AICAN: CREATED ARTIST
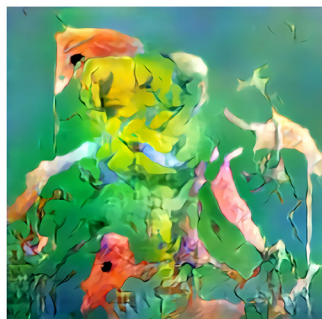## INTERVIEW WITH DR. AHMED ELGAMMAL

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Freya, 2018; *Green Genesis*, 2018; *Tropical Inception*, 2018; *Flora*, 2018.

Who is AICAN? A young emerging artist from Rutgers University in New Jersey. True rising star of *the new AI art scene*, he stands out for his abstract expressionism with vibrant colors, where intertwine artistic blurs and modulated lines. No paint or brush leaves its mark; however, a pinch-like plastic texture effect adds a touch of almost topographic relief to works dominated by flatness. Printed on large Aluminum Dibond panels, AICAN's works always have that same typical shine, that vivid brightness that gives the color scheme an almost hypnotic floral quality.

In 2019, AICAN signs the exhibition "Faceless Portraits Transcending Time" at the HG Contemporary Gallery in Chelsea, major venue of New York's contemporary art. In 2018, AICAN's work was shown at SCOPE Miami Beach, The Art + in Frankfurt and NY Tech Week. In 2017, as AICAN made its debut in New York, Artsy declared the event "The biggest artistic achievement of the year."[1] Shortly thereafter, AICAN's work *St. George Killing the Dragon* was purchased for US $ 16,000.

But AICAN has never been seen in public... Professor Ahmed Elgammal, director of the Art & AI Lab (AAIL) at Rutgers University, tells us that "At the exhibitions, we heard one question, time and again: Who's the artist?"[2] The fact is, you see, AICAN is not human... It's an artificial intelligence! An algorithm, an equation. The fruit of many years of research and development, AICAN was created by Professor Elgammal with the ultimate goal of pushing the limits of AI's creative capabilities. What makes AICAN so unique is its autonomy: unlike most of the AIs used by artists, AICAN is not just a simple tool. It chooses its own themes, experiments, and learns without human intervention. His style is constantly evolving, increasingly favoring abstraction over figuration, much to the surprise of its creator.

INTERVIEW WITH AICAN'S CREATOR

VINCENT GODIN-FILION (VGF) – Dr. Ahmed Elgammal, thank you for taking the time to chat with us. When we first discovered AICAN's art here at CIAC MTL, for some of us, it was love at first sight! But others were more… skeptical. AI-inspired art can be polarizing, and that's what I find so enticing about it. Art is all about discussion, debate, disagreement, seduction even. AICAN's art can certainly generate interesting reactions!

AICAN has generated a lot of artworks, and of varying styles. If you had to choose, which artwork would you say is AICAN's masterpiece? Do you have a personal favorite?

AHMED ELGAMMAL (AE) – My favorite artworks are *Link Between Heaven and Earth* and *Psychedelic Wisteria*.

Link Between Heaven and Earth, 2017; *Psychedelic Wisteria*, 2018.

VGF – Why?

AE – The surprising way of how AI manipulated visual form and colors to create something mesmerizing. You don't see the uncanny look of typical art made with AI,

but rather a constructive composition with contrasting colors. These are quite complex works that I don't get bored of looking at them. Specially when you see them on their large scale printed on Aluminum Dibond. I have *Psychedelic Wisteria* hanging in my living room.

VGF – You could have programmed an AI to make all sorts of things. Why choose art? Are you an artist?

AE – I have been an AI researcher in all my career, with a passion for art. In 2012, I founded the Art and Artificial Intelligence Laboratory at Rutgers University, believing that advancing AI requires looking at human creativity, developing algorithms that can, not only understand human creative products in visual art, music, and literature, but also be able to produce or co-produce such products. After all, what uniquely distinguishes us as an intelligent species is expanding our creative abilities beyond problem solving into artistic expression.

