

αΓΓΡ

Nov. 14-16 2019, in Vienna.

SOPHISTICATION

Conference #3

Copia and copiousness.

Circuitous articulations that matter.

at 09.00-17.30 in Boecklsaal/Kuppelsaal, TU Vienna, Karlsplatz 13, Stiege I, 1. OG / 4. OG.

The Sophistication Conferences are organised once a year at the Technical University Vienna, as a cooperation between the Department for Architecture Theory and Philosophy of Technics ATTP and the chair for CAAD ETH Zurich, where we invite distinguished as well as young scholars from different fields to think about how such »architectonic intellectuality« affects our relations to the world at large – our institutions, as well as our ordinary daily lives.

2017 Sophistication Conference #1
Sophistication: Rhetorical, Geometrical,
and Computational 'Articulation'

2018 Sophistication Conference #2
Instead of Statements, Articulations

All lectures on the ATTP YouTube channel.

How can we find a novel understanding of human intellectuality in co-existence with artificial intelligence? The Sophistication Conferences are dedicated to a basic kind of literacy in how to think about coding as an "alloy-praxis" that glues letters with numbers, physics with information, mathematics with language. If the digital has placed us in an era of New Sophistics, we need an up-to-date corresponding discourse on Sophistication. At the core of such a new materialist literacy is a different relationality among time, nature, subject, and object : Hence our interest is in a »digital gnomonics« that could provide a theoretical framework for addressing computational modelling, machine learning and algorithmic reasoning in a manner that will eventually propel and facilitate ethics, not moralism.

2019 Sophistication Conference #3
Copia and copiousness.
Circuitous articulations that matter.

THURSDAY 14.11

at 18.00-22.00 in Boecksaal, Karlsplatz 13, Stiege I, 1. OG.

Panel One **Copia and Copiousness: Circuitous Articulations that Matter.**

Introduction by Vera Bühlmann & Ludger Hovestadt

18.30 Deforming the Malformed: Physical and Mental Space in René Descartes. James Griffith,
Liberal Arts College, Bratislava

19.30 The Metaphysics of Modular Thinking. Architecture, Geometry, the Felting of Wool and the origins of Greek philosophy. Robert Hahn, *Philosophy, Southern Illinois University*

- break -

21.00 In Praise of Folly,
reading from Erasmus of Rotterdam.
Sebastian Michael, *writer, London*

- a buffet with snacks and drinks will be provided throughout the evening -

FRIDAY

15.11

at 09.00-17.30 in Kuppelsaal, Karlsplatz 13, Stiege I, 4. OG.

Panel Two **All, and then Some.**

Moderation by Emmanuelle Chiappone-Piriou.

9.15 The Third Global Spatial Revolution.

Matteo Vegetti, *Università della Svizzera Italiana in Mendrisio*

10.15 At the Confluence of the Two Seas: On the Ontological Difference of Images

Riccardo M. Villa, *TU Vienna*

- coffee break -

**11.30 Mathematics - Architecture - Philosophy:
The Static Tripod and its Diachronic Stability.**

Elias Zafiris, *Athens University*

- lunch break -

Panel Three **Soft and Hard, Physics of Communication.**

Moderation by Ivica Brnic.

14.15 Zenith Boil. Pa.LaC.E, architects Valle Medina and Benjamin Reynolds, *Basel*

15.15 Code in the Techné of Dramatic Communication.

Admir Selimovic, *ETH Zurich*

- coffee break -

16.30 Watch more TV! Olaf Grawert and Christopher Roth, *Studio Brandlhuber+ Berlin*, and *Design Chair Arno Brandlhuber, ETH Zurich*

Speakers Dinner: on invitation

SATURDAY 16.11

at 09.00-17.30 in Kuppelsaal, Karlsplatz 13, Stiege I, 4. OG.

Panel Four **Furnishings and Finishings: With Imagination.**

Moderation by Georg Fassl.

