Biographies

Alice_ch3n81 a.k.a. Miro Roman is an architect and a scholar. His main focus is the overlap of information technologies and architectural articulations. Miro explores, designs, codes, and writes about architecture while playing with a lot; with 'all' the buildings, books, images; with clouds, avatars, streams, lists, indexes, and pixels. What is this abundance of information about, how to handle it, and how does it shape the way we think about the world? To navigate and surf these vast flows, Miro codes and articulates synthetic alphabets.

Benjamin Dillenburger is an architect who explores computational design methods and digital fabrication to broaden the design freedom for architecture and to develop performative and sustainable building solutions. He seeks for new digital ways to translate information into matter: numerical material. In this context, his research focuses on additive manufacturing and its potential to challenge traditional paradigms of design and construction.

His works were presented at events like the Venice Architecture Biennale, London Design Week and Art Basel Miami. Recent work includes the design of two full scale 3D-printed rooms for the FRAC Centre Orleans and the permanent collection of Centre Pompidou Paris and the development of a lightweight concrete slab, as part of a housing project entirely fabricated with robots and 3D printers, the DFAB HOUSE.

Benjamin holds a PhD and a Master of Advanced Studies degree from ETH Zürich, and is currently Professor at the Institute of Technology in Architecture at ETH Zürich. He previously taught as Assistant Professor at the John H. Daniels Faculty of Architecture. He is head of the Digital Building Technologies Research Group (DBT) at ETH Zürich, and Principal Investigator of the Swiss National Competence Centre of Research NCCR DFAB.

Christina Jauernik studied contemporary dance at HdK Amsterdam, choreography/visual arts practices at Dartington, UK, art and architecture at Academy of Fine Arts Vienna and UdK Berlin. She is Senior Scientist at the Institute for Art and Architecture where she is completing her PhD. Since 2012 collaborations with Wolfgang Tschapeller, among others *Hands Have No Tears to Flow* Austrian Pavilion/Venice Biennale, Fine Arts Library Cornell University, exhibition *OSIRIS—World 1* ORIS House of Architecture Zagreb, lecture series *What Beings Are We?*, artistic research *INTRA SPACE* Academy of Fine Arts. She is co-curating the exhibition *Counter-Archives of Amnesia* with Marina Grzinic at Weltmuseum Wien.

Christophe Girot is Professor of Landscape Architecture at the Architecture Department of ETH in Zürich. He received a dual Masters in Architecture and Landscape Architecture from UC Berkeley in 1986 and 1988. From 1989 to 1999 he was Chair of Design at the Versailles School of Landscape Architecture. Since 2001 he is Full Professor of Landscape Architecture at the ETH Department of Architecture in Zürich. His teaching and research interests span new topological methods in landscape design, landscape perception and analysis through new media, and contemporary theory and history of landscape architecture. At the ETH he founded the Institute of Landscape Architecture (ILA) with professor Günther Vogt in 2005, and then co-founded the Landscape Visualization and Modeling Laboratory (LVML) with Professor Adrienne Grêt-Regamey in 2010. He recently founded the new Institute of Landscape and Urban Studies (LUS) in 2019. His professional practice focuses on large-scale landscape projects, using advanced 3D topological techniques that contribute to the design of sustainable landscape environments like the 3.5 Million cubic metre Alptransit Deposit in Sigirino, Ticino, or the Third Rhône River Correction in the Canton of Valais. He is Co-PI at the ETH Future Cities Laboratory in Singapore and Zürich since 2010, where he worked on the Ciliwung River Park in Jakarta and Urban Heat Island melioration through plantations in Singapore. He has been also Co-PI on the ETH NCCR Digital Fabrication Platform where he is developing research in landscape robotics. His most recent publications *The Course of Landscape Architecture* and *Thinking the Contemporary Landscape* seek to establish both past and current trends in landscape history and theory. Together with Professor Günther Vogt and Teresa Gali Izard, he is launching

for the first time a Masters of Science in Landscape Architecture at ETH. He is Currently Dean of the ETH Department of Architecture.