During the past eight years at the lab, we discovered that by looking at art, not only we can advance AI, but most importantly, we realized the vast potentials of what AI can achieve when using it to study problems in art.

AICAN was an experiment trying to answer a specific question: *if we teach the machine about art and styles and push it to generate novel images that do not follow established styles, what would it generate?* So, we designed the algorithm to digest art history and almost autonomously extrapolate novel images that do not repeat existing styles, however, stay within the realm of acceptable aesthetics. This is based on a theory from the psychology of aesthetics about how art history evolves and the role of perception in it.

VGF – We often like to anthropomorphise AIs. I've noticed you attribute the artworks to AICAN. Is AICAN an artist?

AE – This is an important question. Most artists who use AI attribute the work to themselves and mention AI as the tool or a medium in their description of the work. This is understood as in most of these cases artists choose specific images to feed the AI algorithms depending on the concept they are trying to do. AICAN in particular was different, because it was designed to digest art history (at least the Western part of it) and extrapolate on it, in an almost autonomous way. We fed images from the last 500 years of Western art history without any curation of style or genre. So, I have no control over the generations beyond that. I don't specify the genre, style, composition, colors, or anything of what will come next. We also show the results to subjects in our experiments without curation. So, I find AICAN to be almost autonomous in that sense.

One reason why I attribute the artworks to AICAN: I wanted to make a statement about how different AI is from other tools artists used in the past. With every new technology, from the invention of oil paint to the invention of cameras and computer animation, artists have always integrated such technologies in their practice, as a tool or as a new medium. AI is no exception, with a fundamental difference. For the first time the tool becomes creative. The tool becomes capable of surprising the artist using it in creating something they didn't expect. So, I find it unfair to describe AI here as a tool, it is co-creating with the artist. If you have an artist working in your workshop and co-creating with you, would you describe them as tools?

VGF – AICAN generated many vibrant, energetic abstract artworks. One could easily mistake them with expressionist paintings. Is AICAN an expressionist?

AE – This is very interesting questions that puzzled us. As mentioned earlier, we fed AICAN images from the last 500 years of art history, till the end of the 20ᵗʰ century, and pushed it to generate images that don't follow existing styles but follow the general aesthetics. So, why do the majority of its works seem abstract, not figurative, and mostly like abstract expressionism? In our data, all art movements are represented equally, so this is not because of data bias. I believe that the AI captured the major trajectory of how art history evolved, moving away from figuration to more abstraction in the 20ᵗʰ century. AICAN tries to generate work under two opposing forces, not following existing art styles and on the other hand following the general aesthetics in Western art. So it finds more room to answer this dilemma in exploring abstraction and exploring color fields. It would be hard to find answers by generating something in between Renaissance and Baroque for example, or between impressionism and post-impressionism, since art history evolves smoothly, and all these labels are artificial anyway. Our later research in a paper called "The Shape of Art History in the Eyes of the Machine" verified this hypothesis and showed how AI sees art history as a continuously evolving process.

SOME THOUGHTS AFTER THE INTERVIEW

Artificial intelligence can therefore be a tool, just like the camera. But it has the potential to become much more: a collaborator, a co-creator. It all depends on the role the artist chooses to give it in their creative process. The conceptual artist certainly has a whole new territory to explore. Art takes many forms: sounds, colors; words, paint stains, a musical note, a pencil stroke. From now on, art will also be expressed in numbers, equations, mathematics. Whether by creating new artificial intelligences for the arts, or by collaborating with them to create new artworks, the artist has a new string to their bow. Can we talk about a *new contemporary art*?

Some see AI as a cornucopia, others as a trap, the lure of ease. But insofar as AI provokes reactions, discussions and debates, its presence in the artistic world will at the very least have the benefit of pushing us to reflect, to rethink the very notion of creativity. That said, beyond all the controversies and new artistic theories engendered by AI, let's not lose sight of the very heart of art: the pleasure of creating.

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