9.15 Darwin and the Devil's Shudder: On Desire and What is Veiled in Language.

Amanda Holmes, *Philosophy, University of Villanova*

10.15 Speculative Resources.

Iris van der Tuin, *Gender Studies, Utrecht University*

- coffee break -

11.30 Meteora Alloys : zealous ideations and their architectonic spaces of extension.

Vera Bühlmann, *Philosophy, TU Vienna*

- lunch break -

Panel Five **IT like 'it', the impersonal subject singular.**

Moderation by Cris Argüelles

14.15 Spelling Alice. Xenotheka, Architecture, Information, Atom-Letters. Miro Roman, *ETH Zurich*

15.15 The Spaces of Machine Learning. Roberto Bottazzi, *Bartlett School of Architecture London*

- coffee break -

16.30 Artificial Intelligence, Cogito, and Architectonics. Ludger Hovestadt, *ETH Zurich*

Conference Dinner: all welcome, register until **November 8th** at office@attp.tuwien.ac.at

Speakers at the Sophistication Conference #3

Nov. 14-16 2019, in Vienna.

Copia and Meteora: Circuitous Articulations that Matter Architecturally

Introduction by

Vera Bühlmann,

Prof. for Architecture Theory and
Philosophy of Technics, TUVienna

Ludger Hovestadt,

Prof. Information Technology in
Architecture, Chair for Digital
Architectonics, ETH Zurich

Deforming the Malformed : Physical and Mental Space in René Descartes

James Griffith,

Liberal Arts College, Bratislava

In his arguments against teachers, as distinct from educators, Descartes often criticizes the former for considering the mind to be an empty vessel to be filled with knowledge. However, he is not always clear what kind of metaphor he would use to describe the mind. If it is not an empty vessel, perhaps a more appropriate metaphor for the mind can be found in his description of space, which for Descartes is a plenum. The mind as a plenum would then not be something which can be filled, but is rather formed in the processes of thinking, willing, imagining, and so on. Yet no mind is ever encountered by Descartes, or no mind ever encounters him, without having already been formed in some ways by experience and teachers. That teachers have malformed the mind by thinking it is an empty vessel thus means it must be deformed and reformed, but this deformation cannot be accomplished by those teachers' techniques. As a result, Descartes must draw his readers into the experience of deforming their own minds in order to reform them in accord with the thought of mental space as a plenum. This paper will thus examine Descartes' discussions of physical and mental space in order to watch this performance occur by looking at 'The World', the 'Treatise of Man', 'The Search for Truth', and the 'Rules for the Direction of the Mind'.

James Griffith is the Assistant Professor of Political Thought and Philosophy at the Bratislava International School of Liberal Arts in Slovakia. He received his Ph.D. from the Department of Philosophy at DePaul University in Chicago, IL, and his M.A. from the Department of Philosophy at The New School for Social Research in New York, NY. He primarily works on early modern philosophy, continental philosophy, and political philosophy.

The Metaphysics of Modular Thinking. Architecture, Geometry, the Felting of Wool and the origins of Greek philosophy

Robert Hahn,

Philosophy, Southern Illinois University

Aristotle identifies the origins of philosophy with Source and Substance Monism; the earliest philosophers held that there was an underlying unity – Thales called it water, Anaximenes air, Heraclitus fire – from which all else comes. About this there is no disagreement among scholars. But Aristotle’s claim that, moreover, they were Substance Monists has proved contentious. The Substance Monist maintains that despite the obvious differences among appearances – some are fiery, others airy and light, still others are liquid and flowing, and yet others are hard as stone – these differences conceal that they are only alterations of the basic underlying unity. For them, according to Aristotle, there is no change in the cosmos, only modifications of this basic stuff. I refer to this idea as “modular thinking.” And about this modular thinking, scholars have disagreed whether it accurately captures the opening chapter of Greek philosophy; most recently it has been argued that there is no Greek tradition of positing an underlying, unchanging unity so early, datable to the 6th century BCE – no underlying module. Has Aristotle gotten the origins of philosophy wrong?