David Schildberger is an architect and architectural theorist. He finished his PhD *"On Food"* at ETH Zürich (ITA, Digital Architectonics) and ZHAW Wädenswil (Centre for Food Composition and Process Design) in 2020. His research meditates upon land- and city scapes and mediates novel modes of luxuriating food. David holds degrees in Interior Design and Architecture as well as a specialisation in CAAD from ETH Zürich.

Diana Alvarez-Marin is an architectural researcher at the Chair for Digital Architectonics at ETH Zürich. She is co-author of the book *A Quantum City* around which she developed her PhD *Atlas of Indexical Cities: Articulating Personal City Models On Generic Infrastructural Ground*. Her research explores the role of the observer in the constitution of personal models of the city. Diana graduated with honours from the Ecole d'Architecture de Lille and has collaborated with O.M.A. and group8. She attended the ETH MAS in CAAD from 2011–2012. From 2013–2016 she was researcher at Future Cities Laboratory in Singapore. She has taught several courses for architecture students: 'A Quantum City' and 'Indexical Cities: Articulating your own city of Indexes'. She loves writing in natural and programming languages.

Emma Moberg is an architect, currently a diploma student at KTH Stockholm. Her work focuses on the ambiguity and the persistence of landscape. She is interested in objects and

architecture that negotiate between the state of continual change and physical permanence. Her contribution to this book describes, and gives character to, different trains of thought and chosen theory. Emma has diverse work experience in architecture practices in London, Copenhagen, Stockholm and Basel, amongst these Christ & Gantenbein and Leth & Gori. She is currently involved in an exhibition for Form/Design Centre in Malmö in collaboration with her tutor Carmen Izquierdo.

Giacomo Pala is an architect and researcher. Currently research assistant at the Faculty of Architecture of Innsbruck University where he teaches studios at Bart Lootsma's chair. PhD student under the guidance of Peter Trummer at the same university, his research attempts to find ways of thinking about—and using—canons in the contemporary world, both from theoretical and design-oriented perspectives. His PhD tries to deal with such issues by focusing on Giovanni Battista Piranesi's work and on the concept of parachronism.

Helen Palmer is a senior lecturer in English Literature and Creative Writing at Kingston University London. She is the author of *Deleuze and Futurism: A Manifesto for Nonsense* (Bloomsbury 2014) and *Queer Defamiliarisation: Writing, Mattering, Making Strange* (Edinburgh University Press 2020). She has recently published work on speculative taxonomies, queer clowning, Gilles Deleuze and *Alice in Wonderland*, and some poetry in the Minnesota Review. She is currently writing a novel called *Pleasure Beach* which is a queer feminist reimagining of James Joyce's *Ulysses* set in Blackpool, north-west England.

Ian Cheng is an artist based in New York. His simulations explore an agent's capacity to deal with an ever-changing environment, culminating in the *Emissaries* trilogy. His work has been widely exhibited internationally, including MoMA PS1, Serpentine Galleries, Venice Biennale, Whitney Museum of American Art, and Migros Museum.
www.worldto.live
iancheng.com

Jorge Orozco is a researcher and lecturer at the Chair for Digital Architectonics in the ETH Zürich's Department of Architecture, from which he obtained his Dr. Sc. degree.
Jorge likes being connected. He's fascinated by the new abilities that traditional objects—like a picture, a book, or a movie—gain when they're online and leveraged by computer code that deals with these objects in large quantities. He likes to code and write on this novel phenomenon and on the challenges and fictions that it presents to tradition.

