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FINAL REPORT

MAB20.ORG @MABIENNALE

ARCHITECTURE BIENNALE MAB20

PROGRAM

The MAB20 Program will take place online

WORKSHOPS JUNE 24TH - 29TH via Zoom

ONLINE CONFERENCE JUNE 30TH - JULY 2ND via virtual conference platform

WEDNESDAY 30 JUNE

EST	04:00	04:30	05:00	05:30	06:00	06:30	07:00	07:30	08:00	08:30	09:00	09:30	10:00	10:30	11:00	11:30	12:00	14:30	15:00
AEST	18:00	18:30	19:00	19:30	20:00	20:30	21:00	21:30	22:00	22:30	23:00	23:30	00:00	00:30	01:00	01:30	02:00	04:30	05:00
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KEYNOTES & AWARDS	MAB Live			MAB Live	Keynote Guilherme Wisnik		MAB Live
SYMPOSIA 1		Happy People Architectures	MAB Academy 1 Launch Event			Connecting Cinemas	
SYMPOSIA 2		Digital Publics	Conversation Piece Next Urban Ecology			More-than-Human Intelligence: Bio-Mediated Architectures	
PAPERS & DEMOS		Papers Session 1	Demos & Posters Session 1			Al-driven Conversational Agents in Public Spaces	
ONLINE EXHIBITIONS						Online Exhibition Session 1	

THURSDAY **O1 JULY**

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KEYNOTES & AWARDS	MAB Live	Keynote Cameron Tonkinwis									MAB Stu	udent Awai	ds				MAB Live	Keynotes Laura Fo and And	rlano
SYMPOSIA 1				Designin Unplanna Realtime		s		The Dou of Archit						How to D a Sustain and Inclu					
SYMPOSIA 2				MAB Aca Shaping Future of					Public Dig Infrastruct						rchitecture Well-bein				
PAPERS & DEMOS				Demos 8 Session 2	Posters 2			Papers Session 2	2					Papers Session	3				
ONLINE EXHIBITIONS						Online Ex Session 2													

FRIDAY 02 JULY

EST	04:00	04:30	05:00	05:30	06:00	06:30	07:00	07:30	08:00	08:30	09:00	09:30	10:00	10:30	11:00	11:30	12:00	14:30	15:00
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CEST	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	20:30	21:00

KEYNOTES & AWARDS	MAB Live	Keynote Ayona Datta				MAB Awards	MAB Live
SYMPOSIA 1			Cities of Things		Inclusion in the Datafied City		
SYMPOSIA 2			The City Otherwise Urban Imaginaries in Art and Design		Future Heritage of Smart Cities		
PAPERS & DEMOS			Demos & Posters Session 3	Papers Session 4	Demos & Posters Session 4		
ONLINE EXHIBITIONS				Online Exhibition Session 3			

INTRODUCTION

The Media Architecture Biennale is the world's premier event on media architecture, urban interaction design, and urban informatics. It brings together architects, artists and designers, leading thinkers on urban design, key industry and government representatives as well as community activists. Together, they explore the design and role of media in the built environment and its implications for urban communities and ecosystems. The Media Architecture Biennale 20 (MAB20), was originally planned for the fall of 2020. However, due to the ongoing COVID-19 pandemic and its ramifications, such as social distancing and travel restrictions, the biennale was reimagined as a networked series of events. Over the course of two years we have organized a series of (online) meet-ups, workshops and lectures, involving students, professionals and researchers. This event series was concluded with a large, online conference held in the Summer of 2021.

This conclusive MAB20 event took place in an online format with workshops being held from June 24th – 29th and a conference from June 30th – July 2nd. All sessions and activities were held via Zoom, recorded, and made available on on-demand on MAB20's website (www.mab20.org).

Our event series taking place between 2019 and 2021 was attended by 1105 people. At the final event, around 550 people joined our 15 workshops, and another 600+ people from around the world attended the online conference, with almost 150 speakers, 42 online conference sessions, featuring inspiring and thought-provoking presentations.

Two of the highlights of the MAB20 program were the MAB Student Awards and the MAB Awards celebrating outstanding (student) work in the field of Media Architecture. In addition, collaborations with Volume Magazine, Archdaily, KooZA/rch, and UrbanIxD Learning Community resulted in articles and publications aimed at professionals – showcasing different perspectives on the emerging field of Media Architecture The MAB-academy provided a forum for participants from around the world to discuss the education of future generations of urban interaction designers. The academic contributions will be published later in 2021 in the conference proceedings through the ACM Library.

Despite not being able to meet face-to-face, the MAB-community brought the conference spirit to life in our online sessions, in our Discord channels, and through our social media platforms. The next edition of MAB, which will take place in Toronto in 2023 and will be led by Prof. Dave Colangelo from Ryerson University.

ORGANIZERS

MAB20 is organized by the Amsterdam University of Applied Sciences and the [urban interfaces] group at Utrecht University, in collaboration with the Media Architecture Institute.







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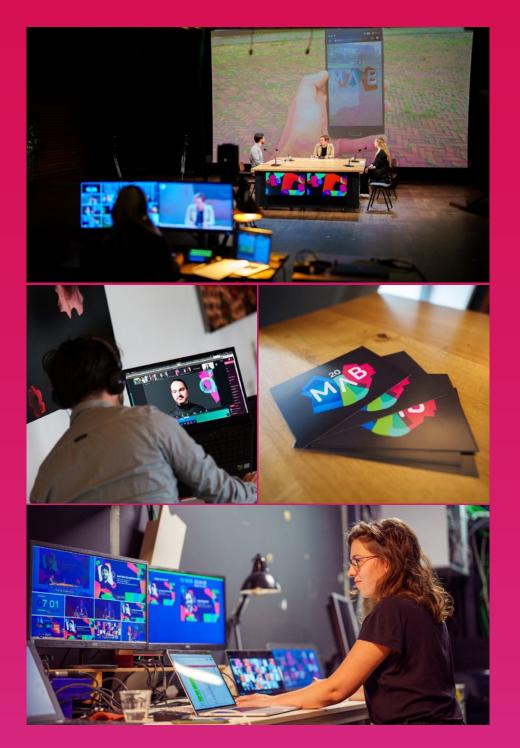
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SPONSORS

The Media Architecture Biennale 20 was sponsored by Amsterdam University of Applied Sciences' Faculty of Digital Media and Creative Industries, Center of Expertise Urban Governance & Social Innovation and the Center of Expertise Urban Technology; Stimuleringsfonds Creatieve Industrie, Utrecht University and its Focus Areas Governing the Datafied Society and Games Research and Media Facades.



Utrecht University

CURATORIAL STATEMENT

"Toronto swaps Google-backed, not-so-smart city plans for people-centered vision", *The Guardian* headlined on March 12, 2021. For years, the tech giant had attempted to gain a foothold in smart city development, via its 'urban intelligence' spinoff Sidewalk Labs. Due to mounting criticism, the municipality of Toronto backed away from the futuristic tech-driven plans for Toronto's Quayside. According to *The Guardian*, this move is a reaction to growing skepticism over technology's role in urban development and reflects a renewed search for public values underpinning urban futures: "Canada's largest city is moving towards a new vision of the future, in which affordability, sustainability and environmentally friendly design are prioritized over the trappings of new and often untested technologies."¹ This recent example shows how urban development – as well as the experience of already existing cities – is increasingly shaped by a range of digital media technologies, like mobile devices, urban screens, interactive installations, 'sharing' platforms, surveillance devices, data trackers, embedded sensors, and so on. While these are often marketed as neutral tools that simply make cities better, more efficient, or safer, they are increasingly questioned from a value-based perspective: Better for whom?; more efficient for whom and what?; to what goals and underlying logic exactly?; and safer, at the cost of exclusion of or bias against whom?

Urban technologies are, of course, not neutral but come with inbuilt assumptions, biases, and values that profoundly reshape urban life itself. At the Media Architecture Biennale 20 – which is taking place for obvious reasons in 2021 – we wish to bring out a value-based discussion on urban technology and connect it to the design and implementation of media architecture in urban life. What future scenarios are implied in today's urban technologies? We call not just for a critical evaluation of the scenarios that tech giants propose for places like Toronto's Quayside, but also to constructively imagine its alternatives: how can interactive urban technologies be shaped to respond to the needs of citizens and their surroundings, and contribute to cities that are both socially and ecologically sustainable?

From a critical vantage point, by now, these new urban technologies have been criticized for spurring the dystopian logics of 'three Cs': Control by states and companies capturing and nudging our desires and behaviors; the increasing *Commodification* of urban life as a set of individualized infrastructural services catered to – usually the highest paying – customers; and the *Capsularization*, or splintering of social domains into fragmented silos. These three Cs are antithetical to public urban values that underpin city life, like civic agency, publicness, and communality.

