# What is an artist needed for? asks Jussi Lahtinen with his artificial intelligence artwork

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Artificial intelligence creates new images that are based on Jussi Lahtinen's previous artworks from his Metropolis series. The picture above shows three screen captures taken of the endless image stream produced by the art machine, which will be published in March 2023. (Picture: Jussi Lahtinen).

Art machine makes you think about the role of artificial intelligence in creative work. Who actually is the artist when artificial intelligence endlessly generates new versions of previously created artworks? Visual artist Jussi Lahtinen wanted to see what happens when he hands over his finished artworks to a machine. Urban AI Art created by Lahtinen tests the possibilities of modern technology. It is an independent work of art whose image stream can soon be viewed online. The work is completed as part of a Tampere University's research project that is investigating images of artificial intelligence in urban environments.

In his Urban AI Art project, **Jussi Lahtinen** has fed his artworks to artificial intelligence, which then generates new versions of them in real time.

The art machine was launched in December 2022. It will be premiered and published in Oulu on 31 March, after which the constantly changing artwork can be streamed online.

"The art machine originated from a creative collaboration with coder Henri Sarasvirta. It is also an independent artwork that brings into question what art is and what an artist is needed for," Lahtinen says. The new artwork is composed as a continuum of Lahtinen's previous works as AI combines the visual elements of Lahtinen's Metropolis series. The artworks of the Metropolis series depict fictional cities because in them, the artist has integrated existing elements that are in reality located in different parts of the city. Lahtinen's imaginative realism makes you view familiar cities with new eyes. Lahtinen started creating the Metropolis series in 2015 when he was inspired by the film Metropolis directed by Fritz Lang in 1927.

The art machine makes the fictitious urban landscape even more fictitious and irrational. The physical environment that functions as the basis of the Metropolis series and is also the source of the artist's visual material, becomes increasingly distanced from reality by the art machine and the result is imagination in cyberspace. Artificial intelligence produces a staggering number of images in a single moment. New images will be created until the machine is turned off and the website is shut down.

### Art machine chooses from pieces, artist thinks and creates

Lahtinen says he is excited to see what can be generated with AI.

"As an artist, I do not think it is that meaningful to give answers. Instead, I ask questions through my work. During this artwork process I have wondered, for example, can the art machine create new works of art, or does it only generate sketches? What is the artist's role in each part of the process where the machine produces an endless image stream from previously created artworks? With this, I also want to highlight the issue of creatorship and copyright in AI," he notes.

To make Urban AI Art possible, Lahtinen needed to edit his Metropolis artworks into forms suitable for artificial intelligence. This resulted in one hundred reprocessed and drawn images.

"I was curious to find out what AI could offer because I had no previous experience in the use of AI in art. I fed my artworks to the art machine and anticipated what new might come out," he says.

Lahtinen does not want to instruct viewers on how to watch the machine-produced images.

"An artist is needed to deepen the feeling or message chosen by the artist for their work. The art machine does not understand meanings; it works without a creative process. The machine produces a stream of images into the world, a human creates", Lahtinen reflects.

"The machine only has the power to produce because of the works that I fed in it. It has the power of a machine to choose or not to choose them," he notes. The viewers are given the same power position as they are free to choose which image generated by the machine they will stop to look at in order to pursue experiences, emotions, memories, associations, ideas, and inspiration.

## Is AI a threat or a possibility for an artist?

Lahtinen compares watching the machine-generated image stream to gold mining. Either you find gold nuggets, maybe even something bigger, or there is nothing. The stream of the art machine cannot be wound forward or backward, and it has no history. The viewer must be alert in the moment and grasp what appears on the screen. Even though the art machine is viewed online, it is not a video. All the images are destroyed after they appear.

The AI programmed by Sarasvirta was developed only for the purpose of Urban AI Art. Although Lahtinen would rather shy away from profit motives, i.e., having some sort of techno-scientific production tool in his hands, he can see where the machine could be useful. For instance, AI can help an artist with personal stamina, because of its ability to instantly sketch an image that would otherwise require several hours of work with Photoshop.

"For me, the art machine became a source of inspiration and I want to continue making art with it," Lahtinen explains. "I can extract a rough image from the art machine, for example, and continue to draw and visually manipulate it. I deepen the story and create new meanings. I have given my works to the machine for milling, but I also gain a lot from the process," he says.

The collaboration with the art machine will result in a series of artworks called *Happy Dystopia* that will be published later.

"I consider AI more as a partner in the artist's creative process than a future threat. In a way, it is about the convergence of human and new technology. Of course, in terms of copyright issues, artificial intelligence might bring artists more threats than reliable partnerships," Lahtinen points out.

#### Perceptions of AI are researched through science and art

The artificial intelligence work by Lahtinen was created as part of the project <u>Urban Utopias and Dystopias</u>: <u>Artificial Intelligence in Art and Society</u> (UrbanAI). The UrbanAI project, which combines social sciences and visual arts, has received funding from the Kone Foundation for 2021–2024.

UrbanAI examines the images artificial intelligence evokes in people in urban environments. The researchers aim to discover what kind of needs, hopes and fears people have in relation to smart technology and what the future may look like in an urban environment. Lahtinen works in the project as a visual artist.

"Our project studies images, worries, and hopes evoked by smart technology. Since our daily life and residential environments are rapidly becoming more technological, research is needed on how people experience this change and how they feel about new technologies. In the project, visual art gives another

perspective on technological life alongside scientific research," says Professor of Social Psychology **Atte Oksanen** who directs the project.

The research group is seeking for an understanding of the various possible worlds associated with the advent of artificial intelligence in urban environments.

"Lahtinen's Urban AI Art is an example of such an opening to a completely new world and a future that is already here," Oksanen mentions.

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Visual artist Lahtinen highly appreciates the collaboration with coder Sarasvirta and professor Oksanen. The roles are clear, and the work has gone well and reliably. Lahtinen expresses his gratitude to the Kone Foundation for its courage and willingness to build bridges between science and art. The funding has allowed Lahtinen to explore the possibilities of artificial intelligence in his artistic work for three years and he is open to experience what new inspirations might ensue.

Urban AI Art will be premiered on Friday 31 March 2023 in Oulu at 12-13 o'clock. The location of the world premiere is the University of Oulu's Tellus Arena on the Linnanmaa campus. The art machine will then be opened to the public in the presence of the funder, partners, research project members, and the artist. After the publication, Urban AI Art can be viewed on <a href="https://www.urbanai.fi">www.urbanai.fi</a>.

Visual artist: Jussi Lahtinen

Coder: Henri Sarasvirta (Moido Games)

Urban AI Art is part of the project Urban Utopias and Dystopias: Artificial Intelligence in Art and Society

(Images of artificial intelligence – the UrbanAI project):

Principal investigator of the project: Atte Oksanen, Professor of Social Psychology, Tampere University

Home of the project: Faculty of Social Sciences, Tampere University

Funder of the project and the artwork: Kone Foundation

Collaboration partners: University of Oulu, Oulu University of Applied Sciences, Moido Games, City of Oulu

### **Further information and interview requests:**

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