I propose to construct a broad, interdisciplinary case, that urges us to review the whole idea of modular thinking for the archaic Greeks in its technological context – and thus the origins of philosophy – to show the likelihood that Aristotle had it right. To do so, I invite this audience with special interests in architectural technologies and theories to think metaphysically. The metaphysics of the module centers on understanding Source and Substance Monism, and we shall distinguish the structure of the module from the process by which it transforms – altering without changing. It is an interdisciplinary context of contemporaneous activities that offers a new chance to re-view the structure of modular thinking in the monumental temple architecture of the 6th century Heraion in Samos, Artemision in Ephesus, and the Didymaion just outside Miletus, and in the forays in applied geometry by Thales and Anaximander of Miletus measuring the height of a pyramid by its shadows, the distance of a ship at sea, and the construction of the first seasonal sundial, that led to the Greek discovery of the so-

called Pythagorean theorem; for the process of transformation of appearances we will turn to industrial textiles to see a metaphysical meaning of the felting of wool.

To see whether Aristotle had the origins of philosophy right, that the earliest philosophers were Source and Substance Monists, we must turn to what scholars of ancient philosophy have largely ignored – the technological contexts in which their imaginative ideas germinated, and about which monumental temple architecture and building technologies play a special, and especially under-appreciated role in revealing the development of geometrical thinking in the metaphysics of the cosmos. For to accept Aristotle's view, we begin by acknowledging that the world of appearances is a magical illusion, that despite the appearance of such differences, there really is only one underlying essence in the cosmos capable of altering without really changing.

Robert Hahn is Professor of Philosophy at Southern Illinois University Carbondale. He received his Ph.D. in Philosophy from Yale University and held teaching appointments at Yale, Brandeis and Harvard Universities, and in the University of Texas, before coming to SIU. He is the author of nine books including *Archaeology and the Origins of Philosophy*, and now *The Metaphysics of the Pythagorean Theorem*, just published this year. Professor Hahn has been honored by awards as The Outstanding Teacher of the College, and The Outstanding Educator in the University.

Reading from *In Praise of Folly* (Erasmus of Rotterdam)

Sebastian Michael,
Writer, London

“Except I am too partial to be a judge in my own case, I am apt to believe I have praised Folly in such a manner as not to have deserved the name of fool for my pains,” Erasmus wrote to his close friend Thomas More, at whose house in London he was staying when he composed his *Moriae Encomium* in 1509. The Latin title even puns on More’s name: it could also be translated as *In Praise of More*. The fact that we still have it today, half a millennium later, and still recognise ourselves in it, suggests Erasmus was right in his assessment of his own work.

First published in 1511, the text was widely read and soon translated into Czech, French, German, and English, where it became known, among several other titles, as *In Praise of Folly*. With a sharp satirical wit and an immensely entertaining bemused-yet-benign tone, Folly, in her own person, notes the great many ways in which human beings are beholden, even devoted to her, and argues cogently that there is none better placed to deliver an encomium to her, than she, Folly, herself.

Sebastian Michael will be reading excerpts from the 1922 Peter Eckler Edition, lasting approximately one hour.

Sebastian Michael thinks, writes, and creates across disciplines in theatre, moving image, print, and online with a deepening interest in humans, the multiverse, and a quantum philosophy. He lives in London and works wherever his projects take him, also as a guest lecturer at TU Wien (University of Technology, Vienna) and most recently at ETH (Federal Institute of Technology) Zürich.
@optimistlondon

The Third Global Spatial Revolution

Matteo Vegetti,

Università della Svizzera Italiana in Mendrisio

Globalisation is a figural concept. The very concept of “globe” is a spatial figure, always heavy with political implications. The idea of “revolution” is holding here two meanings: the first one refers to a general spatial reform, caused by the perception of the unity of the globe, the second one is the return, the repetition of old geographical codes in new figures, in order to legitimize a given political order, a “nomos” of the earth. The rise of the American globalisation is in this sense the repetition of the British one, but if the previous was based on the command of the sea, the second is based on the conquest of a new natural element: the air. Nowadays we are facing a third profound spatial revolution, still linked to the air age, but caused by the rise of a new technological element: the internet. A challenge, needing a new spatial imagination.