Yet, in addition to the relentless techno-push and its threat to public values, there are also opportunities for new technologies to contribute to public values in the design of urban life. They could play a role in tackling profound global challenges like increasing inequality and exclusion to climate change and loss of biodiversity. Again, central to addressing these challenges is the articulation, discussion and rethinking of public values. For instance, cities are explicitly mentioned in the UN Sustainable Development Goals, with the aim of making them "inclusive, safe, resilient and sustainable."² And the 2021 Venice Architecture Biennale asks the value-driven urgent question, "how will we live together?"³

Thus, cities are caught up in a double whammy between technological and societal challenges. In response, various actors have already embraced the need to design urban technologies from a values-based perspective. Cities such as Amsterdam, Barcelona, and New York have called for citizen's digital rights in the application of technologies to design.⁴ Designers, researchers, and policymakers have argued for the explicit inclusion of public values in the design of digital infrastructures.⁵ Explorations are put to the front to explore the actual adaptation of new technologies in the design of public space to activate public space in facilitating instead of enforcing action.⁶ Moreover, an increasing awareness has transpired regarding the necessity to include the well-being of the natural ecosystem at large in the design of media architecture.⁷

We believe that Media Architecture is one of the emerging spaces where this much-needed transdisciplinary experimentation and critical reflection can take place. The Media Architecture Biennale is a biannual event that brings together architects, designers, artists, researchers, engineers, educators, policymakers, and industry professionals to jointly explore how technology and digital media can bring out such livable and sustainable city environments with active public spaces. At MAB20 we want to open up this debate by bringing out alternative futures that media architectures can contribute to. How can media architecture trigger social sustainability and citizen's digital rights, collective action, and new dynamics in public spaces? How can it help to balance between consumption and sustainability, and reconcile the broader interests of humans with those of non-humans and the broader natural ecologies in our cities? And how can it catalyze change towards sustainable mobility and consumption patterns, bringing out more circular economies?

With these questions we partly return to more critical as well as forward-looking perspectives that emerged with the rise of media architecture as a new field of – yes of what exactly? – something at the crossroads of art, engineering, urbanism, technology and design around the beginning of the century. At that time, the opening up of accurate GPS signals to citizens and commercial actors in combination with the rise of mobile communication technologies led to practices of what was then called locative media. These included artworks that tried to reinvigorate public spaces and make cities more sociable while at times invoking classical theories on urban culture. Around the same time, as cheaper, larger electronic and now possibly also interactive next-generation displays emerged they sparked a critical debate about the ever-presence of moving (digital) images in our public spaces; usually brought to us by advertisers. As an example, in 2005, about 200 people assembled (physically!) on the top floor of an 11-story postindustrial relic in Amsterdam – now demolished to make room for amongst others the headquarters of Booking.com – to attend the first Urban Screens Conference, organized by the Institute of Network Cultures. There, critical questions were being raised about urban screens of various scales dominating urban public spaces in global cities. One of the primary concerns was to instigate a critical investigation of fundamental transformations affecting urban public space.[®] Similar questions at that time were posed at conferences such as Media Cities, The Hybrid City, The Mobile City and the long-running bi-annual Digital Cities workshop series.

Over the years, Media Architecture has become an emerging, highly interdisciplinary field of art and design that is concerned with the application of media and technologies in cities. It brings mediated experiences into the urban public realm, bridges the use of digital platforms, technologies, and physical urban spaces, and connects the flows of data with the circulation of people, goods, and other resources. And whereas Media Architecture originally was mostly concerned with the integration of displays and interactive installations into architectural structures, such as media facades and urban screens, in recent years the discipline has grown as new technologies such as digital platforms and smart city technologies have increasingly made their way into the experience, management, and design of cities.

Media Architecture approaches all the intersections of physical and digital spaces from an integrated design perspective. It searches for new forms of understanding at the crossroads between traditional architecture, technology, media art, design, and the humanities and social sciences. It integrates an engineering perspective aimed at the development and implementation of new technologies with a design approach that puts the user or the citizen at the center of the process. With the increasing integration of physical and digital spaces and experiences, media architecture has also seen an even larger interest from commercial companies in advertising, tech development, and digital platforms. This partly resulted in a design approach focusing on usability and customer satisfaction, aiming at gamification and branding, with a devotion to the spectacular and the dramatic.

Whereas this has brought interesting insights into the 'design grammar' of media architecture, as well as convenient services for consumers and bedazzling experiences at the levels of buildings and skylines, we now wish to reinvigorate the value-based thread in the research and design of Media Architecture. With our latest edition of the MAB, we argue that now more than ever media architecture must move beyond the mere spectacle, and the design of individualized services comforting human customers. We call for media architectures that strengthen citizen's digital rights in democratic societies. We call for urban interaction design that dares to take on a more-than-human approach: aiming at the wellbeing of the ecosystem as a whole. We need a media architecture that explicitly addresses the underlying values and implied futures of new technologies, bringing out the implications and opportunities for locally situated communities of citizens as well as their natural ecologies.

In exploring these questions, the following themes are of specific interest, and will be the main themes of MAB20.

THE AESTHETICS AND POETICS OF RESPONSIVE URBAN SPACES

Inclusive democratic societies need media architectures that contribute to vibrant public spaces. As such, media architecture should contribute to a sense of place, deepening citizens' understanding of and attachments to locales and habitats. It activates public spaces as an 'urban theatre' where citizens can take notice of each other, and (playfully) interact with each other. It makes places more legible and also imaginative, in ways that stimulate exploration, reflection and criticality. It should also make the (re)design of urban spaces more inclusive, bringing in perspectives from various stakeholders.

CITIZENS' DIGITAL RIGHTS IN THE ERA OF PLATFORM ECOLOGIES

A nascent platform society in which economic, social and cultural urban relations are mediated through digital platforms needs an architecture that is open and inclusive as well as transparent and accountable, underwriting citizens' digital rights. We need to explore alternatives for 'extractive' platform economies, for example, by further investigating privacy and autonomy-by-design, commons-based collaborations and platform-cooperatives. We need a media architecture that articulates public values and allows citizens to govern to digital platforms, rather than be governed by them.

PLAYFUL & ARTISTIC CIVIC ENGAGEMENT

Smart Cities need media architectures that not just increase efficiency, but instead need technologies that create meaningful experiences. As

an alternative, 'playful cities' promote a people-centric view of the smart city in which citizens themselves learn, negotiate and create innovations through play and games. Shaping our urban futures is a challenge of the imagination rather than a technological challenge. To become serious about our planetary urban future, we need imaginative gameful tools and playful interventions.

RESTORATIVE CITIES

Socially and ecologically sustainable cities make use of the affordances of media architectures to restore socially, ecologically and physiologically on multiple levels, from the individual human, groups of people to the city as an entity of systems. We need media architecture to create 'restorative pockets', on the levels of the building (like immersive rooms to create help elderly relive their past); the street (creating active public space, collective ownership, local communities); the city (shaping socially and ecologically resilient entities) ; and the level of the globe (preventing a race to the bottom competition, fostering transnational learning – and answers to the downside of new technologies).

MORE-THAN-HUMAN CITIES

Sustainable cities need media architectures to embrace the well-being of the natural ecosystem as a whole. As our planet is rapidly urbanising, 'nature' has become encapsulated in urban life, to the instrumental logic of modern technology. This places severe strains on animals, plants and critters, and – ultimately – also our own well-being and health. We need media architectures that enable us to "live together" with other beings in ways that respect them, and allows for their difference and unicity to exist.

Michiel de Lange, Frank Suurenbroek, Nanna Verhoeff, Martijn de Waal – executive committee & general chair of MAB20.

- 2. https://www.un.org/sustainabledevelopment/cities
- 3. <u>https://www.labiennale.org/en/architecture/2021</u>
- 4. https://citiesfordigitalrights.org/

^{1.} https://amp.theguardian.com/world/2021/mar/12/toronto-canadaguayside- urban-centre

- José van Dijck, Thomas Poell, and Martijn de Waal, *The Platform Society. Public Values in a Connective World*. Oxford: Oxford University Press 2018; Michiel de Lange, and Martijn de Waal, 'Owning the City: New Media and Citizen Engagement in Urban Design'. *First Monday, Special Issue "Media & the City"* 18 (11) 2013. <u>https://doi.org/doi:10.5210/fm.v18i11</u>
- Areti Markopoulou, Chiara Farinea, and Mathilde Marengo, eds. 2017. State of the Art and Best Practices Collection. Active Public Space. Barcelona: Institut d'Arquitectura Avançada de Catalunya. <u>http://activepublicspace.org/;</u> Frank Suurenbroek, Ivan Nio, and Martijn de Waal, Responsive Public Spaces. Exploring the Use of Interactive Technology in the Design of Public Spaces. Amsterdam: Amsterdam University of Applied Sciences 2019.
- Marcus Foth, and Glenda Amayo Caldwell, 'More-than-Human Media Architecture', ACM International Conference Proceeding Series, 2018, pp. 66-75. <u>https://doi.org/10.1145/3284389.3284495</u>; Rachel Clarke, Sara Heitlinger, Ann Light, Laura Forlano, Marcus Foth, and Carl DiSalvo. 2019. 'More-Than-Human Participation: Design for Sustainable Smart City Futures', Interactions 26 (3) 2019, pp. 60-63. <u>https://doi.org/.1037//0033-</u> 2909.126.178
- 8. See for instance McQuire et al., Urban Screens reader 2009 <u>https://</u>_____networkcultures.org/urbanscreens/reader

This article was published in Volume 59: Futures Implied.



MAB20 OPENING

The official opening of the MAB20 Online Conference took place on June 30th, 2021 with contributions from Vice Mayor of Amsterdam Marieke van Doorninck, AUAS Rector Geleyn Meijer, Waag Director Marleen Stikker, Professor Albert Meijer of Utrecht University.

WATCH HERE

Marieke van Doorninck

Deputy mayor for Sustainability and Spatial Development for the City of Amsterdam. From 2006 until 2014, she was a member of the Municipal Council for the GreenLeft party, of which she was the party chair since 2009.

"Amsterdam has high ambitions when it comes to digitization, but also, sustainability. And I believe that in this Biennale these two themes very much come together."

Marleen Stikker

Founder of Waag and of of 'De Digitale Stad' (The Digital City) in 1993, the first virtual community introducing free public access to the Internet in Amsterdam.