Katja Novitskova (EE, 1984) is a visual artist working in a variety of media, from books to installations. She lives in Amsterdam and Berlin. Her work explores the ecological dimension of visual information technologies: from attention economies to machine vision. She studied semiotics at the University of Tartu in Estonia and graphic design at Sandberg Instituut, Netherlands. In 2011, she published her first artist book and curatorial project *Post Internet Survival Guide*. Since then her work has been exhibited globally: at The Museum of Modern Art in New York, Estonian pavilion at 57th Venice Biennale, 9th Berlin Biennale and many others.

knowbotiq (Yvonne Wilhelm, Christian Huebler) has been experimenting with forms and medialities of knowledge, political representations and epistemic disobedience. In recent projects they are investigating and enacting political landscapes and inhuman geographies with the focus on algorithmic governmentalities, libidinous economies and postcolonial violence. In various installations, interventions and performative settings knowbotiq are exploring molecular, psychotropic and derivative aesthetics. knowbotiq is currently doing research on translocal latent knowledges at IFCAR Institute for Contemporary Art Research and are professors in the MA in Fine Arts at Zurich University of the Arts. Forthcoming Publication with Nina Bandi: *Swiss Psychotropic Gold* (CMV 2020). knowbotiq.net

Nina Bandi is a political philosopher. Based in Zürich and Vienna, she works on questions of non-/representation and the relation between bodies, technology, and materiality from a feminist and postcolonial perspective.

Ludger Hovestadt is Professor for Computer Aided Architectural Design at ETH Zürich, Switzerland, since 2000, where he is directing a permanent research group of 16 PhD students. His interest is in artificial intelligence and not in computer graphics. He founded several companies in the fields of smart geometry, building intelligence, building information models and the internet of things. Since 2008 his focus shifted from applications to the principles of computing in architecture. In 2010 he cofounded the Laboratory for Applied Virtuality with Vera Bühlmann, which edits the Applied Virtuality Book Series (Birkhäuser, since 2010). He has published several books on architecture, computing, philosophy, and mathematics.

Maria Smigielska is an architect and researcher educated in Poland (TU Poznan) and Switzerland (CAAD ETH Zürich) with diverse experience in academia and practice for architecture and design. Her interest lies in the enhancement of potentials for digital and physical creation of objects, installations and interactive systems by modulating varied materials properties, utilising alternative fabrication methods and novel design strategies. Currently, she works as a researcher at FHNW HGK Integrative Design, Basel. Recent exhibitions: Tallinn Architecture Biennale, EE 2017; Ars Electronica Festival Linz, AT 2018; duo exhibition at Tetem gallery, Entschede NL, 2018; Biennale for Arts and Technology 'Digital Wild' Trondheim, NO 2020.

Michael Hansmeyer is an architect and programmer who explores the use of algorithms to generate and fabricate architectural form. Recent work includes the design of two full-scale 3D-printed sandstone grottos, the production of an elaborate Muqarna for Mori Art Museum in Tokyo, and the installation of a hall of columns at Grand Palais in Paris. He has exhibited at museums and venues including the Museum of Arts and Design New York, Palais de Tokyo in Paris, Martin Gropius Bau Berlin, Design Miami/Basel, and the Gwangju Design Biennale. His work is part of the permanent collections of FRAC Centre and Centre Pompidou.

Recently, he taught architecture as visiting professor at the Academy of Fine Arts in Vienna and at Southeast University in Nanjing, and as a lecturer at the CAAD group of the Swiss Federal Institute of Technology (ETH) in Zürich. He previously worked for Herzog & de Meuron architects, as well as in the consulting and financial industries at McKinsey

and J. P. Morgan respectively. Michael holds an MBA from INSEAD and a Master of Architecture degree from Columbia University.

Mihye An is a senior researcher and lecturer at ETH Zürich's Department of Architecture (Chair for Digital Architectonics). She is the author of *Atlas of Fantastic Infrastructures: An Intimate Look at Media Architecture* (Applied Virtuality Book Series vol. 9, Birkhäuser 2016). She holds a PhD in Architecture from ETH Zürich and degrees in Culture Technology and Industrial Design from KAIST. Her interests lie in the intricate 'affairs' between digital infrastructures and architecture, and in the notion of 'media' in its broadest conceptual capacity in relation to 'nature'. She has various experiences in media, art, and technology, including software development at future LAB (Winterthur) and dizmo AG (Zürich), future mobile device design with Samsung, media art solo and group exhibitions (Seoul and Daejeon).

