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Launch editorial

Philip F. Yuan[*]

Architectural Intelligence, guided by scientific design thinking, focuses on the three future scenarios of smart habitat, virtual habitat, and space habitat. Utilizing evidence-based architectural research methods, *Architectural Intelligence* reconstructs the architectural knowledge system and creates an international academic platform of multi-disciplines, establishing a new paradigm for sustainable development. In the first place, it is necessary to define architectural intelligence. In her book *Architectural Intelligence: How Designers and Architects Created the Digital Landscape*, Molly Wright Steenson argued that intelligence is rather expressed in design processes and tools, computer programs, interfaces, and digital environments and it includes all forms of intelligence involved with the built environment (Leach & Yuan, 2020; Steenson, 2017).

In the book *Natural-born Cyborgs*, Andy Clark argues that what makes humans so different from other species is our capacity to fully incorporate tools and support cultural practices in our lives (Clark, 2003). The coexistence of humans, technology, and nature in a post-humanism era result in human beings augmented by technology to become natural born cyborgs. Contrary to the early years when nature and humans stand against each other without the intervention of technology, cyborgs are now created to impact nature through technological enhancement. Furthermore, the new subjectivity of design should not solely invent the metaverse with machines as the main body but rather be the augmentation of human intelligence. Digitally intelligent architecture no longer introduces tools for making but tools for thinking (Carpo, 2017). In the age of post-humanism with the rising complexity and contradictions, architectural design

thinking is urgent to integrate scientific thinking with social, ethical, and cultural thinking. The design and construction processes are transformed rapidly by the iteration of multi-disciplinary knowledge, gradually forming a new frontier of disciplines.

The digital paradigm shift after the pandemic has promoted interaction between social life and technological development. Rapid acceleration of technology enables full mobilization of social evolution and requires humans and non-humans to adapt to the intense transformation, establishing global epistemology and aesthetics. The novel knowledge of the Internet, biotechnology, artificial intelligence, and planetarization (Hui, 2020) provides various approaches to achieve the goal of sustainability. This is similar to *globalization-minus* mentioned by Bruno Latour (2018), which promotes protections of diversity including biodiversity, noodiversity, and techno-diversity by planetary thinking (Hui, 2020).

Currently, software can be endowed new authorship of creativity, and the development of digital tools might also become a prominent future discipline. In the era of weak artificial intelligence development, human-machine collaboration becomes the most remarkable focus. However, artificial-intelligence-augmented design would have a profound embodiment on the materiality in architecture which may reshape the new authorship (Picon, 2021). Computational design thinking exists in the metaverse and has a profound impact on our physical world (Leach & Yuan, 2019). Therefore, integration of computational formation, artificial intelligent prediction, and robotic fabrication might broaden the horizons and extend the boundaries of architecture (Yuan, Menges, & Leach, 2015; Yuan, Leach, & Menges, 2018).

Meanwhile, we should also balance the digital futures of Material Intelligence and Immaterial Intelligence. On one hand, based on the emerging explorations, artificial intelligence already strongly empowers human imagination

*Correspondence: philipyuan007@tongji.edu.cn

College of Architecture and Urban Planning, Tongji University, Shanghai, China

and creativity. This discussion should also focus on whether the fully virtualized space experience negatively or positively affects human beings when metaverse is used to transform the content of social production 'from real to virtual'. Therefore, we should further discuss the impact of immaterial intelligence in architecture. On the other hand, as Bernard Stigler mentioned, technology is a pharmakon resulting in imbalance, chaos, and disaster in society [Stiegler, 2016]. Is there any necessity or possibility that the intelligence properties of 'digital object' can be materialized? The entire paradox of the architectural discipline consists in its desire to render matter expressive to human beings. Thus, material intelligence would be a new way for architects to control material resources and reinforce the fundamentally humanistic nature of architectural endeavor with an increasing sense of design freedom and a release from material constraint in the digital era (Picon, 2021).

Architectural intelligence establishes a new agenda through which architecture design, civil engineering, environmental engineering, computer science, social science, and other relevant disciplines generate novel knowledge and allow developments of new techniques. It forms an interdisciplinary platform for intelligent thinking methodology and practical research on generation, simulation, optimization, construction, operation, and inhabitation. Besides, it incorporates multi-discipline with Design and Science, Structure and Material, Environment and Energy, Mathematics and Computation, and Behavior and Sociology. *Architectural Intelligence* also promotes cutting-edge developments of digital technology and interdisciplinary research to produce up-to-date original research and review papers with the highest quality in this field with an aim to build a leading international platform for designers, scientists, engineers, and other academics to exchange scientific and technological knowledge and merge science and research with academia. The article types published by this journal include research article, review article, case study, and commentary. To conclude, the goal of this journal is to continuously explore the innovative zeitgeist that integrates artificial intelligence with humanistic principles to explore strategies for combining the materialization with virtualization through algorithm methodologies, promoting a more intelligent future in architecture and built environment.

Declarations

Competing interests
There is no competing interests. The author is editor in chief of the journal.

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