"We have to reclaim the (digital) public spaces and rethink how the digital structures are interfering with our social lives and in our cities. So I think the theme of MAB20 (Futures Implied) is really spot on."

Geleyn Meijer

Member of the Board and Rector of the Amsterdam University of Applied Sciences. Prior to this position he was Dean of the Faculty Digital Media & Creative Industries at the same University. He drives the digital renewal programs in the University.

"Currently, the design challenge we have as a university is what does it mean to be a blended institution? How can we create spaces where people can meet each other and have interactions which are essentially human using our campus area, while at the same time, how can we enjoy what the ICT and digital spaces can bring us? This is a design challenge that this conference is exactly taking on."

Albert Meijer

Full professor of public innovation at Utrecht University in the Netherlands. He is chair of the Public Management Group at the School of Governance and board member of the focus area Governing the Digital Society.

"We need to do a new type of science, because governing the digital society, while finding ways to ensure that our democratic state will be guaranteed also in an information age, takes a lot of effort and input from different angles. That is why I am really happy to be part of the MAB20, because we believe that we need to bring in different angles to talk about, investigate and find solutions to the key topics that we are facing."



WORKSHOPS

For the MAB20 call for workshops we received a record number of **38 proposals** from academics and professionals from all around the globe. Originally, 20 workshops were selected and from those, 15 accepted the challenge of adapting their proposals to an online format. We ended up with a line up of workshops that explored a multitude of themes in the media architecture realm, which ultimately attracted **over 500 participants worldwide**.



URBAN COMMONS AND PARTICIPATION IN THE CONTEXT OF THE PLATFORM SOCIETY

Exploring how digital platforms have impacted or can be adopted for the management of commons.

Organizers: Gernot Tscherteu (realitylab GmbH), Julia Jesella (realitylab GmbH), Juan Carlos Carvajal B. (Media Architecture Institute).



THE CITY AS A LICENSE: DESIGN, RIGHTS AND CIVICS IN A BLOCKCHAIN SOCIETY Working towards a special issue/edited volume on the theme of 'The City as a License: Design, Rights and Civics in a Blockchain Society'.

Organizers: Martijn de Waal, Gabriele Ferri & Inte Gloerich (Amsterdam University of Applied Sciences); John Vines & Chris Elsden (University of Edinburgh)



AUGMENTING CITIES AND ARCHITECTURE WITH IMMERSIVE TECHNOLOGIES

Discussing use-cases for creating situated augmented reality and immersive applications with the purpose of making cities more engaging.

Organizers: Callum Parker (The University of Sydney), Soojeong Yoo (University College London), Waldemar Jenek (Queensland University of Technology), Youngho Lee (Mokpo National University)



FROM GLITTER TO \$€£¥: DEVELOPING BUSINESS CASES FOR MEDIA ARCHITECTURE

Developing practical tools that aid in articulating business goals of media architecture, balancing them with the medium's user experience goals.

Organizers: Niels Wouters (University of Melbourne), Vanessa Pouthier (University of Melbourne), Franz Wohlgezogen (University of Melbourne), Kim Halskov (Aarhus University)



PROTOTYPING NEXT GENERATION URBAN INTERFACES

Inspiring new approaches that have the potential to accelerate and support future work on designing and evaluating emerging urban interfaces.

Organizers: Alexander Wiethoff (LMU Munich), Martin Tomitsch (University of Sydney), Marius Hoggenmueller (University of Sydney), Luke Hespanhol (University of Sydney), Linda Hirsch (LMU Munich), Beat Rossmy (LMU Munich), Stewart Worrall (University of Sydney



THE SPACES AROUND THE SCREENS: TOWARDS A CRITICAL SPATIAL PRACTICE OF MEDIA ARCHITECTURE Discussing and employing concepts from the book, "The Building as Screen: A History, Theory, and Practice of Massive Media".

Organizers: Dave Colangelo, Patricio Dávila (Co-Founders — Public Visualization Studio, Toronto, Canada).



DESIGNING RESTORATIVE CITIES Exploring the transmission of the concept of 'restorativeness' into the realm of urban design and architecture.

Organizers: Frank Suurenbroek (Amsterdam University of Applied Sciences, Amsterdam), Stefano Andreani (Harvard, Graduate School of Design), Ben Hooker (ArtCenter College of Design).



DIY & MORE-THAN-HUMAN MEDIA ARCHITECTURE

Exploring media architecture approaches & toolkits that emphasize equitable human, lesser human, and nonhuman rights to the

city.

Organizers: Kavita Gonsalves, Waldemar Jenek, Glenda Caldwell, Marcus Foth (Queensland University of Technology), Greg Nijs (Université Libre de Bruxelles), Thomas Laureyssens (LUCA School of Arts), Jorgos Coenen (KU Leuven), Andrew Vande Moere (KU Leuven)



SENSATIONAL BUOYS Exploring the intersection between citizen sensing, toyification and monitoring urban waters.

Organizers: Artur Vasconcelos Cordeiro (Universidade de São Paulo), Jéssyca Hellen Lima Rios (Independent researcher), Mattia Thibault (Tampere University), Federico Sassi (Independent researcher)

MAB 2021



ENGAGING WITH SMART CITY CONTROVERSIES THROUGH A MEDIA INTERFACE

Engaging with a media interface, debating about controversies and reflecting on desirable and (un)desirable smart city futures.

Organizers: Julieta Matos Castaño (University of Twente), Anouk Geenen (University of Twente), Corelia Baibarac-Duignan (Utrecht University)

WORKSHOP VISUALIZING URBAN HAPPINESS

VISUALIZING URBAN HAPPINESS

Developing a blueprint for making city dwellers aware of and involved in changes to city design and governance.

Organizers: UNSx | UNStudio, Squint Opera



PLAYFUL EXPERIENCE THROUGH INTERACTIVE SONIC DESIGN IN VIRTUAL ENVIRONMENTS

Exploring and demonstrating how sound can affect the duration of stay and potentially enable or inhibit engagement in public space.

Organizers: Xiaoduo Xu, Busra Berber, Ava Fatah gen. Schieck (Bartlett, University College London), Qianhua Fu (Xinhua Zhiyun Technology Co.), Hamed Alavi (Human-IST Institute, University of Fribourg)

WORKSHOPS



EXPERIMENTS WITH THE IMAGINATIVE NATURE OF RESPONSIVE FIBRE CONCRETE

Testing and exploring the creative potential of responsive fibre concrete, a technology developed by iart merging the digital and physical realms.

Organizers: Laura Company, Valentin Spiess and Bettina Lotz (IART)



SITUATING URBAN SCREENS AND PUBLIC MEDIA ART IN ASIAN CITIES: SINGAPORE, SEOUL AND HONG KONG

Discussing use-cases for creating situated augmented reality and immersive applications with the purpose of making cities more engaging.

Organizers: Kristy H.A. Kang (Nanyang Technological University)



SUBVERSIVE CITIZEN MANUAL FOR THE MORE-THAN-HUMAN CITY

Exploring the design space of contestation within the more-than-human city, employing tactics to try out multiple perspectives.

Organizers: : Maria Luce Lupetti, Iskander Smit, Iohanna Nicenboim, Gijs Huisman (Delft University of Technology), Eduard Fosch Villaronga (Leiden University), Viktor Bedö (University of Applied Sciences and Arts Northwestern Switzerland), Mick Jongeling (Rotterdam University of Applied Sciences).

WORKSHOPS







KEYNOTES



AYONA DATTA

Ayona Datta is a Professor of Human Geography at University College London. Her work focuses on the intersections of postcolonial urbanism, smart cities, regional futures and gendered citizenship in the global south.

PRESENTATION: Learning from Small Cities in the Global South

What can we learn from small cities in a digital urban age? Using the lens of speed, scale and size as defining practices of urban 'futuring', it will argue that while small cities constitute the primary sites of urbanisation in the global south, the increased focus on smart technologies to accelerate their influence and reach presents significant roadblocks to sustainable futures.

WATCH HERE



LAURA FORLANO Fulbright award-winning and National Science Foundationfunded scholar, is a writer, social scientist and design researcher. She is also an Associate Professor of design at the Institute of Design at Illinois Institute of Technology

PRESENTATION: Making Critical (More-than-human) Futures

How do we imagine, design, use and maintain digital technologies in ways that allow all lives — human and non-human — to flourish? The answer to this question requires new understandings of what it means to be human, new conceptualizations of knowledge and expertise, new inventive methodologies as well as new ethical and political concepts.

WATCH HERE



ANDREA POLLI

Andrea Polli is an environmental artist working at the intersection of art, science and technology. She is also a Prof. with appointments in the College of Fine Arts and School of Engineering at The University Of New Mexico

PRESENTATION: Hack the Grid

Hack the Grid employs public light and energy artworks in the built environment and community engagement to promote greater understanding of energy production and consumption. Through this, she encourages audiences to experiment with energy-related technologies and ideas, to make more informed choices about energy consumption and advocate for greener energy industries.

WATCH HERE



CAMERON TONKINWISE

International expert in design studies and transition design and Director of the Design Innovation Research Centre at University of Technology Sydney. He writes and speaks extensively on the power of design to drive systems-level change to achieve more sustainable and equitable futures.

PRESENTATION: Vision-led Transition Designing: Making Abundance Legible

The shift to Distributed Energy Systems as afforded by renewables is already causing problems for infrastructures and worldviews structured around scarcity. Media Architecture will be needed to help people navigate this Transition, but the practice will need to become bolder than its Society of Spectacle lineage.

WATCH HERE



GUILHERME WISNIK

Guilherme Wisnik lives and works in São Paulo. He is an architectural and art researcher, curator, and an Associate Professor at the Faculty of Architecture and Urbanism of the São Paulo State University (FAUUSP).

