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## Meta

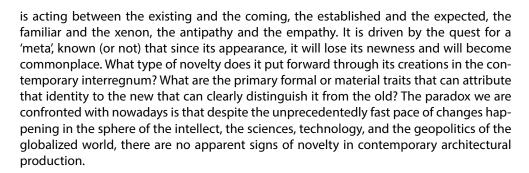
## Maria Vogiatzaki

The call of this issue, authored by Professor Polyxeni Mantzou, from the Department of Architectural Engineering, Democritus University of Thrace, Greece addressed "the notion of 'meta', a term typically used to denote something of a higher or second-order; or a change of position or condition; or a position behind, after or beyond. 'Meta' in Greek is an extremely wide-ranging word, used to denote, among others, the way in which, in accordance to, after, in-between, with. We use the term "meta" to define our current condition, of a higher or second-order, one that comes after and goes beyond but also with the one that came before and more importantly, describe the intermediate, betwixt, in-between nature of our times.

Our Meta- age is difficult to define as many separate conditions of the past coexist and are blended and merged together in a new, hybrid and fused reality. The pre-modern, pre-industrial, pre-alphabetic world, reigned by handicraft, orality, immersion, randomness, aggregation, nowness and emotion and the modern, industrial, alphabetic world, ruled by machine-made, text, theory, regulation, analysis, perspective and rationality; are now merged in this meta- condition, where new hybrids are conceived and engendered and a new and programmed wilderness emerges.

Relation and mediation characterise this meta- age and architecture as a formerly principal mediator is challenged. The Meta- issue aims to examine this challenge in different aspects of architecture. Design as a detached and separate process from construction is reconsidered; typologies and customization are re-examined; representations no more aim to describe buildings or objects but rather to relate the experiences of subjects in or with them; unbuilt simulations become autonomous and even more seductive than the experience of physical space; materials are no longer classified as natural, artificial or industrial as they are all calculable or even programmed; description of forms surrenders to the survey of in-formation through abstract modeling conceptions; subject and object opposition becomes irrelevant as interconnected subjects and re-contextualized things that form part of an almost animated standing reserve, define new possibilities for novel interrelations and configure dynamic atmospheres."

The good practice example, authored by Professor Constantin-Viktor Spyridonidis from the School of Architecture, Canadian University of Dubai, and by Professor Maria Vogiatzaki from the School of Architecture of Anglia Ruskin University, is entitled "Architectural Interregnums". The authors argue that architectural design has always been the laboratory where experimentation with ideas about the newness, and elaboration of forms and spatial arrangements take place towards architectural creations. Prefixes such as post, de-, re-, neo-, appear as typical signifiers of the spirit of novelty representing the different shifts that shape the history of architecture and could be broadly summarized by the term 'meta'. Even if 'meta' is a kind of ontological reference to newness, implying its definition with what preceded, it always remains polysemic and, for this reason, ambivalent. Design



The 14th issue of ArchiDOCT attracted five different voices from five different institutions around the world, all doctoral students and researchers who submitted essays that examine the notion of "Meta-" and the way this radical but subtle paradigm shift creates novel possibilities but also demanding challenges for architecture.

"Immediate Systems: Exploring the Potential of Human-In-The-Loop Cyber-Physical Systems that Embed Design and Implementation in Situations of Use" is the essay submitted by Christian Friedrich, doctoral student at the Faculty of Architecture at Delft University of Technology, in the Netherlands. Aim of this essay is to introduce the notion of Immediate Systems which embed design and implementation in situations of use and thus overcome the limitations of remoteness. This is based on the hypothesis that Design activity, especially in architectural praxis, takes place in spatial and temporal remoteness from the use of its outputs. This remoteness impedes the ability to respond to actual needs that arise in situations of use. Immediate Systems, as defined by the author, are cyber-physical systems comprised of interacting digital, analogue, physical, and human components. As meta-systems they include people and environments in a tight loop between human intention and immediate adaptation. Immediacy in this context indicates a state of continuously available adaptability at the speed of human intention. Such meta design systems take design methodology to an extreme that paradoxically resembles the situation before design emerged as separate praxis. Three theoretical contributions propose and frame the notion of Immediate Systems, present and discuss a series of examples indicating opportunities and challenges of such systems, and identify characteristics of and conditions for Immediate Systems derived from the first two contributions.