Matteo Vegetti, philosopher, is Professor in «Philosophy of space» (SUPSI), Lugano, Switzerland, and Lecturer in «Theory and practice of space», «Forms of housing», «The culture of the city», Accademia di architettura di Mendrisio (AAM), Switzerland. His last book (Einaudi, 2017) is titled *L'invenzione del globo*.

At the Confluence of the Two Seas: On the Ontological Difference of Images

Riccardo M. Villa,

Department for Architecture Theory
and Philosophy of Technics, TU Vienna

If modernity was supposed to be the age in which world-images were abrogated or discredited as world-views, or as ideologies to be critiqued and deconstructed, our contemporary condition seems to be faced with an unexpected reappearance of images and of their importance for orienting our values. Instead of coming from mythology, theology or philosophy, these “world-pictures” are rather ‘renderings’ and ‘accounts’ of scientific models; by conceiving and studying their subject as a closed environment—as an *oikos*, a ‘house’—disciplines like economy and ecology are able to project their own picture of the world. Yet, such pictures become normative (they acquire the power to legitimate policies) only when they are pushed to their own limit; in other words, these pictures become images whenever they stage the crisis of their own model. But is this phenomena limited to the contemporary condition and to its presumedly singular ‘criticality’, or is it rather pertaining to human’ orders and to ‘artificial’ techniques at large? Looking at the interplay between images and crisis might open up a field of perspectives able, if not to escape, at least to re-think any apocalyptic prophecy, for how ‘scientific’ its base might be.

Riccardo M. Villa is Assistant Researcher for the Department for Architecture Theory and Philosophy of Technics since September 2017. He holds a Master’s degree in Architecture from the Polytechnic University of Milan, and he is currently pursuing a PhD at the department. His recent interests revolve around architecture in its production, under a spectrum of investigation that spans from aesthetics and semiotics to biopolitics.

Mathematics - Architecture - Philosophy: The Static Tripod and its Diachronic Stability

Elias Zafiris,

Athens University

The basic idea proposed to address the modelling of obstacle-laden domains, is the following: Instead of analysing them in terms of constituent set-based elements and their hypothetical absolute relations, adjoin to them other adequately-understood domains, which can provide pointers and open up communication channels with the former ones. The process of adjoining should not be ad hoc, meaning that it should be qualified as structurally-respecting, at least locally, or partially. What is crucial always is the notion of a scaffold that is able to bridge together the involved domains, so that an obstacle-embracing metaphora can emerge via the communication between these domains. In this respect, the essence of adjoining and bridging is based on the notion of partial or local structural congruence, and implies a certain type of modularity. The treatment of obstacle-laden domains. A particularly symmetric and temporally stable pattern appears in the case of a threefold canonical metaphoric communication among three domains. In this case, we say that these three domains constitute a Static Tripod, in accordance to the ancient Greek term, meaning that any one of them gives rise to a pair of encoding/decoding bridges with respect to the pertinent metaphora establishing the canonicity between the other two. We elaborate this subtle notion in relation to the Tripod enfolded by Mathematics, Architecture, and Philosophy.

Elias Zafiris holds an M.Sc. (Distinction) in “Quantum Fields and Fundamental Forces”, and a Ph.D. in “Theoretical and Mathematical Physics”, both from Imperial College at the University of London. He has published papers on category-theoretic methods in quantum physics and complex systems theories, modern differential geometry and topology, and many other topics in the foundations of physics and mathematics. He is also the author of three books on these subjects. He is a research professor in Theoretical and Mathematical Physics at the Institute of Mathematics at the University of Athens, and he is also currently a teaching professor on Mathematical Thinking at the TU Vienna, Institute of Architectural Sciences.