PRESENTATION: Public space as a place of conflict Brazil has very large and complex cities, in which public spaces are often privatized, or destroyed for the passage of new avenues and viaducts. In the last two decades, however, many civil society movements have emerged claiming the right to public spaces, and activating them in different ways. A common element to these movements is the awareness that the "public" attribute of space is the dimension of conflict and differences inherent in society itself.

WATCH HERE

KEYNOTES

SYMPOSIA



CONNECTING CINEMAS A discussion on the role of cinemas as cultural innovation hubs and their role as curators of interactive visual culture.

Organizers: Amsterdam University of Applied Sciences and Public Art Lab in the framework of the project Connecting Cinemas For Rural Areas

WATCH HERE



MORE-THAN-HUMAN INTELLIGENCE: BIO-MEDIATED ARCHITECTURES Roundtable on the role of living organisms in designing sustainable cities of tomorrow.

Organizers: AUAS Learning Community Critical Making & Research Through Design

WATCH HERE



AI-DRIVEN CONVERSATIONAL AGENTS IN PUBLIC SPACES

A live demonstration/unboxing event of the current prototype of our device. We will show the functionality, explain the hardware and software, and give an impression of our design process.

Organizers: The Hague University

WATCH HERE



DESIGNING THE UNPLANNABLE IN REAL TIME DIGITALITIES How can an innovative use and application of data help us design the unplannable?

Organizers: ARCAM

WATCH HERE



COLLABORATIVE CITY-MAKING IN THE PLATFORM SOCIETY

Discussing how digital platforms can be adopted to manage common resources, to generate new forms of decentralized participation between citizens.

Organizers: Gernot Tscherteu, Julia Jesella (realityla GmbH), Juan Carlos Carvajal B. (Media Architecture Institute)

WATCH HERE



HAPPY PEOPLE ARCHITECTURES How does design contribute to the happiness of inhabitants of smart buildings and neighborhoods?

Organizers: ARCAM



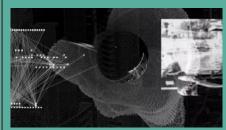


DIGITAL PUBLICS

Two panels that seek to define the immersive experience in the public context and its role in placemaking.

Organizers: Digital Placemaking Institute and Urban Screen Production

WATCH HERE



CONVERSATION PIECE - NEXT URBAN ECOLOGY

Exploring the artistic research program NEXT URBAN ECOLOGY, which aims to confront and evoke the emergence of data as new 'agent species' in the cityscape.

SYMPOSIA

Organizers: Marineterrein Amsterdam

WATCH HERE



CITIES OF THINGS

How will our city life change when we share public space with autonomous intelligent things? What will be the impact for designers of the city and the intelligent things, how will it impact policymakers?

Organizers: Cities of Things field lab AMS-MUC initiative

WATCH HERE



INCLUSION IN THE DATAFIED CITY Discussing some of the research conducted by the special interest group at Utrecht University on inclusion in the datafied city, focusing on urban mobility, public policy and smart city futures.

Organizers: Anae Sobhani, Corelia Baibarac-Duignan, Erna Ruijer, Michiel de Lange (Utrecht University)

WATCH HERE



THE CITY OTHERWISE: URBAN IMAGINARIES IN ART AND DESIGN How do artists and designers engage with

alternative futures by surfacing, representing and making malleable urban imaginaries?

Organizers: Roy Bendor

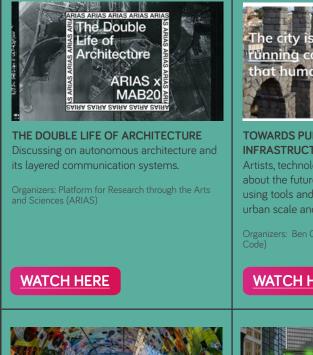
WATCH HERE



FUTURE HERITAGE OF SMART CITIES Exploring the future heritage of smart city technologies by discussing how such technologies may become part of a city's history and identity.

Organizers: Michael Nagenborg, Yashar Saghai, Andreas Weber (University of Twente), Delfina Fantini van Ditmar (Royal College of Art, London), Sanna Lehtinnen (University of Aalto).







HOW TO DESIGN A SUSTAINABLE AND **INCLUSIVE CITY**

How can (digital) design and art play a role in the sustainable and inclusive city? And how does digitalization influence architecture and urban living spaces?

Organizers: Centre of Expertise for Creative

WATCH HERE



TOWARDS PUBLIC DIGITAL CULTURAL INFRASTRUCTURE

Artists, technologists and policy makers talk about the future of public cultural production using tools and platforms deployed on an urban scale and beyond.

Organizers: Ben Cerveny(The Foundation for Public

WATCH HERE



NEURO-ARCHITECTURE TO PROMOTE WELL-BEING

Exploring the potential of neuro-architecture to inform and steer the (re)design of our cities to promote human and non-human well-being.

Organizers: Amsterdam University of Applied project Sensing Streetscapes.

WATCH HERE







PAPERS & LATE-BREAKING WORK

For MAB20's calls for **Papers and Late-Breaking Work** (LBW) we received 38 submissions, from which 17 were selected. The conference's academic track included four Paper Sessions, where the selected full papers and LBWs were presented via Zoom and followed by discussion. All selected submissions will be featured in MAB20's Conference Proceedings to be published via ACM Digital Library. **Playing with the Spirit of a Place: Designing Urban Interactions with Hybrid-Resolution Media Façades** Peggy Liu and Luke Hespanhol (The University of Sydney).

Moving Walls and Talking Floors: Design Considerations on Magical Media Architecture Experience Eléni Economidou (University of Salzburg)

metaPLACE: Co-designing Sino-Australian Urban Media for Participatory Placemaking Ian McArthur and Fang Xu (UNSW Sydney).

Developing a Place-oriented Approach for Interactive Installations – a Preliminary Design Framework

Yu Kao, Glenda Caldwell and Jared Donovan (Queensland University of Technology).

Storystamp: Evaluating the Impact of the Place-oriented Approach for Placemaking Yu Kao (Queensland University of Technology)

Media Architecture in Architecture Studio Education Capturing Dynamics in the Process.

Waldemar Jenek, Glenda Caldwell, Jared Donovan, Veronica Garcia Hansen, Matt Adcock, Mingze Xi, Kavita Gonsalves, (Queensland University of Technology), (CSIRO's Data61)

Decolonizing the Urban Screen: An Argument and Approach for First Peoples-led Content Programs in Massive Media

Susie Anderson (Science Gallery Melbourne), Niels Wouters (The University of Melbourne) and Ryan Jefferies (Science Gallery Melbourne).

A Critical Review of How Public Interfaces Facilitate Placemaking

Paul Biedermann (KU Leuven) and Andrew Vande Moere (KU Leuven).

Fused Twins: A Cognitive Approach to Media Architecture Through Augmented Reality

Jascha Grübel (ETH), Michal Gath-Morad, Leonel Aguilar, Tyler Thrash, Robert W. Sumner, Christoph Hölscher, Victor Schinazi. (ETH Zürich, Miami University, Bond University)

Generating and Disseminating Intermediate-level Knowledge on Multiple Levels of Abstraction: An Exploratory Case in Media Architecture

Boudewijn Boon, Maximiliane Nirschl, Giulia Gualtieri, Frank Suurenbroek, Martijn de Waal (Hogeschool van Amsterdam)

Evaluation Framework for Public Interactive Installations Adam Kjær Søgaard, Bo Jacobsen, Michael Utne Kærholm Svendsen,

Rune Lundegaard Uggerhøj, and Markus Löchtefeld (Aalborg University)

A Media Architecture Design Space: The MAB 2012–2018 Nominees Kim Halskov (Aarhus University).

Designing and Building CommunIT Carlos Henrique Araujo de Aguiar, Keith Green, Trevor Pinch, Gilly Leshed, Kevin Guo, and Yeolim Jo (Cornell University).

Ubiquitous Memory: A Field Study on Ubiquitous Technology Systems and Interaction Design for the Symbolic Appropriation of Spaces Through Collective Memory

Pablo Sotres Castrejon, Carlos Guerrero Millan, Cristina Rivas Herrera, Nora Morales Zaragoza, and Santiago Negrete Yankelevich (Universidad Autónoma Metropolitana).

Public Gratification Palace: A Framework for Increased Civic Engagement

Jennifer Jiang (Technische Universität Berlin), Lawson Spencer (Cornell University) and Liss C. Werner (Technische Universität Berlin).

Distancing Interface: Improvisational media architectures for placebased discourse under lockdown

Dietmar Offenhuber (Northeastern University) and Sam Auinger (independent).

Media Architecture As Privatization Zach Melzer (Media Architecture Institute)

Embedding an Interactive Art Installation into a Building for Enhancing Citizenís Awareness on Urban Environmental Conditions

Penny Papageorgopoulou, Dimitris Delinikolas, Natalia Arsenopoulou, Louiza Katsarou, Charalampos Rizopoulos , Antonios Psaltis, Iouliani Theona, Alexandros Drymonitis (Birmingham City University), Antonios Korosidis (University of Macedonia) and Dimitrios Charitos (National and Kapodistrian University of Athens).

Mediascapes in China: The Empire of Figures Transforms into Connected Media Facades Thomas Schielke (ERCO arclighting), Lin Ma (Fujian Feixiang Lighting Design)

Situating Media Infrastructure Yuhan Ji, Ava Fatah Gen Schieck and Duncan Wilson (The Bartlett, University College London).

Plant(e)tecture: Towards a Multispecies Media Architecture Framework for Amplifying Plant Agencies

Hira Sheikh, Kavita Gonsalves and Marcus Foth (Queensland University of Technology).

