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> EDITORIAL

Artificial Creativity

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This special issue entitled *Artificial Creativity* aims to foment discussion around the cultural, societal, and ethical aspects of robots or AI engaged in creative production.

The history of nonhumans engaged in creative activities can be traced back to Pierre Jaquet-Droz's automata *The Writer* and *Musical Lady* (1770s), which respectively performed calligraphic writing and music. In the 1950s, Jean Tinguely's *Métabotics* produced generative artworks, in response to long-standing questions about the role of the artist. Most recently, a number of artworks have featured robots that draw (e.g., *6 robots named Paul*, Tresset), paint (e.g., *The Painting Fool*, Colton), or make music (*Shimon*, Weinberg). The 10th Bucharest Biennale in 2022 will be curated by *Jarvis*, an AI system created by Spinnwerks, Vienna (FlashArt).

These tendencies provoke at least two lines of inquiry. On the one hand, one can ask: what are the possibilities and potential pitfalls of AI technologies in the cultural sector? For example, AI makes its recommendations and choices based on its exposure to large databases, and yet Lev Manovich warned about the “increasing automation of the aesthetic realm”, which might, over time, reduce cultural diversity (Manovich 85). Some academics caution against the biases of people who have created a specific AI system and have compiled its learning sample, as these biases might later be replicated by the system itself (Buolamwini).

On the other hand, AI technologies encourage debate about the meaning of creativity. Some authors suggest revisiting the concept of creativity, which can be contemplated as a uniquely human faculty (Gunkel 1). Others conceptualise it as a *process* in which both humans and nonhumans are involved.

In this issue, we showcase a variety of perspectives around this debate. The aim is not to resolve such a complicated puzzle. Instead, we map a tapestry of approaches that mark the state of the art of a dynamic, emerging research area.

The term *Artificial Creativity* has been in use for some time (e.g., Elton); it seems to be a rather useful concept for researchers in the field of interaction design and HRI (Human-Robot Interaction). However, our take on this concept is a playful rendering of the term *artificial intelligence*, which also serves as a reminder that technological innovations are often rife with organismic language (Jones; Boden).

The virtual conference devoted to the same title took place on 19-20 November 2020, and was organised by the editors of this special issue.

References:

Boden, Margaret. *The Creative Mind: Myths and Mechanisms*. Routledge, 2004.

Buolamwini, Joy. "Artificial Intelligence Has a Problem With Gender and Racial Bias. Here's How to Solve It." *TIME Magazine*, 7 Feb. 2019, <https://time.com/5520558/artificial-intelligence-racial-gender-bias/> Accessed: 20 February 2022.

Flash Art Feed. "The 10th Bucharest Biennale: the first biennial curated by Artificial Intelligence in VR." May 27th 2020.

Colton, Simon. "The Painting Fool: Stories from Building an Automated Painter." *Computers and Creativity*, edited by Jon McCormack & Mark d'Iverno, Springer, 2012, 3-38.

Elton, Matthew. "Artificial Creativity: Culturing Computers." *Leonardo* 28.3(1995): 207-213.

Gunkel, David. "Special Section: Rethinking Art and Aesthetics in the Age of Creative Machines: Editor's Introduction." *Philosophy and Technology*, 30, no. 3, 2017, pp. 263–265.

Jacquet-Droz, Pierre. *The Musical Lady. 1770s*, Musée d'art et d'histoire de Neuchâtel.

Jacquet-Droz, Pierre. *The Writer. 1770s*, Musée d'art et d'histoire de Neuchâtel.

Jones, Raya. "What makes a robot 'social'?" *Social Studies of Science* 47.4 (2017): 556–579.

Manovich, Lev. "Automating Aesthetics." *Flash Art* 50.316 (2017): 85-87

Moura, Leonel. *Swarm Painting 08*. 2002, Courtesy of Robotarium, Alverca / Sao Pãulo.

Robotlab. *The Big Picture*. 2014, Courtesy of Robotlab. ZKM, Karlsruhe.

Tresset, Patrick and Frederic Fol Leymarie. "Portrait Drawing by Paul the robot." *Computers & Graphics* 37(2013): 348-363.

Weinberg, Gill. "Shimon: Now a Singing, Songwriting Robot: Marimba-Playing Robot Composes Lyrics and Melodies With Human Collaborators." 25 Feb. 2020, www.news.gatech.edu/2020/02/25/shimon-now-singing-songwriting-robot.