zero or carbon neutral pavilion. It was conceptualized to encapsulate the synergistic relationship between the natural habitat and man. We worked with that idea, and created a narrative of a canopy of trees represented by groves of columns supporting the crown canopies, with a series of 3 pavilion structures, meandering walkways and firefly, illuminating poles, symbolizing reforestation and our biodiversity [...] These 3 organic forms, which touch the earth at as few points as possible, are intended to evoke references to the tropical jungle.

Together with the Net-Zero carbon approach, building for impermanence was a key idea of the pavilion. The Malaysian Pavilion was designed to be able to be deconstructed and moved to another location, but the cost of building was probably cheaper than the cost of moving it. [...] The idea was finally to create a pavilion where 70% of the materials could be repurposed and recycled by using selected lower, embodied carbon materials like timber so that reuse is ensured at the decommissioning.

Net-Zero energy was another commitment made, but we could only generate less than 20% on site generation on a very small [part] on the roof. But the organizing committee of Expo 2020 Dubai announced that they would provide solar power to all the pavilions for the duration of the expo [...] Apart from this, and in collaboration with the Ministry of Energy and Natural Resources, Malaysian Pavilion purchased 4,000 tons of CO2 equivalent worth of carbon offsets under the national reducing emissions for deforestation and forest degradation “red plus” program.

The Malaysian Pavilion 2020 embodied the concept and expression of harmony between man and nature, and to celebrate the spirit of reforestation with the potential of restoring biodiversity and wildlife habitat.

## ***On the use of storytelling and design in the Gabon pavilion for Expo 2020 Dubai***

***Oliver Poole***

***CEO – Zebek Ltd., United Kingdom***

We were contracted by the government of Gabon. One of the challenges we've had is that many people haven't heard of Gabon. But Gabon is actually one of those very important countries. It holds a unique position, and has a unique value in some of the most important conversations occurring internationally at the moment. And the reason for this is that Gabon is at the heart of the great Congo Basin Rainforest. There are two great rainforests left on the planet. There's the Amazon, and there's the Congo Basin Rainforest.

So we knew we had an important story to tell, and we knew that the expo in Dubai provided an extremely important opportunity for us to get that across.

The question was going to be, how could we best tell it? And that's why this issue of storytelling is at the very heart of the Gabon Pavilion in Dubai. Because what we wanted to be able to do we had to get people to come to pavilion of a country they did not know about. [...] We needed them to immediately and quickly grasp the significance of its unique place as one of the most forested nations in the planet. And we needed them to leave with a very clear understanding that this was going to be a place that they needed to learn more about, and would remember.

We wanted it to tell a story. We wanted it to leave people with an understanding of the country. [...] We essentially storyboarded a journey for people to come [...] in order to show what Gabon was, and the significance of the forest that it was part of. [...] And again we wanted this to be a journey and a story that people could discover for themselves and explore and get into as much detail as they wanted.

For us the big lesson we learned was the importance of storytelling: that if you're going to try to tell big topics and do so about countries that do not have the name recognition, you've got to have a very clear narrative.



## **On masterplanning guidelines for world and horticultural exhibitions**

**John Boon**

***Head of Landscape Architecture and Green City Advisory Group – Arcadis, Netherland***

AIPH, as the global approving body for international or horticultural expos partners with the BIE, because after our approval, the BIE recognizes those events.

In some ways they're very similar and some very different [to other expos]. When I was trying to explain the whole concept of a horticultural expo to someone, I said to them: "Well, it's like the Dubai Expo. It's an amazing area with beautiful pavilions." [...] But, and I don't mean this with any disrespect, Dubai Expo is stuck in the middle of a concrete jungle. Imagine a beautifully landscape park. Imagine, then, beautiful pavilions and gardens built in that whole area. It's a completely different concept, that you would see at a horticultural expo.

To give an idea of how much of a horticultural exhibition is left over, it is, by definition, sustainable and reused in some way. [...] For instance, the expo that we held last year in Almere in the Netherlands. The point of that expo was that it was going to be transformed into part of the new city of Almere, and a lot of the park will still remain. It's been handed over now to developers who will create business and residential areas within the park.

A good example in theory was the Liverpool Garden Festival in 1984, which was the last held in the UK. The idea behind that was to transform an area of Liverpool which was totally derelict and create a beautiful park and an area with a legacy. They did a fantastic job with the Expo, but post expo rather than continuing that, they let it go derelict. They did try some kind of further development, but ultimately the legacy aspect of that did not work.