More-Than-Human Future Cities: From the Design of Nature to Designing for and Through Nature

Serena Pollastri, Rupert Griffiths, Nick Dunn, Paul Cureton, Christopher Boyko, Adam Blaney and Elisabeth De Bezenac (Lancaster University).

The Business Case for Media Architecture: Modeling Project Benefits to Justify Investment

Niels Wouters, Franz Wohlgezogen (The University of Melbourne) and Kim Halskov (Aarhus University).

Designing for Place-making in XR: The Process of the Co-Drive Stops and its Atlas Laura Boffi (IDAUP - University of Ferrara)

44

DEMOS & POSTERS



ENCUENTROS, Spain Augmented interactive documentary about home, identity and personal borders.

Team: Patricia Mascarell, Álvaro Vera, Daniel Vera





HAMAJA, Iran An A.R. mobile app functioning both as an urban game and a social media.

Team: Media Shokrani, Sahel Minaei, Mahtab Moradi, Sepehr Omidvar

MORE INFO



BIG APPLE_SMALL PLUG-IN, U.S.A. Pandemic Architecture; Social Distancing; DIY infrastructure

Team: Gandong Cai, Mingjie Cai

MORE INFO



MEDIA ART NEXUS

ELMAN PROJECT, Singapore Cross Cultural Urban Media Exchange, Singapore - Germany

Team: Liu Yixuan, Ina Conradi, Thorsten Bauer, Verena Kraemer

MORE INFO

The call for Demos & Posters attracted 41 submissions worldwide, from which 26 were selected. The Demos & Posters Sessions showcased a range of earlystage prototypes and more mature work-in-progress developed by academics, artists and industry professionals. The selected works were organized in four sessions and presented via Zoom, also followed by discussion. In addition, the works were showcased in the Online Exhibition Sessions, via the platform SpatialChat, where makers were present in the online exhibition space to talk about their projects and network with MAB20 Attendees.



CHATTY BENCH PROJECT, Australia Situated [Story-Place-Media] Making during

COVID-19 Team: Communify, Village Church, QUT Design Lab, Kelvin Grove Urban Village Principal Body Corporate, Digital Stories: 16 storytellers

MORE INFO



HERE BUT WHEN, UK An interactive network of spatial information.

Team: Iliana Papadopoulou, Sathish Somasundaram, Ava Fatah gen Schieck (Supervisor)

MORE INFO





Team: Adrianna Karnaszewska, Agnieszka Trzcinska, Karolina Krzyzanowska, Zofia Sosnierz





HIPERORGANICOS, Netherlands Sensor-actuator prototypes linking virtual and physical worlds.

Team: Henriette Bier, Alex Liu Cheng (PhD student), and workshop participants (MSc students and professionals)

MORE INFO



FUTUROTHEQUE, Netherlands How to configure our future life?

Team: Sander Veenhof, Leonieke Verhoog

MORE INFO



AUGMENTED THEATRE, Uruguay Actions against the invisible

Team: Federico Lagomarsino, Leonor Courtoisie, Joaquina Rivas, Federico Donner, Nicolás Arduino, Gastón Dufau, Pablo Gómez Oliver, Leticia Tanky

MORE INFO



RIFLESSI, Italy A vortex of water around a mirrored cylinder

Team: Lea Brugnoli, Anna Torazza, Andrea Spontoni





WOODIE, Australia An Urban Robot For Hybrid Placemaking

Team: Marius Hoggenmueller, Luke Hespanhol, Martin Tomitsch



DEMOS & POSTERS



KINEIN, Austria A kinetic physical display with a sequential tile

rotation for playful tangible interaction.

Team: Eleni Economidou, Moritz Kubesch, Anton Bauer, Dr. Alina Krischkowsky, Martin Murer

MORE INFO



UTRECHT2040, Netherlands A large-scale, mobile urban futures game

Team: Astrid Mangnus, Dr. Joost Vervoort

MORE INFO



CURIOCITY 2021, Australia Four AR experiences to encourage community engagement

Team: Michael Hunter, Alessandro Soro, Ross Brown, Joel Harman

MORE INFO



SHUTTERCAM, Netherlands

Empowering citizens to block camera lenses; exploring digital rights in public space

Team: Henriette Thijs, Coen, Anouk, Tom, Markus & Sioerd

MORE INFO





A dynamic and responsive shading system

Team: Henriette Bier, Arwin Hidding, Vera Laszlo, Robotic Building Lab. TU Delft





BACK TO THE FUTURE OF PUBLIC SPACE, Australia

Imaginative exploration of the consequences of the pandemic on public space Team: Dorotea Ottaviani, Cecilia De Marinis

MORE INFO



Media Architecture

for neighborhood resilience

#ROSHOP, Ugana

Sharing architectural prototyping and refugee innovation knowledge using GitHub Team: Ira Emmanuel, Gama Richard, Gilbert Charles, Doreen Bazio, Timm Wille, Richard Maliamungu, Stephen Kovats, Peter Treuheit



MEDIA ARCHITECTURE FOR

NEIGHBORHOOD RESILIENCE, Netherlands Design strategies for promoting neighborhood resilience through Media Architecture. Team: Maximiliane Nirschl, Boudewijn Boon, Giulia Gualtieri, Martijn de Waal, Frank Suurenbroek



DEMOS & POSTERS



NOVARTIS PAVILLON, Switzerland A zero-energy media facade

MORE INFO

AN EXPLORATION TO ENHANCE HUMAN-MACHINE COLLABORATION THROUGH EYE GAZE, UK

> Team: Zikun Quan and Ava Fatah gen. Schieck (Supervisor)

MORE INFO



FROM ANALYSING GAZE TO CREATING **COMMUNICATION, UK**

A wearable device that uses eye gaze to interact with objects and people in the environment Team: Zehao Qin, Ava Fatah gen Schieck (Supervisor)

MORE INFO

WALK WALK DANCE, Canada Enchanting the post-COVID city

Team: Stu Wershof, Michael Baker, Anne Ouellette, Rebecca Taylor, Pierre Thirion, Eva Schindling, Éric Villeneuve,

MORE INFO



WORLD COLLIDER, Netherlands Urban research project that uses augmented reality as a medium to collide different worlds.

Team: Tomo Kihara





UPTOWN UNDERGROUND, U.S.A.

A geographically accurate view of the cityscape above a moving subway train, projected onto its ceiling, as it moves under New York City

Team: Ian Callender

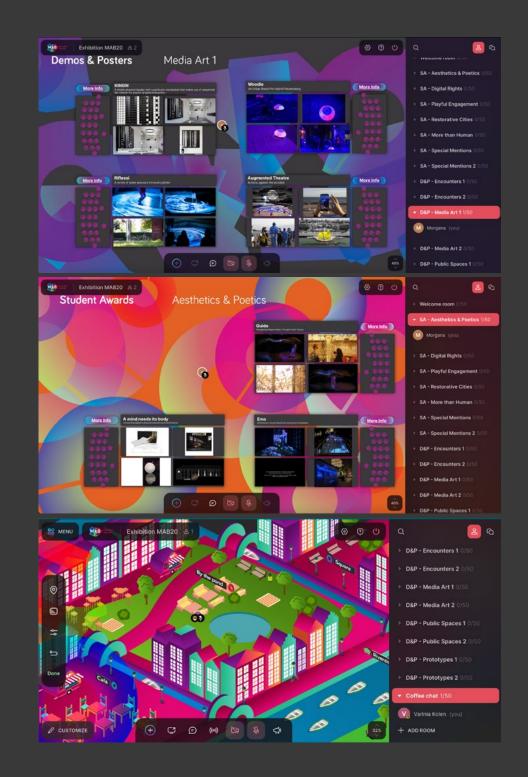
MORE INFO

DEMOS & POSTERS

ONLINE EXHIBITIONS

The MAB20 Online exhibitions showcased the projects nominated for the MAB Students Awards and works selected for the Demos & Posters Sessions, via the platform SpatialChat.

The exhibition was set up in multiple virtual rooms, where makers presented their works, answered questions and interacted with members of the audience. Audience members were also welcome to visit the Coffee Chat Room to network and chat outside the exhibition spaces.



MAB AWARDS

The Media Architecture Biennale Awards celebrates outstanding projects at the intersection of architecture, urban design and planning, media and interaction design.

For the 5th call for the MAB Awards, we received a **record number of 118 submissions from all over the world**. A jury consisting of members from the MAB20 organizing committee, together with professionals from our international curatorial network selected three nominees in the following categories: Animated Architecture, Participatory Architecture and Infrastructures, Spatial Media Art, Future Trends and Prototypes and the new category: More-than-Human Architecture.

Nominees have been selected from all corners of the world, from San Diego to Sydney, and from São Paulo to Helsinki, reflecting the worldwide uptake of media architecture in the last decade. The Winners were announced during the MAB Awards ceremony, which took place on July 2nd. A selection of projects is also featured on the Media Architecture Catalogue, a digital compendium of outstanding projects that define the state of the art of built Media Architectures worldwide.

WATCH HERE

NOMINEES FOR THE CATEGORY: ANIMATED ARCHITECTURE

WINNER: THE DIGITAL BRICKS



THE DIGITAL BRICKS, Australia If These Walls Could Talk...