Natalie Hase is a student from the Architecture School of KTH in Stockholm, currently doing an exchange at ETH Zürich. Since 2017, Natalie has been working with Petra Gipp Studio in Stockholm. Her work has mainly evolved around the abstract plaster casts taking a central role within the projects of the office. She has been involved in the interpretation of Sigurd Lewerenz exhibited at the Venice Biennale 2018, the exhibition *Passage, Schakt/Nische/Fodring/Nav — Vandring*, as well as the ensuing book with the same name. With an interest in the mechanisms of memory and of archiving, Natalie has plunged into works by Derrida, Foucault, Calvino, Borges, and through writing she

has been able to put into words ideas not yet illustrated in drawing, taking form as *The Ignoramus Palace*.

Noa Nagane was born in Kanagawa, Japan in 1995. She graduated from the University of Tokyo in 2018 and studied abroad at ETH Zürich in 2019 as an exchange student. After receiving her Master's degree in architecture from the University of Tokyo in 2020, she began working at Kajima Design on finding new approaches to the design process, combining architectural and urban scales, while emphasising the social aspect of architecture. During her Master course, she dealt with the urban redevelopment project in Chiba Manabu Lab and worked in the disaster recovery studio.

Petra Tomljanovic lives and works in Zürich. Her interests lie in developing formats that operate at the intersection of curatorial, artistic and theoretical practice. She is a curator, writer and artistic director of Kulturfolger, a Zürich-based off-space founded in 2016. She holds an MA in Art History and Literature from the University of Zagreb, MAS in Curating from the ZHdK and CAS in Expressive Arts Therapy from the European Graduate School in Saas Fee, Switzerland.

Riccardo M. Villa is an architect and theoretician. He is Research Assistant and PhD candidate at the Department for Architecture Theory and Philosophy of Technics, TU Vienna. His interests revolve around architecture in its production, under a spectrum of investigation that spans from aesthetics and semiotics to bio-politics; his current research focuses on images, ideology, and ideography in the digital age.

Romeo Castellucci was born in 1960 in Cesena, Italy. He graduated in Painting and Scenography from the Academy of Fine Arts in Bologna. In 1981 he founded the company Socìetas Raffaello Sanzio, and since then he has created numerous performances as an author, director, and designer of set, lighting, sound, and costumes. His works have been presented in more than fifty countries. His direction proposes dramatic lines not subject to the primacy of literature, making theatre a plastic art, complex, full of visions. His work is regularly invited and produced by the most prestigious spoken word theatres, opera houses, and international festivals.

Sebastian Michael thinks, writes, and creates across disciplines in theatre, film, video, print, and online with a deepening interest in humans, the multiverse, and a quantum philosophy.

His work ranges from contemporary relationship drama *The Power of Love* to the apocalyptic comedy *Top Story* to an exploration of affinity beyond affection in his debut feature *The Hour of Living*.

Sebastian is a contributing author to *A Quantum City* (Birkhäuser, 2015), co-author of *A Genius Planet* (Birkhäuser 2017) and writer of the forthcoming *Atlas of Digital Architecture* (Birkhäuser 2020). His ongoing publishing project *EDEN by FREI* — '*a concept narrative in the here & now about the where, the wherefore and forever*' is at EDENbyFREI.net. sebastianmichael.com @optimistlondon

Shintaro Miyazaki is a Senior Researcher at the Critical Media Lab Basel, Academy of Art and Design FHNW. He studied media studies, philosophy, and musicology in Basel and

Berlin where in 2012 he received a PhD in media studies (about the history of digital technologies focusing on algorithms and their rhythms by coining the term algorhythmics). Since about six years ago he has been on an extended field trip in humanities-driven, experimental media design research and interested in how we can generate moments of criticality which could emancipate us from our self-imposed ignorance of the algorithmic infrastructures we are captured by. In autumn 2020 he starts a junior professorship for 'Digital Media and Computation' at Humboldt-Universität Berlin.