Zenith Boil

Valle Medina and Benjamin Reynolds

Pa.LaC.E

www.palacepalace.com

In the bounties of a private pool, a swimmer steps out and looks towards the valley floor below. Visions of countless spatial motifs overarched by the sky become the object of his interest. The motifs and the sky are separated by a layer of air that mediates his sight and borders on the painterly. While the sun traverses the sky towards nightfall, the swimmer records “air captures” by means of a device, whose capability is greater than the eye; able to catch tiny deviations in the air of his visions. It is more exciting to register the motifs as they shift: making them quicker than they are, dignifying them in smaller and larger magnitudes, like in the palaces, mosques and churches where murals appear to extend the actual architecture of walls and ceilings into infinity. His day culminates in an account of outlines and depths of what he experiences; in initially illegible findings that when stockpiled, confirm a visual and spatial order. Part of the talk will elaborate on the running collaborative initiated by Dom Gross together with Valle Medina and Benjamin Reynolds (Pa.LaC.E) and Vera Bühlmann at the department for Theory of Architecture and Philosophy of Technics in Vienna; www.domgross.com

The work of Valle Medina and Benjamin Reynolds (Pa.LaC.E) can be understood as ‘conceits’ borrowed from the metaphysical poets, as drawn-out, turns of images. Their works comprise numerous discrete décors that access ideas – together they create a ‘sense’, or vector. Their works play out through exhaustive ‘idea surveys’ that stem from their interest in large acts of human endeavour – encyclopaedic projects, expeditions, taxonomies, etc – which also ‘reinforce the naturalisation’ of their work within the ceaselessly shifting contexts in which they operate. Valle Medina and Benjamin Reynolds are co-founders of Basel-based practice Pa.LaC.E. 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 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 are currently directing the group 'High Holdings' at the Royal College of Arts, London.

Code in the Techné of Dramatic Communication

Admir Selimovic,

Chair for Digital Architectonics, ETH Zurich

Aristotle's comments in Poetics show metaphor, which he considers to be the most precious feature of poetic language, as a dramatic form, and dramatic plot as the articulation of such—metaphoric—activity. Chances are that the metaphoric double whole not dual, or oppositional, are two parallel stages whose homologous relation ensures learning in one advances learning in the other, and that they are in anything but in a casual relationship. What are the intrigues of obscuring in the shadows of one, that which is the other's lit, and the inverse? What are the workings of code in dramatic communication? Not code as a secret, and not as an instruction, but as a joint.

Admir Selimovic is a researcher at Chair for Computer Aided Architectural Design (CAAD), Institute of Technology in Architecture (ITA), ETH Zurich and a lecturer at Department for Architecture Theory and Philosophy of Technics (ATTP), Institute of Architectural Sciences (IAW), University of Technology Vienna.

He has been a research fellow in Digital Gnomonics, a post-Master's programme focused on the philosophy of technics and the principles of mathematical and computational thinking, conducted by Prof. Dr. Ludger Hovestadt (ETH Zurich), Prof. Dr. Vera Bühlmann (TU Vienna), and Prof. Dr. Elias Zafiris (University of Athens). He holds a Master's degree in Architecture from the Institute for Art and Architecture (IKA), Academy of Fine Arts Vienna, where he graduated with distinction, receiving the university's Achievement Award.

Watch more TV!

Olaf Grawert and

Christopher Roth

Studio Brandlhuber+ Berlin

Design Chair Arno Brandlhuber, ETH Zurich

8 rules for TV

1. We don't believe in the lonely artist, we don't believe in resistance, withdrawal or anarchy either. We make programs with recurring episodes, not unique masterpieces.
2. We speculate even as we try to minimize uncertainties. We believe in science fiction, the realism of our time. The future is neither a nightmare nor a daydream.
3. We try to come up with stories, answers and possibilities, not with questions, data and complaints.
4. We believe in compression. If arguments don't survive compression, they are bad arguments. So no piece should be longer than five minutes. Or two.
5. We are not going to talk about everything to absolutely everyone. We leave that to Contemporary Art.
6. Try to make complex ideas more simple, build arguments, form positions, sell them, create a tagline, be populist.
7. Look around you. The more interesting things are always pretty close by. Right there. Outside in the real world. Very rarely do you have to travel far. Or go introspective.
8. Let's try to think politically about the relations between subjects, whether human or nonhuman. Stop looking at yourself.