Project concept/design: Science Gallery Melbourne, Arup

MORE INFO



DAZZLE | SAN DIEGO INTERNATIONAL AIRPORT, USA Zero Energy Mediatecture

Project concept/design: Artists: Nik Hafermaas, Dan Goods, David Delgado, Jeano Erforth

MORE INFO



WINDOW INTO THE SEAS, Germany The Ocean in the City

Project concept/design: German Maritime Museum | Exhibition Department

MORE INFO

NOMINEES FOR THE CATEGORY: PARTICIPATORY ARCHITECTURE AND INFRASTRUCTURES

WINNER: SP_URBAN ARTE CONECTA



SP_URBAN ARTE CONECTA, Brazil Collaborative festival of artistic transmission in residential urban spaces during quarantine.

Project concept/design: Marília Pascullli

MORE INFO



ANTOPOLIS, Austria Interactive media facade

Project concept/design: Laurent Mignonneau and Christa Sommerer

MORE INFO



CITIZEN DIALOG KIT, Belgium & Netherlands Starting Conversation at Places That Matter

Project concept/design: Jorgos Coenen, Sandy Claes, Andrew Vande Moere

MAB AWARDS



NOMINEES FOR THE CATEGORY: SPATIAL MEDIA ART

WINNER: LEVENSLICHT



LEVENSLICHT, Netherlands 104,000 luminescent stones remember 104,000 Holocaust victims.

Project concept/design: Studio Roosegaarde

MORE INFO



VARIEGATION INDEX, UK Media art installation taking live photosynthesis data from plants

Project concept/design: Jason Bruges Studio

MORE INFO



WERVEL [TURMOIL], Netherlands A flowing 20-metre double-sided video ledsculpture on turbulence.

Project concept/design: Video sculpture Wervel [Turmoil] by artist Nicky Assmann



NOMINEES FOR THE CATEGORY: FUTURE TRENDS AND PROTOTYPES

WINNER: NOVARTIS PAVILLON



NOVARTIS PAVILLON, Switzerland A zero-energy media facade

Team: iart

MORE INFO



WOODIE, Australia An Urban Robot For Hybrid Placemaking

Team: Marius Hoggenmueller, Luke Hespanhol, Martin Tomitsch

MORE INFO



UPTOWN UNDERGROUND, U.S.A.

A geographically accurate view of the cityscape above a moving subway train, projected onto its ceiling, as it moves under New York City

Team: Ian Callender

MORE INFO

NOMINEES FOR THE CATEGORY: MORE-THAN-HUMAN ARCHITECTURE

WINNER: TOUCHING NIGHT SKIES



TOUCHING NIGHT SKIES, Germany An immersive public art installation challenging peoples perception of the illumination of public spaces

Project concept/design: Tobias Ziegler - TBSZGLR

MORE INFO



GROW, Netherlands Highlighting the beauty of agriculture.

Project concept/design: Daan Roosegaarde

MORE INFO



AUKIO, Finland

Immersive and interactive digital nature

experience in the airport Project concept/design: OiOi Collective with Granlund Oy, based on a concept by Davidsson Tarkela Architects and Rune & Berg Design Oy.



MAB STUDENT AWARDS

The Media Architecture Biennale 2020 (MAB20) invited students to send in their projects for the first edition of the MAB Student Awards. We especially encouraged submissions that addressed the MAB20's theme of 'Futures Implied' and demonstrated the implications of media technologies for urban development, the design of our public spaces, and the well-being of the ecosystem at large.

We received over 100 submissions from all over the world and we are truly impressed by the quality of the submissions. A jury consisting of members from the MAB20 organizing committee, together with professionals from our international network selected three nominees in the following categories: The Aesthetics and Poetics of Responsive Urban Spaces, Citizen's Digital Rights in the Era of Platform Ecologies, Playful & Artistic Civic Engagement, Restorative Cities, More-Than-Human Cities. Winners were announced during the MAB Student Awards ceremony, which took place on July 1st,.

WATCH HERE

NOMINEES FOR THE CATEGORY: AESTHETICS AND POETICS OF RESPONSIVE URBAN SPACES

WINNER: EMO



EMO, China An Emotion-visual Interactive Immersive Installation

Team: Xiying Bao

MORE INFO



GUIDO, Netherlands Navigating People Safely Through Public Places

Team: Cin Yie Chang, Iris Damen, Hugo van Dijk, Angela Hanna, Jos van der Velden, Marina Wiemers and Philip Wüst





A MIND NEEDS ITS BODY, Sweden Connecting digital & physical educational environments

Team: Anastasia Angeli, Elin Ghersinich and Siobhan Lawson

MORE INFO

NOMINEES FOR THE CATEGORY: CITIZEN RIGHTS IN THE ERA OF PLATFORM ECOLOGIES

WINNER: CONNECTING LIMANARKASI



CONNECTING LIMANARKASI, Turkey An Urban Experiment with the concept of Stitching

Team: Xiying Bao

MORE INFO

GRIDSCAPE, UK An illustrated representation of the hidden materialized digital society

Team: Liina Lember

MORE INFO



OBSERVATION LAB, Germany Pavilion of Tracking Sensations

Team: Didem Zeynep Ödemis & Ksenija Tajsic

MORE INFO

NOMINEES FOR THE CATEGORY: PLAYFUL AND ARTISTIC CIVIC ENGAGEMENT

WINNER: SOCIAL PAINTING



SOCIAL PAINTING, Germany An interactive projection space that leads to reflection of discrimination

Team: Ruo-Xuan Wu, Ann Böttcher

MORE INFO





A multi-channel installation, which tells the cautionary tale of hummingbird classification and Al.

eam: Jack Hardiker

MORE INFO



SHAPE-SHIFTING ARCHITECTURE, Germany A project on user-responsive kinetic design of urban open spaces and their impact in

redefining the Ammani Urban Pockets.

Team: Ahmad Hafez



NOMINEES FOR THE CATEGORY: RESTORATIVE CITIES

WINNER: BRIC



BRIC (BUILD - ROTATE - INTERACT -CONNECT), Belgium A bench-brick that breaches barriers

Team: Augustin Pol, Catarina Varela, Clémentine Renaud, Django Vranken

MORE INFO



INFRASTRUCTURAL GARDENS, Colombia Making Moravia's landscape visible

Team: Daniel Monroy

MORE INFO



THE GLO-CAL EXPERIENCE, Netherlands Reviving Tourism & the Global Economy Post COVID-19

Team: Thanat Prathnadi, Nathan Ngo, Liva Sadovska

MORE INFO

NOMINEES FOR THE CATEGORY: MORE-THAN-HUMAN CITIES

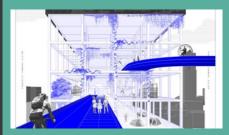
WINNER: WELCOME TO THE Ü-HOOD



WELCOME TO THE Ü-HOOD, Netherlands New to the City? Get Connected.

Team: Andrej Antonic, Bernice Ong, Wenqing Xia

MORE INFO



A SOCIO-SPATIAL EXPERIMENT ON TRANSITIONING TOWARDS POST-CAPITALIST FUTURE, Belgium An exploration of radical imagination

Team: Prof. Burak Pak and Hulya Ertas

MORE INFO



NOTHING EXISTS INDEPENDENTLY - HOW TREES COMMUNICATE, Germany A responsive installation for public urban spaces

Team: Maximiliane Nirschl

MORE INFO

MAB STUDENT AWARDS

MAB ACADEMY

The MAB Academy, launched as a new initiative at the 2020 edition of the Media Architecture Biennale has the goal to contribute to the development of media architecture as an academic and pedagogical field. The aim of the MAB Academy is to support research and teaching in this new and fast-developing field, and to create platforms for the exchange of knowledge around the practices, collaborations and frameworks that shape its educational and academic infrastructures, internationally. The MAB Academy invites creative professionals, academic researchers, students, educators, and program coordinators to explore and exchange experiences, insights, and ideas about and from research, learning, and teaching in the field of media architecture. On our agenda are the following aims, questions, and plans:

PRACTICES

Our aim is to share and disseminate experiences and best practices. We need to address how do we teach the interdisciplinary field of media architecture, what theoretical inspirations, creative methods and research formats are we using? We plan to address this by creating platforms for exchanging knowledge and inspiration, and by articulating our needs and ambitions.

COLLABORATIONS

Our aim is to bring together leading academics, practitioners and educators to lead the development of the activities; to develop ad hoc communal tactics for advancing and carving out and strengthening the field. In order to do this we need to explore if we can work more closely together as a field and simultaneously forge crossovers with adjacent fields (including computer science, urban planning, policy science, social sciences, philosophy and other fields in the Humanities)? We plan to develop a series of activities and communal tactics for carving out and strengthening the field.

FRAMEWORKS

We aim to develop the methodological, pedagogical and institutional frameworks needed for the field of media architecture to develop as an academic and professional field. This means we should consider which methodological, pedagogical and institutional frameworks are needed in order to make the field of media architecture grow and blossom, through e.g. funding schemes, different review procedures, curriculum changes, organizational changes, industry involvement? We will formulate longer term strategies for anchoring media architecture institutionally.



MAB EDUCATION PUBLICATION TOWARDS MEDIA ARCHITECTURE

The publication Towards Media Architecture. Educating the next generation of urban interaction designers around the world includes profiles of 15 programmes, 3 students and 3 professionals internationally in the field of media architecture and urban interaction design. It is a first attempt to map this emerging field and inspire a discussion on how these new types of designers can be trained. The publication aims to instigate the debate about the implications of our increasingly hybrid cities and explore how to embed this in education. This publication is an initiative of the MAB Academy in collaboration with the Urban IxD Learning Community at the Amsterdam University of Applied Sciences.

