ArtHist.net

Arts: The Machine as Artist: An Introduction

Basel
Deadline: Oct 31, 2017
www.mdpi.com/2076-0752/6/2/5/htm

Dennis Kiss

The notion of arts and technology approaching each other more and more is a fact to be inevitably considered in recent developments. Technical devices being used by artists to produce art is only the beginning – we may already easily speak of the machine becoming the artist itself in a major dimension.

For this special issue of "Arts" we would therefore like to call for artists, art historians, scientists, engineers, humanists and other interested colleagues to lay down their thoughts and views on the topic of art and technology not only going hand in hand with each other but overlapping crucially in the field of artificial intelligence (AI). It is the issue's goal to reach comfortability when speaking of "the machine as artist". We would like to focus on analysing and determining the state of art in mechatronics and computation. It is an inevitable requirement to be fulfilled, that the machine is going achieve an aesthetic sensitivity and therewith will help to a friendlier and more sensitive machine intelligence in general.

The special issue's major theme being the idea that we can at present begin to think of the machine not as the artist's subject matter or medium, but as creator or co-creator, we would like to focus on the topic's several subfields:

1. The kinetic or robotic art works whose movement and/or behaviour has become so sophisticated that we are entitled to regard them as performance artists in their own right.
2. The algorithmic studio assistants set loose to embellish computer-mediated graphic or sculptural works of art, and which work is then output via large-format ink-jet printer or additive manufacturing system, or as video.
3. The autonomous and cleverly-designed painting robots which, drawing upon the emergent properties of minimally-intelligent systems, are nonetheless able to create striking abstract works.
4. The far more computationally-intensive anthropomorphic robots able to create sensitive and imaginative portraits of their human subjects, or engage in other forms of graphic virtuosity.
5. The purely computational/AI systems which qualify themselves as aesthetically competent entities, if not actual artists, by their ability to predict the style period and/or author of existing works of graphic art.
6. The purely computational/AI systems capable of isolating and capturing the style of a given work of graphic art and applying it in an aesthetically-pleasing manner to an arbitrary image.
7. The purely computational/AI systems capable of generating striking imagery based on otherwise mundane or even random visual input fields.

Physical robotic systems recognizing, analysing and even producing arts show an essential over-lapping of these sub-genres with traditional graphic arts. These graphic arts have emerged as a vital research arena for the artificial intelligence community and as an extension of mankind in various other fields. It is therefore not the question anymore, whether artificial intelligence is capable of winning a real amount of autonomy, but rather whether it can operate in humane and responsible manner, namely including an environmental dimension.

Graphic arts performing a non-competitive, creative and humane activity, gaining aesthetic values, clearly defines the development's direction of the addition of aesthetic capabilities to the machine intelligence armamentarium perhaps bringing us an important step closer to the addition of a sense of empathy and responsibility, as well.

This potentiality is what we would like to propose as the focus of our special edition on "The Machine as Artist".

We are eager to hear more of the thoughts of the artists, engineers and scientists working with the machines, considering the question whether there can be a humane intelligence apart from the sense of balance, harmony and attention to detail that we normally associate with aesthetics.

We hope to provide here an opportunity for specialists in the fields of computer science, neuroscience, anthropology, and especially art history to share their thoughts on a more open-ended basis. We do further hope for interaction to happen between the humanities and sciences in respect to this question of humane machine intelligence.

In this respect, we would like to invite potential contributors to submit written reports on their experiments, thoughts, new results, experiences at the crossings of art, science and technology, to be considered by our review panel.

1) Space Machines Corporation, 3443 Esplanade Ave., Suite 438, New Orleans, LA 70119, USA
2) Department of Computing, Goldsmiths College, University of London, SE14 6NW London, UK