Olaf Grawert plans, writes and talks about architecture between Berlin and Zurich. In alternating collaborations and media, he deals with the economization and politicization of space and possible strategies for the re-popularization of architecture. He has been a research fellow and teaching assistant at ETH Zurich since 2017.

Christopher Roth is a film director and television entrepreneur. His film *Baader* was awarded the Alfred Bauer Prize in the Berlinale Competition in 2002. From the retro-futuristic research *80*81* (with Georg Diez), 13 books and more than 20 theatre performances emerged. In 2016 he founded the web-TV platform *space-time.tv*.

Christopher Roth and Brandlhuber+ (Arno Brandlhuber, Olaf Grawert) collaborated on the films "Legislating Architecture" (2016), "The Property Drama" (2017) and "Architecting after Politics" (2018). They have been shown at the 15th Architecture Biennale in Venice, the Chicago Architecture

Biennial 2017 and, as part of the traveling exhibition “Legislating Architecture – Architecting after Politics” (touring since 2018). Arno Brandhuber, Olaf Grawert and Christopher Roth work together at ETH Zurich where they set up and operate the web TV architecture channel station.plus.

Darwin and the Devil's Shudder: On Desire and What is Veiled in Language

Amanda Holmes,

Philosophy, University of Villanova

What is the difference between a code and a message? Can we identify the distinction in their respective modes of signification? That is to say, how might we contrast the particular structures that situate the signifier in relation to the signified? We find one approach to the distinction between code and message in the thought of Jacques Lacan. In his teaching from the 1950s, Lacan constructs an elaborate graph that represents the relations between the speaking subject and the signifier and in this graph he identifies the place of code and message in language. Lacan calls this graph the "Graph of Desire." This paper will offer an explication of this strange graph, identifying its most important elements and unpacking Lacan's claim that it is nothing other than desire which structures language. In order to explain this graph, the paper will turn to an example Lacan gives in the opening lesson of his Seminar from 1958-1959, from Charles Darwin's text *The Expression of the Emotions in Man and Animals*.

Amanda Holmes is a Doctoral candidate in the Philosophy Department at Villanova University. Her work is situated at the intersection of ontology and psychoanalysis. She is currently living in Vienna, Austria and writing her dissertation, which is titled "Erotology: Desire and Being in Lacan's Return to Freud."

Speculative Resources

Iris van der Tuin,

Gender Studies, Utrecht University

In this talk I first address Susanne K. Langer's take on the shared philosophical project of "Bell, Fry, Bergson, Croce, Baensch, Collingwood, Cassirer, and I (not to forget such literary critics as Barfield and Day Lewis and others too, whom I have not named and perhaps not even read)" (Feeling and Form, 1953, p. 410) and on analysis as non-exhaustive ('Facts', 1933). Second, I will address Langer's sourcebook, Reflections on Art from 1958, as a resource for speculation. Whereas teaching books have been looked down upon since the empirical turn in the philosophy of science and humanities, I argue with Langer's book as an example that, and why, they must be emancipated. In more general terms, the talk is a proposal for a speculative turn in the philosophy of science and humanities.

Iris van der Tuin is professor of Theory of Cultural Inquiry at Utrecht University, Department of Philosophy and Religious Studies. She is also director of education of the School Liberal Arts and programme coordinator of the interdisciplinary bachelor Liberal Arts and Sciences. Iris trained as a feminist epistemologist and works as an interdisciplinary researcher. She works at the crossroads of philosophy of science and science and technology studies, cultural theory, and practices of cultural inquiry. She is writing a monograph on the blogger Maria Popova and the philosopher of art Susanne K. Langer. Popova is best read as Thumbelina, and Langer as one of her ancestors (Serres [2012] 2015: 69).