DOWNLOAD

Encouraging Transdisciplinary Teaching and Working in Urban Development



Learning Community Urban Interaction Design Amsterdam University of Applied Sciences

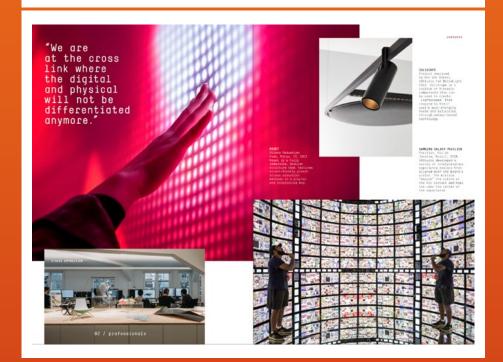
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The Learning Community (LC) Urban Interaction Design at the Amsterdam University of Applied Sciences is embedded within media and design programs in education and research across the university. It initiates transdisciplinary projects and events that connect these various programs around urgent design issues and questions about major societal issues and concern regarding the role of digital media and technologies in urban culture and public spaces and the (future) development of cities. In these projects, the learning community brings together students and teachers from various courses in our educational programs, professionals and researchers to explore practices of co-creation and bottom-up approaches to urban design. The exchange of knowledge and experiences, and the dialogu about these issues, is the main focus of LC. The Learning Community revolves around three themes: Responsive public spaces (spaces that make use of interactive technologies to adapt to users and situations to enhance the quality of the space as a public realm), Smart Cities and Smart Citizens, and the forcefield between those two. The vision of the LC continues to be inspired by Amsterdam's historic and current vision of respecting citizens' digital rights as well as vision of the internet as a potential public space, due to the 1994 creation of the first internet community in the Netherlands, the Digital City, to their present attendance in the coalition Cities for Digital Rights

As a Learning Community, it offers students a new lens of urban interaction theory and practice to learn from, turbering and facilitating experimental education through critical thinking about design in and for urban polisite spaces. The students are challenged to reflect critically on their own role and responsibilities as designers, and to develop an ethical momental to the empathic attructs downeds their possible impact. They are spursed to develop the ability to assess and evaluate how emergent technologies can be both instruments of positive change or threats to liberties and rights. They are prepared with the knowledge to understand and reflect upon the impact that digital media can exert on the physical space and infrastructure of the vitic, tright and culture. Alts core, the LC supports educational programs with a framing and understanding of the multiced completicity of unban problems, and it



MAB20 PRE-EVENTS

As part of our collaboration with the Pakhuis de Zwijger we organized a series of livecast exploring relevant topics and issues from the field of Media Architecture that related to our theme *Futures Implied*. Twenty-five speakers from all over the world shared their thoughts and expertise during these sessions, which were held at the studio at Pakhuis de Zwijger and broadcasted live via their website.

MAB20 LIVECAST SERIES AT PAKHUIS DE ZWIJGER



MAB20 LIVECAST #1 MEDIA ARCHITECTURE TODAY, FOR TOMORROW'S CITIES, SEP 2020

Participants live: 60 Views on YouTube (29/09/2020): 547

WATCH HERE



MAB20 LIVECAST #2 FUTURES IMPLIED: HOW MEDIA ARCHITECTURE SHAPES OUR CITIES, OCT 2020

Views on YouTube (29/09/2020): 544

WATCH HERE



MAB20 LIVECAST #3 DESIGNING RESTORATIVE ENVIRONMENTS: MOVING BEYOND COVID-19, FEB 2021

Participants live: 257 Views on YouTube (29/09/2020): 316

WATCH HERE

MAB20 LIVECAST SERIES AT PAKHUIS DE ZWIJGER



MAB20 LIVECAST #4 WHERE MEDIA ARCHITECTURE MEETS

CIVIC INTERACTION DESIGN, MAR 2021

Participants live: 201 Views on YouTube (29/09/2020): 151

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MAB20 LIVECAST #5





Views on YouTube (29/09/2020): 147

WATCH HERE

MAB20 LIVECAST #16 LAUNCH OF V59 - FUTURES IMPLIED, VOLUMEXMAB20, MAY 2021

Participants live: 61 Views on YouTube (29/09/2020): 173

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PAKHUIS De Zwijger



http://spurban.com.br/#ofestival

https://kunstmuseumbasel.ch/en/agenda/blog/ 2020/6

MAB20 PRE-EVENTS

EDUCATION

During the two and a half years leading up to the MAB20, we had the opportunity to collaborate with several institutions and organizations, inside and outside the Amsterdam University of Applied Sciences (AUAS), and together create contributions to Education. Some of the outputs vary from local and online meet-ups, to international training camps and seminars, which attracted people from around the word to participate in.

COLLABORATIONS WITH EDUCATION WORKSHOPS, SEMINARS & MEETUPS



WINTER SCHOOL PROMISES PROMISES | TECH REALITY-CHECK, JAN 2020 Research workshop with the ambition to do a reality-check of the intersection of technology, architecture and urban planning.

In collaboration with: AUAS Master Digital Design, Sandberg Instituut, Academie van Bouwkunst, Design Centre Amsterdam, Amsterdam Creative Industries Network and Archis/Volume



MEETUP | PLAYFUL CITIES: DRAMATURGIES FOR ACTIVE PUBLIC SPACES, JAN 2020 Discussing examples of strategies and dramaturgies for playful cities. Can public spaces be activated by making them more playful?

In collaboration with: Trust in Play European School for Urban Game Design and ARIAS



TRUST IN PLAY: URBAN PLAY CAMP, OCT 2020

A 2-days practical workshop to discover the techniques for creating games for cities.

In collaboration with: AUAS Digital Society School and the Trust in Play European School for Urban Game Design

COLLABORATIONS WITH EDUCATION WORKSHOPS, SEMINARS & MEETUPS



MINI-SYMPOSIUM & LAUNCH URBAN INTERFACES SPECIAL ISSUE, OCT 2019 The issue approaches interfaces in a contemporary urban context, and explores

the different ways in which situated media, art, and performances create, intervene in, and transform urban spaces.

In collaboration with: Utrecht University [urban interfaces]



[URBAN INTERFACES] SEMINAR URBAN ECOLOGIES, FEB-MAR 2020

Exploring issues around livable and sustainable urban ecologies, the role of critical imaginaries and design in shaping futures for our cities, and perspectives for more-than-human cities.

In collaboration with: Utrecht University [urban interfaces]

COLLABORATIONS WITH EDUCATION WORKSHOPS, SEMINARS & MEETUPS



WEBINAR INCLUSION IN THE DATAFIED CITY, FEB 2021

Prof. Ayona Datta discuss her work on gendering the smart city, and her action research in Delhi's urban peripheries that uses creative methods to give voice to local residents through animation and podcasts.

In collaboration with: Utrecht University focus area Governing the Digital Society (GDS)



[URBAN INTERFACES] SEMINAR: INTERFACING THE (IN)FORMAL CITY, MAR 2021

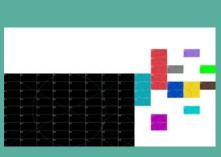
What happens when quantification, commodified platforms, formal protocols, gamified nudges and algorithmic culture impact public and (in)formal urban life?

In collaboration with: Utrecht University [urban interfaces]



PRESSURE COOKER WORKSHOP: DESIGNING MORE-THAN-HUMAN CITIES, MAR 2020 In this workshop, students from different programs and academies collaborate on an interdisciplinary urban design assignment. The specific focus of the workshop is to develop creative design for more-than-human cities.

In collaboration with: Utrecht University [urban interfaces]



ONLINE MAB MEETUP: MEDIA ARCHITECTURE IN THE UNIVERSITY CONTEXT, JUL 2020 How to teach and research the transdisciplinary field of Media Architecture?

In collaboration with: HAW Hamburg Faculty DMI, Department of Media Technology.

COLLABORATIONS WITH EDUCATION MEETUPS WITH AUAS MASTER DIGITAL DESIGN



MAB & MDD MEETUP WITH JASON BRUGES: ART, ARCHITECTURE & DESIGN, MAR 2019 Jason Bruges lifts the lid into the ways of working of his studio.

Number of participants live: 70

In collaboration with: AUAS Master Digital Design and Jason Bruges Studio



MAB & MDD MEETUP WITH FILIPPO LODI: FROM ARCHITECTURE TO SENSORIAL EXPERIENCE DESIGN, JULY 2019 Exploring how UNStudio addresses the increasing role of technology in urban design. Number of participants live: 50

In collaboration with: AUAS Master Digital Design and Outburst Amsterdam

BIBLIOTEK M M CC Ex ac au

MAB & MDD MEETUP WITH PETER DALSGAARD | MEDIA ARCHITECTURE FOR COMMUNITY BUILDING, OCT 2019 Exploring examples and methodologies for activating citizens in the co-design of digitally augmented public spaces. Number of participants live: 50

In collaboration with: AUAS Master Digital Design

COLLABORATIONS WITH EDUCATION MEETUPS WITH AUAS MASTER DIGITAL DESIGN



MAB & MDD MEETUP: DO DESIGNERS PLAY?, FEB 2020

What methods could digital designers borrow from game makers for shining a spotlight on the human and social aspects of technology? Number of participants live: 51

In collaboration with: AUAS Master Digital Design and the Trust in Play European School for Urban Game Design



MAB & MDD ONLINE MEETUP: ON CITIZENS, THEIR CITIES, AND THE ROLE OF DESIGN, APR 2020

Questioning how media architecture can be used to create a fair(er) and inclusive city. Number of participants live: 76

In collaboration with: AUAS Master Digital Design, Archis Volume, Sandberg Instituut, T/U Eindhoven , and Academie van Bouwkunst.