However, when we approve expos we go quite deeply into what the legacy of that event would be, and the purpose of that event. So we want to ensure that you will have a beautiful park, then you know that's a really good purpose for us to approve that expo.

## **Panel Session # 04**

### **Things to Come**

**Session Chair: Dr. Guido Cimadomo**  
*University of Malaga, Spain*

## **On the design of Malaga' Expo 2027 master plan**

*Javier Pérez de la Fuente*

*Head Architecture and Infrastructures – Municipality of Malaga, Spain*

The competition faced with an initial reflection. The master program focuses on the possibility of generating thinking on the city of the future. [...] but we think that cities are not the problem, but the solution. [...] So the motto for Expo 2027, "The urban era. Towards the sustainable city," concerns everyone.

We thought that we needed to take into account all the things that were an enhancement for the landscape, the heritage values, the preservation of the land. [...] We thought, what if we [...] start by restoring nature? What if we put this little river existing in the plot in the center of the design? What if we go on creating a forest around the river? And what if we embrace the whole thing with the ring infrastructure which is going to host the International Pavilions?

The objective to be achieved with this environmental proposal is the creation of a Mediterranean forest in which Mediterranean and micro-climate habitats from all over the world will have a place. This forest is going to be not only the green area of the Expo, but it's going to have the added value of a nature classroom. [...] It's very important to underline that we have put very much effort not only thinking about the three months of celebration, but in what is going to happen next.

Citizenship, innovation, and environment expresses a suggestive and aspirational approach towards a concrete goal. The sustainable city. Expo 2027 showcases that culture and cultural diversity are sources of enrichment for humankind, and provide an important contribution to the sustainable development of cities, human settlements, and citizens empowerment to play an active and unique role in development initiatives.

## On the design of Minneapolis' Expo 2027 master plan

*David Loehr*

*Principal – DLR Group, USA*

We have designed a vibrant urban expo district, a plan for a visionary expo design that elevates the ideals of what an expo is, and advances on our theme of “Healthy people, healthy planet” through architecture and urban design.

We have taken vacant parcels, owned and controlled by the city, and transformed them into a singular expo district full of energy from participants, visitors, performers, food, art, and culture. [...] In addition, our design looks to the future beyond Expo 2027. Our Expo district plan expands into a new urban neighborhood for the city with a permanent international convention center, [and a] concentration of sports and healthy living facilities.

It is our responsibility to deliver the best possible experience during the 93 days of the Expo, and to fulfill our promise to create healthy lives and healthy places for generations to come. Fundamental to our core, is to create architecture that contributes to the well-being of the planet. I share with you today architecture that is dynamic, innovative, forward-looking, inclusive, safe, resilient and sustainable.

We are inspired by the fluid forms in nature, by the flow of the nearby Mississippi River, by clean water that sustains our lives by the movement and flow of visitors. [...] One of the most compelling aspects of the design is a plan for the world's first Net-Zero energy and carbon-free expo aligning with the United Nations SDGs.

At the heart of South Expo is a central host pavilion. a unifying and iconic form that is surrounded by international pavilions. North Expo is anchored by the International Conference Center theme pavilions to explore the depth of “Healthy people, healthy planet”. [...] Our design is inclusive by nature, accessible by all, welcoming to all visitors with opportunities for social interaction, entertainment, art, culture, learning, and sharing meals together.

## On the design of Odesa Expo 2030 master plan

*Roman Grygoryshyn*

*Deputy head – Odesa Regional State Administration for Odesa Expo 2030, Ukraine*

This master plan was made by Zaha Hadid architects. Let me introduce to you how we want to change the Odesa region. Postwar development will see a fundamental transformation of Ukraine's economy towards green energy, efficient and low-carbon technologies. [...] The effective reuse of facilities after the exhibition has closed its doors is a challenge, for this reason we believe the expos of the future are ones where nothing is wasted. Odesa Expo 2030 will embrace economic and social sustainability, implementing strategies that stately energy efficiency whilst improving education and sparring economic growth for the city and the region.

Finding freedom in the design of each pavilion often means increased construction costs, construction time and potentially a larger embedded carbon footprint. [...] Addressing these issues, Odesa Expo will offer the participants the choice of a flexible modular system which will allow official participants to present the best of the nation in a practical, creative, and visitor-friendly way, enabling them to interpret the expertise and present it to visitors by means of each county's unique cultural expression. [...] Participating countries will be able to connect prefabricated components to form the pavilions and customize the asset design chosen amongst a set of material options with the lowest possible carbon impact. [...] This system will ensure Expo pavilions are not only economic, and fabricated by the local supply chain quickly and off site, but also installed on site in a fast and efficient manner, combined with Ukraine's own national digital expertise. [...] They will contribute towards an energy positive expo site which will be able to not only support its own energy demand, but will supply renewable energy for local needs.