Meteora Alloys: zealous ideations and their architectonic spaces of extension

Vera Bühlmann,

Philosophy, Prof. for Architecture Theory, TUVienna

Mechanics literally means ‘resourcefulness’. How to think about such resources and their instrumentation architectonically? This paper recollects ideas around technical ekphrasis in Vitruvius, a metaphysics of light in Robert Grosseteste, copiousness and formulation in Erasmus of Rotterdam, and geometrical fabulation in René Descartes. All four proposals share that they engage with what counts to us today as a horizon of critique in the resourceful manner of zealous ideation. I will propose to relate the notion of a geocentric horizon to that of a cosmoliterate firmament, from the Greek stereoma for a “firm or solid structure”. The grounds for thinking the extension of space with respect to the world (not any ‘beyond’) is one of abductive reasoning. The solidity or firmness it supports manifests in the communication of experiences. It is a reasoning that supports an objective kind of ideation capable of actively keeping in suspension, by an optics that knows how to depict without picturing, outlooks to an a-territorial kind of geography for migrational coexistence in our contemporary condition of the Anthropocene.

Vera Bühlmann is Professor for Architecture Theory at Vienna University of Technology, and director of the ATTP Department since 2016. She originally studied English Literature and Language, Philosophy, and Media Studies at Zurich University, and earned a PHD in Media Philosophy/Philosophy of Technics from Basel University in 2009. Together with Ludger Hovestadt, she is co-founder of the applied virtuality lab in 2010, at the Chair for Computer Aided Architectural Design at ETH Zurich, where she had been teaching since 2008. She is Co-editor of the Applied Virtuality Book Series (Birkhäuser, since 2012). Her newest monograph is under contract with Bloomsbury Press, London, and will be entitled *Mathematics and Information in the Philosophy of Michel Serres* (2020, forthcoming).

Spelling Alice. Xenotheka, Architecture, Information, Atom-Letters

Miro Roman,

Chair for Digital Architectonics, ETH Zurich

Alice is one of my avatars. She comes from the plenty; she comes from the wonderland. She is an avatar, a bot, an alien; she is both me and not me; we are related but she is independent and dependent on me. She deals with a Lot, with different data streams and abundance of objects images and text. The story of Alice renders how by playing with my personal libraries, I can find consistencies in the infinite flows of data and bring them together in synthetic characters. Alice is one of those characters; a letter and a persona at once; atom-letter. Alice behaves like a brand. She is implicit and atmospheric, far from perfection. There are a lot of open questions around her, but I think she can tell an interesting story of how to play with a lot of data. Since she is my avatar, like me, she is interested in architecture and information. She talks about them by potentially playing with all the images and texts. In this play the paradoxes of working with a lot of data become apparent. If data is big enough, it will not tell us the 'truth' but will show us the world we want to see. In this kind of setup, how do we talk about things we care for? How to write if I have access to all the books in the world, how to take or work with pictures when they are omnipresent and overflowing? One possible approach to these phenomena comes from thinking of coding as a kind of a literacy. This is a story of how Alice became literate in coding. Currently she has a voice on Twitter: https://twitter.com/Alice_ch_n3e81

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, movies, and 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.

Miro is currently a lecturer and a postdoctoral researcher at the chair for CAAD at ETH Zurich. From 2004 to 2017, he was a part of the project romanvlahovic. From 2013 to 2015, he was a part of the Future Cities Laboratory, the

interdisciplinary research program of the Singapore ETH Centre for Global Environmental Sustainability (SEC), where he coedited “A Quantum City” book.

The Spaces of Machine Learning

Roberto Bottazzi,

Design Unit Architecture Theory,
Bartlett School of Architecture London

By incessantly moving between abstract and actual domains, the notion of space takes a particular significance in computational design as it extends to data and their organisation and distribution through algorithmic procedures. Here architectural ideas entangles with mathematics and logic to conjure up a fertile ground for speculative thinking. What ideas and instruments can be called up or invented to tune these two types of spaces when we design with learning algorithms? What established tropes of computational design show signs of strain or become altogether superseded? The paper moves playfully between these two spaces by referring back to historical precedents as well as other disciplines such as philosophy and art.