Adolfo Jordán, doctoral student at the School of Architecture, Engineering and Design, Universidad Europea de Madrid authored "Systemic Considerations: Regarding the Importance of the Pre- in the Post- on the Path Towards the Meta-system". The first part of the essay is a historiographic trajectory of the system as a notion, in various critical shifts of paradigm. The traces of these shifts have brought about what we currently appreciate as a system, especially in a world mediated by machines. The merging of these various traces, despite the linear thinking yielded, are putting forward the notion of meta-system. More specifically, as meta-system, the author defines as deriving from ongoing processes anchored in the distant past, finally leading to a new paradigm. The essay traces the evolutionary nature of systems as these emerge from the broader worldview and the view of architecture, towards gaining a better insight into the present and future: in order to achieve the role of intelligent machines, we must see that, rather than being the origin

of the new paradigm, they are neither the origin nor the product. Therefore, the author's concept of "meta-" constitutes a hybrid condition that implies an appreciation of the "prior" and the "subsequent", not only in the sense of "post", but also in the sense of "with" and "alongside", based on the intermediate contemporary perspective. Finally the essay suggest that in order not to conflate meta-progress with just digital advance, we ought to look into the future of comprehensive research based on the origins of parametricism in architecture, based on the hypothetical existence of an equally rich parametric pre-digital theory and history that has been barely explored.

The essay entitled "Architecture in a Petri dish: co-programming Meta-Life in design through biointegration and synthetic biology" by Selenia Marinelli, doctoral student at DiAP (Dipartimento di Architettura e Progetto), Faculty of Architecture "Sapienza", University of Rome, Italy, touches upon 'meta' through the investigation of the concept of meta-life as a grey area between the animate and the inanimate, the natural and the engineered, the born and the built, in order to demonstrate how these entangled notions could be applied also as new design strategies. The essay suggests that the advent of synbio and bio-information as tools for architecture could in fact drastically change the way we conceive buildings as meta-living beings in ontological continuity with the biosphere. Fine illustrations of how biotechnology and synthetic biology are offered, and suggest the entanglement of contemporary architectural contemplation and practice to climate change and environmental decay.

Meta(re)presentations essay authored by Antonis Moras, PhD candidate at Aristotle University of Thessaloniki, reviews the key literature on the notion of metarepresentations in fields beyond architecture. The essay is an attempt of rereading the conception of representations in the architectural domain. Two main categories of metarepresentations in architecture are proposed and depend on their effect on thinking representations; Content and context aware metarepresentations

Content aware metarepresentations are based on a value system and can be divided in two categories. The first one is characterized by standardization and selfreferentiality while the other one is structured as criticism by enabling referencing and quoting within content. Characteristic examples are modern and postmodern architecture. As the author argues "Context aware metarepresentations resemble the condition of monitoring a system by focusing on the relations between the different parts that temporarily constitute it as such. Characteristic examples are post-cybernetic and post-digital architectures".

Verena Ziegler, doctoral student at Linz University of Arts and Design in Austria, in her essay "InBetween – a post-digital turn – Crafting 4.0" discusses the "continuous beta" version of becoming as a way to describe the between space for the merging and coexistence of what used to be the ends of polarities and the dialectics of anthropocentrism. As Ziegler explains, post-digitality involves the physical dimensions of spatio-temporal engagements. This new ontological paradigm reconceptualizes digital technology through the experience of the human body and its senses, thus emphasizing form-taking, situational engagement and practice rather than symbolic, disembodied rationality. The emerging questions focus on ways in curiosity, playfulness, serendipity, emergence, discourse and collectivity, are encouraged. Furthermore, ways in constructing working methods without foregrounding and dividing the subject into an individual that already takes position are

discussed. The essay briefly outlines the rhizomatic framework developed by the author, aiming at overcoming two prevailing tendencies: first, the one-sided view of scientific approaches to knowledge acquisition and the purely application-oriented handling of materials, technologies and machines; second, the distanced perception of the world. On the contrary, the work presented, involves project-driven alchemic curiosity and doing research through artistic design practice. This means thinking through materials, technologies and machinic interactions. 10 interdisciplinary projects that have emerged from this ontological queer-paradigm that is post-digital–crafting 4.0. are illustrating the underpinning theoretical viewpoint.