Expo 2030 will provide opportunities for a lifelong education improving social equality well-being and citizen engagement via public consultation... to represent the imagination and aspiration of the people of Ukraine.

## On the design of Rome Expo 2030 master plan

*Matteo Gatto*

*Founder – Matteo Gatto & Associati, Italy*

Expo 2030 master plan is designed with the aim to trigger urban transformations over the long term, beyond the temporary limits of the event. The master plan will therefore leave a virtuous legacy of clean energy and regeneration for the Torvergata area and the wider city.

But it will also be a spectacular event at the convergence of natural and artificial, investigating the ecological and energy transition, the coexistence between humans and the other forms of life, the ethics of technology and digital development and the boundaries between city and the countryside.

A second tier of innovation lies in the Expo 2030 pursuit of circularity as a crucial principle. All buildings, the design of which will be entrusted to hundreds of architects from all over the world, will have to be built having already defined the use, after the end of the Expo. From recycled materials for new constructions elsewhere in Rome to converting pavilions for neighborhood services and activities.

The masterplan of Expo Rome 2030 encompasses the design of a large urban solar park covering an area of 150,000 square meters, the largest of its kind in the world. [...] All pavilions will be designed with clean energy and will share it through a common grid. This strategy of energy sharing will sustain the expo site during the six months of the event and will continue to serve Torvergata after the Expo, supporting a continued process of decarbonisation for the area and the city of Rome.

Finally, the very location of the national pavilions reflects the multilateral and inclusive approach of Expo 2030. The pavilions will be arranged facing directly on the boulevard, rejecting the idea of building hierarchies among participating nations.



# **EXPO DUBAI 2020 GALLERY**





Expo 2020 Dubai sign.



Al Wasl Dome.



Mobility district entry gate.

Japanese Pavilion.



Mitate, Japanese Pavilion.



Post-it notes, Ukrainian Pavilion.





Austrian Pavilion.



Kazakhstan Pavilion.



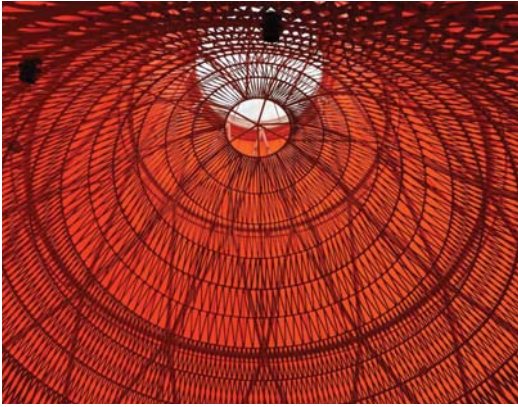
Calligraphy bench.



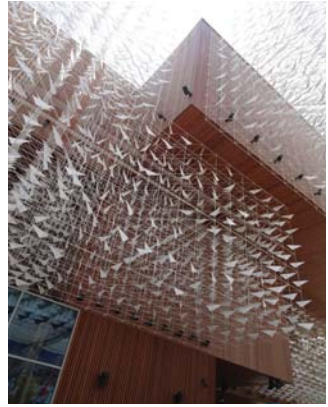
Spanish Pavilion.



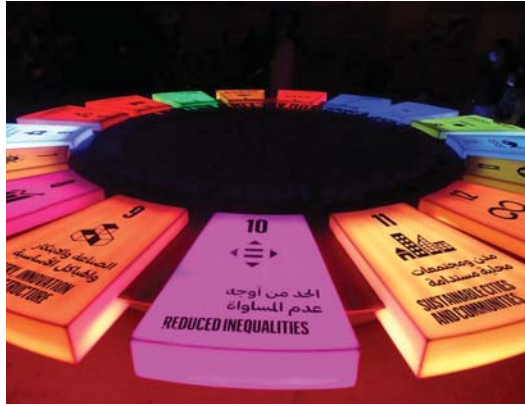
Spanish Pavilion.



Vision Pavilion.



Polish Pavilion.



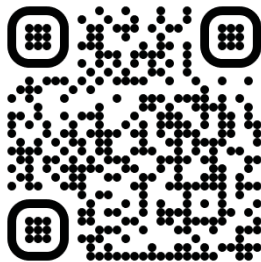
Opportunity Pavilion.



Malaysian Pavilion.



Gabon Pavilion.



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