EDUCATION

MAB ONLINE MEETUPS WITH PHD CANDIDATES FROM THE FIELD

For these two editions of MAB (online) meetups, we brought together earlycareer researchers from around the world to discuss their research topics and processes, and share their multiple perspectives on the interdisciplinary field of Media Architecture. The aim of these sessions was to showcase current developments in the research of media architecture and promote international and interdisciplinary knowledge exchange.



FUTURES IMPLIED: NEW HORIZONS IN MEDIA ARCHITECTURE #1 Number of participants: 51

November 2020

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MAB ONLINE MEETUP FUTURES IMPLIED: new horizons in media architecture #2 MAR 10th, 2021 09:00 CET FUTURES IMPLIED: NEW HORIZONS IN MEDIA ARCHITECTURE #2 Number of participants: 36

March 2021





COLLABORATIONS

Organizing the MAB20, provided the opportunity to connect and collaborate with several institutions and organizations, inside and outside the Netherlands. Together, we were able to further explore the field of Media Architecture and in this process develop a variety of content - from publications and to series of article/ interview series, to online and in person meetups and roundtables. Here is a list of our main collaborations and their outputs.

VOLUME 59 59 FU FU TURES IMPLIED

VOLUME

VOLUME

For over one year the MAB team worked together with **VOLUME** magazine curating an special issue which would focus on the field of Media Architecture particularly from the perspective of MAB20's theme 'Futures Implied'. As a result, **V59** – *Futures Implied* was released on May 2021.

It is time for the discipline of media architecture to get under its own skin, and address the implied futures of new technologies. In *V59 – Futures Implied* we invited people that showed relentlessly the courage to look behind the facade. A selection of articles from this speacial issue are openly accessible below.

READ HERE





READ HERE

In collaboration with MAB20, **Archdaily** has published a series of articles showcasing interviews with MAB20's chairs on the field of Media Architecture and this edition's theme, Futures Implied. In addition, there are other five articles featuring the nominees for each of the categories of the MAB Awards and a final piece highlighting the winners of the 6th edition of the MAB Awards. All pieces from this series are written by Jeroen Junte and can be read below.



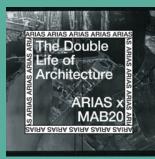


KOOZA/RCH

In a partnership with MAB20, the experimental digital platform **KooZA/rch** that researches the potential of the Architectural Imaginary, has published a series of interviews featuring the nominees of the **MAB Student Awards**, which can be read below.

KooZA/rch

READ HERE



ARIAS

The Amsterdam Research Institute of the Arts and Sciences (ARIAS) organized one of the symposiums that took place during the MAB20 Online Conference. The symposium was titled organized the *The Double Life of Architecture* and explored the concept of autonomous architecture and its layered communication systems.

Aside from that, ARIAS also collaborated with us in the organization of the pre-MAB20 *Meetup Playful Cities: Dramaturgies for Active Public Spaces.*



tute



COECI

The AUAS' Centre of Expertise for Creative Innovation (CoECI) organized one of the symposiums that took place during the MAB20 Online Conference. The symposium was titled organized the *How to Design a Sustainable and Inclusive City* and explored how interactive digital products, environments, systems, and services will help us in shaping and building a sustainable and inclusive future city.

C•ECI

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architectuur

amsterdam

centrum



The Architecture Centre of Amsterdam (ARCAM) organized two of the symposiums that took place during the MAB20 Online Conference. First, *Happy People Architectures*, which explored the results from the MAB20 workshop *Visualizing Urban Happiness*. The second symposium was titled *Designing the unplannable in real time digitalities* and focused on innovative uses and applications of data that can help us design the unplannable. Both are have been mentioned previously in the "Symposia" section.

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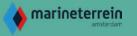
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COLLABORATIONS



MARINETERREIN

The Marineterrein organized one of the symposiums that took place during the MAB20 Online Conference. The symposium was titled, **Conversation Piece – Next Urban Ecology** and explored the artistic research program NEXT URBAN ECOLOGY, which aims to confront and evoke the emergence of data as new 'agent species' in the cityscape.



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PAKHUIS DE ZWIJGER

We partnered with Pakhuis de Zwijger for the **MAB20 Livecast Series**, mentioned above in the "Pre MAB events". The series featured guests from all over the world and explored relevant topics from the field of Media Architecture that related to the MAb20 theme Futures Implied.

COLLABORATIONS

PAKHUIS DE ZWIJGER

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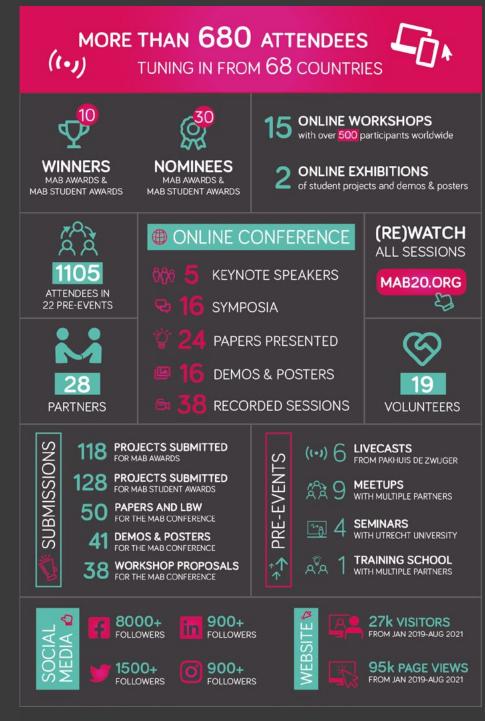
MEDIA ARCHITECTURE BIENNALE - MAB20

PARTNERS

During the two and a half years leading up to the MAB20, we are glad to have been able to expand our network and partner with several institutions and organizations that are interested in exploring and further developing the multidisciplinary field of Media Architecture. Here is our list of partners.

Organizing Partners CIVIC Amsterdam University of Applied Sciences Amsterdam University of Applied Sciences Amsterdam University of Applied Sciences 5 INTERACTION DESIGN URBAN GOVERNANCE & SOCIAL INNOVATION **URBAN TECHNOLOGY Master Digital Design** ARIAS SAIRA SAIRA **C**•ECI **PAKHUIS DE ZWIJGER** Research Institute of the Arts and architectuur centrum amsterdam 🛦 marineterrein demy of Architectur M€ light festival usfontein Gemeente Amsterdam Stadt Wien 094% Amsterdam **OPEN & AGILE SMART CITIES Media Partners** KooZA/rch VOLUME arch

MAB20 IN NUMBERS



EVALUATION

Once MAB20 was over, we sent out an evaluation form to all our attendees. Although we only had 22 responses, we were still able to gather some insights on what went well and what can be improved in the next editions of the Media Architecture Biennale.

SURVEY RESPONSES

How satisfied were you with your overall experience of MAB20?

VERY SATISFIED	15 (68,2%)
SATISFIED	8 (27,3%)
NEUTRAL	1 (4,5%)
DISSATISFIED	O (0%)
VERY DISSATISFIED	O (0%)

Did you find MAB20 informative and inspiring?

VERY MUCH	19 (86,4%)
YES 🛑	3 (13,6%)
NEUTRAL	O (0%)
NO	O (0%)
NOT AT ALL	O (0%)

Did the MAB20 sessions address relevant topics in the field of media architecture?

VERY SATISFIED	15 (68,2%)
SATISFIED	4 (18,2%)
NEUTRAL	1 (13,6%)
DISSATISFIED	0 (0%)
VERY DISSATISFIED	0 (0%)

MEDIA ARCHITECTURE BIENNALE - MAB20

SURVEY RESPONSES

What were the highlights of MAB20?

"It brought people from various locations and background together who were working towards a better future. Many people with innovation and contribution for the future. It was an event on global level"

"Keynotes and the fact that it was accessible for people worldwide." "The student awards were quite inspiring.The MAB academy seems to be a good initiative and it should be continued."

"I think the organizing team always supporting you. And the topics covered. All the presentations were innovative and detailed."

"Technological and accessible from anywhere in the world"

96

"All the awards nominated this time were amazing. Great learning."

SURVEY RESPONSES

What did you miss at MAB20, and what could be improved?

"Communication with other attendees. I would like to see more interactions and conversatios about the topics covered in the conference." "I would strongly recommend to give higher priority to the academic part of MAB. Only 5 minutes for paper presentation is way to little."

"I mostly heard how technology is troublesome (everyone knows this), but how about talking more about how it can be used to ones advantage." "Sometimes it was tricky to choose among the sessions that were running simultaneously."

"More in depth sessions"

"More/better use of Twitter as a more accessible and public conference back channel rather than Discord. "



IMAGE CREDITS:

MAB20 Livecast #1 | Media Architecture Today, for Tomorrow's Cities (p.71) Project: Impulse, Lateral Office and CS Design. Photo: Ulysse Lemerise / OSA

MAB20 Livecast #2 | Futures Implied: How Media Architecture shapes our cities (p.71) Project: Sonic Runway, Rob Jensen & Warren Trezevant. Photo: Scott Ashkenaz

MAB20 Livecast #3 | Designing Restorative Environments: Moving Beyond COVID-19 (p.71) Maggie Chan, courtesy of Public Visualization Studio

MAB20 Livecast #4 | Where Media Architecture Meets Civic Interaction Design (p.72) Project: Musical Swings, Daily Tous Les Jours. Photo by Jay Fenech.

MAB20 Livecast #5 | Playful Urban Futuring (p.72) Project: Tara Karpinski. Photo: Marc Faasse

MAB20 Livecast #6 | Launch of V59 – Futures Implied, VOLUMExMAB20 (p.72) Shirin Amouei

MAB20 VISUAL IDENTITY Studio BLT | https://studioblt.nl/