Roberto Bottazzi is an architect, researcher, and educator based in London. He has studies in Italy and Canada before moving to London. He is Director of the Master in Urban Design at the Bartlett, UCL. His research analyses the impact of digital technologies on architecture and urbanism. He is the author of *Digital Architecture beyond Computers: Fragments of a Cultural History of Computational Design* (Bloomsbury, 2018) and editor of *Walking Cities: London* (Camberwell Press, 2017). He has lectured and exhibited internationally.

Artificial Intelligence, Cogito, and Architectonics

Ludger Hovestadt,

Prof. Information Technology in Architecture,

Chair for Digital Architectonics, ETH Zurich

Computers are not tools, they are any-tools. Most powerful by their ubiquitous connectivity. Everything we know, what we think we are, erodes. Computers are not helping, they are threatening. Let us talk about the data as the ash of our memories and the generic algorithms of AI as the ghosts of our dreams. And they are coming back and play any form. Let us also talk about our cogito to tame these fakes and as architecture to put them in place and face their power. To open up generous spaces in this new world.

Since 2000 Ludger Hovestadt is Professor for Computer Aided Architectural Design at the ETH Zürich, Switzerland, and 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.

Panel Moderators at the Sophistication Conference #3

Nov. 14-16 2019, in Vienna.

Cris Argüelles,

Moderation Panel **“IT like ‘it’, the impersonal subject singular”**

Architect, PHD Candidate and Scientific Assistant at ATTP TU Vienna

Cris Argüelles holds a Master's degree in Architecture from the Universidad Politécnica de Madrid (ETSAM), receiving the university's Achievement Award on her thesis. She's a member of the COAM and partner in 'blast', some of their latest works have been part of the Venice Biennale 2018 Spanish Pavilion. She has been a research fellow in Digital Gnomonics and joined the department in June 2019 to pursue a PhD.

Emmanuelle Chiappone-Piriou,

Moderation Panel **“All, and then Some”**

Architect and Art Historian/Curator, PHD Candidate at ATTP TU Vienna

Emmanuelle Chiappone-Piriou works as an independent author and curator, working at the cross-road of architecture and contemporary art. She is an external lecturer at Ecole nationale supérieure d'architecture de Paris Malaquais (FR) and at TU Vienna. She is a member of the CIVA (BE) and the Cité de l'Architecture (FR) scientific councils. She holds a Master's degree in Architecture from ENSA Paris La Villette and in Architecture history from Paris Panthéon Sorbonne (FR). She is currently pursuing a PhD at the department.

Georg Fassl,

Moderation Panel **“Furnishings and Finishings: With Imagination”**

Architect, Scientific Assistant at ATTP TU Vienna

Georg Fassl is an Austrian-born (*1985, Graz) architect engaged in practice, teaching and research. Based in Vienna, he collaborates widely on work inspired by abstract thought and the contingency of contemporary life.

Ivica Brnić,

Moderation Panel **“Soft and Hard, Physics of Communication”**

Ivica Brnić studied Architecture at ETH Zurich, and completed his PHD in Architecture at TU Vienna in 2015. Next to his practice as an architect in Lugano and Vienna, he teaches and works as a researcher at TU Vienna, whereby his focus is on the perception of space in relation to constructive expression. His interest in the phenomenology of space was intensified through experiences in stage set designs for theater and opera productions. His approach is guided by the quest for intellectual/spiritual foundations for architecture; Brnić's book „Nahe Ferne, Sakrale Aspekte im Prisma der Profanbauten“ has been published in 2019.

Thinking is a feast that consists in exhausting oneself on striving not to »consume« any of the abundant dishes one finds set on the table.
– The Department for Architectural Theory and Philosophy of Technics considers the 2000 years old tradition of Architectonic Treaties as a plentiful banquet where one can experience that and how thinking can be learned. Here we can instruct ourselves in how to formulate and articulate an abstract stance with regard to the grand themes of our own time:
»the Anthropocene«, humanism / posthumanism, climate and sustainability, responsibility and globalization, in short: the role of architecture in relation to power, politics, economy, technics, values, art, and knowledge.

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