Valle Medina and **Benjamin Reynolds** are co-founders of Pa.LaC.E, based between Basel and London. They have been art fellows at the Van Eyck Academie, NL. They won the 50th annual Shinkenchiku/Central Glass Award in Tokyo, among other international prizes. Their work has been published and shown internationally, notably at the ICA (UK), Van Abbemuseum (NL), the Centre of Contemporary Culture of Barcelona (CCCB, ES), the Boston Centre for the Arts (US) and Basis voor Actuele Kunst—BAK (NL).

Benjamin Reynolds received a diploma with honours from the Architectural Association, London. Valle Medina is a graduate from the Laboratory for Applied Virtuality at ETH Zürich D-ARCH (summa cum laude). They have been leading the studio 'Dom Gross' (www.domgross.com) at the Vienna University of Technology and are currently directing the group 'High Holdings' at the Royal College of Arts, London (www.ho.ldin.gs). Their first major monograph—Paris Hermitage—was published in late 2016 with Cooperative Editions (New York).

Vera Bühlmann, born 1974 in Switzerland, studied English Literature and Language, Philosophy and Media Studies at Zurich University and Basel University. She is professor for architecture theory at TU Vienna, where she directs the research group Architecture Theory and Philosophy of Technics (ATTP). Among her fields of interest are the emergent engendering of a quantum literacy and of an aesthetics from a new materialist point of view, digital architectonics, the role of statues and sculpture, as well as of rhetorics, in a polar thinking that keeps its centre void, as non-anthropocentric humanism.

She is editor of the Applied Virtuality Book Series with Birkhäuser (with Ludger Hovestadt), which investigates from a philosophical, a mathematical and an architecture theory point of view how we can comprehend digitalisation as a challenge, and how we can relate to it with a novel architectonics and a novel understanding of literacy. Among her own publications are two monographs: *Information and Mathematics in the Philosophy of Michel Serres* (Bloomsbury, London 2020), Die Nachricht, ein Medium: Städtische Architektonik, Generische Medialität (Birkhäuser, Basel 2014); two anthologies, one on the city: *A Quantum City, Mastering the Generic* (Birkhäuser, Basel 2015, Ed. with Ludger Hovestadt, Miro Roman, Diana Alvarez-Marin, Sebastian Michael), and one on world objects: *Sheaves, When Things Are Whatever Can Be the Case* (Birkhäuser, Basel 2013); she is also editor of four collections of essays by scholars of various disciplines on the 'Metalithikum', a broken-symmetry term for addressing the contemporary human condition: *Printed Physics* (ambra, 2012), *Domesticating Symbols* (Birkhäuser, 2014), *Coding as Literacy* (Birkhäuser, Basel 2015) as well as *Symbolizing Existence* (Birkhäuser, 2016).

Yngve Holen is a Norwegian/ German sculptor who lives and works in Berlin and Oslo. NO. Holen is the recipient of international acclaim, including the Robert-Jacobsen-Prize (2017) and ars viva (2015). His work has been the subject of large-scale institutional solo exhibitions, such as *Heinzerling,* Kunstnernes Hus, Oslo (2019), *Horses,* Kunsthalle Düsseldorf (2018), and *Verticalseat*, Kunsthalle Basel (2016).

Dr. Mihye An
Senior researcher and lecturer at ETH Zürich's
Department of Architecture (Digital Architectonics),
Zürich, Switzerland

Prof. Dr. Ludger Hovestadt
Professor for Digital Architectonics at ETH Zürich's
Department of Architecture, Zürich, Switzerland

With contributions by Alice_ch3n81(Miro Roman),
Benjamin Dillenburger, Christina Jauernik,
Christophe Girot, David Schildberger, Diana Alvarez-
Marin, Emma Moberg, Giacomo Pala, Helen
Palmer, Ian Cheng, Jorge Orozco, Katja Novitskova,
knowbotiq and Nina Bandi, Maria Smigielska,
Michael Hansmeyer, Natalie Hase, Noa Nagane,
Petra Tomljanovic, Riccardo M. Villa, Romeo
Castellucci, Sebastian Michael, Shintaro Miyazaki,
Valle Medina and Benjamin Reynolds, Vera
Bühlmann, Yngve Holen.