The book contains the papers, installations, posters, artworks and live performances presented at XXII Generative Art conference in Rome, Italy.

In the cover and in the section titles, drawings by Leonardo da Vinci, representing natural events, as a homage to the 500th anniversary of his death

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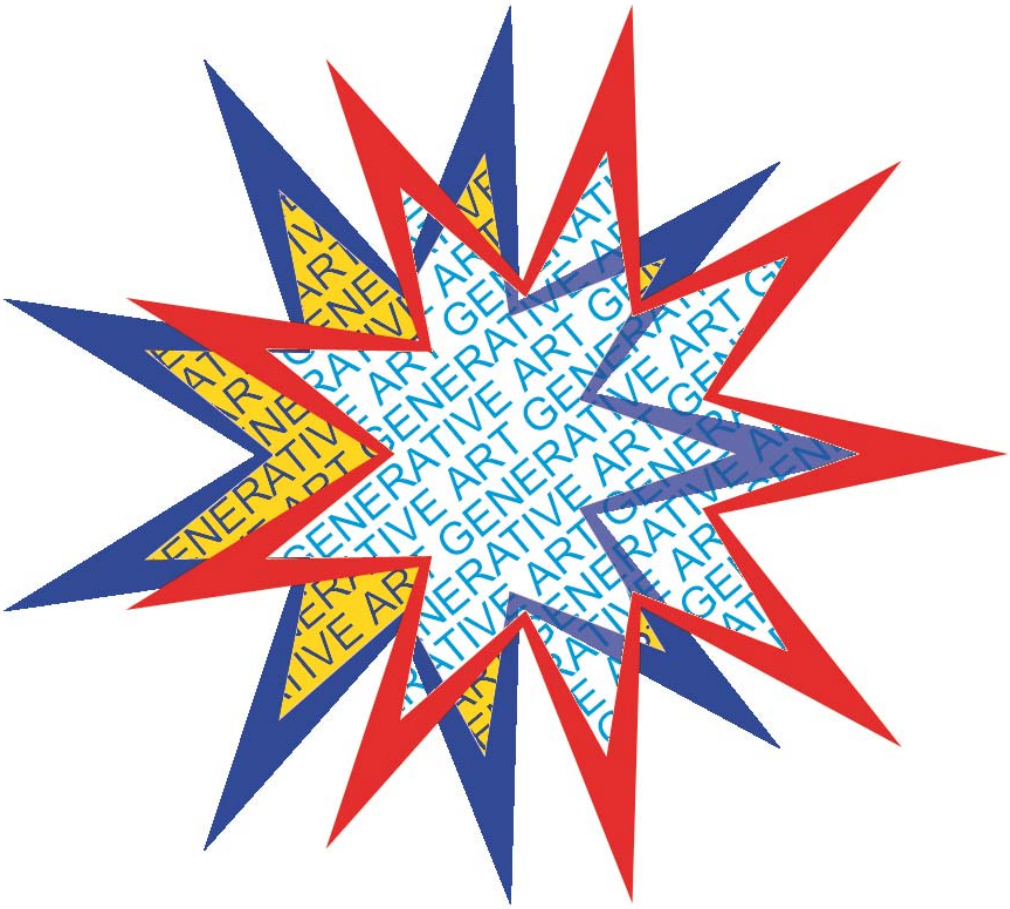

GENERATIVE ART 2019

GA2019, XXII Annual International Conference

Roma, 19, 20, 21 December 2019 at the Museo Nazionale Etrusco di Villa Giulia

Proceedings

Edited by Celestino Soddu and Enrica Colabella

Generative Art and Design Lab, Argenia Association, Roma, Italy

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OPENING XXII GENERATIVE ART CONFERENCE

Twenty-two years ago, the Generative Art conference held its first event at the Politecnico di Milano, organized by the Generative Design Lab. The digital era took its first steps.
Today everything changed. The rapid development of technology has led the majority of people to use digital media on a daily basis. But it also led to a development based essentially on technology and not on widespread digital culture.

The Generative Art conference has existed for twenty-two years but a few years ago there was still someone who tried to make us understand what Generative Art is, claiming to do so with an approach dated, still based on cataloguing into "objective" categories and without considering the thousands of works that had been presented at the GA conference in the previous decade.
These type of attempts to catalogue Generative Art, which however have continued until today, committed a serious error of approach, which appears immediately clear as these definitions speak of Generative Techniques, inserting Generative Art in the category of techniques i.e. computer art, evolutionary art, robotic art, and interactive art, Most of these definitions of Generative Art was made without considering that, on the contrary, Generative Art is not a technique but a peculiar scientific approach to creativity. It is a revolution compared with the "objective" approach of problem solving and optimization where technique is predominant on the poetic of the artist.

This attempt to define Generative Art as a technique has an explicit purpose: it tends to maintain the supremacy of the anonymous on the subjective vision, but above all the supremacy of technology on the subjective interpretative logics, even in art.

What emerges progressively from the works presented in these 22 years is that Generative Art is a peculiar approach to creativity able to rediscovers the author. Each author uses different “techniques”, most of them directly created by the same author, but the peculiarity is the subjective approach in defining the own vision and the related generative path. Finally, after almost a century of collective dominance and disappearance of subjectivity, the recognizability and appreciation of the artist's vision finds a central role in the papers and generative artworks presented to GA conferences. The generative structure stems from the ability to insert subjective interpretation into machines, or rather to use machines to enhance the uniqueness of each artist's vision.

Everything is changing, and digital culture opens up new possibilities. Today, the need to conquer new spaces of complexity has led to the rediscovery of the uniqueness of individual logical approaches. This is called singularity in the last AI systems. It opens new horizons to the ability of Artificial Intelligence to be in line with a possible relationship between man and machine. AI is moving from a merely instrument of pre-packaged services toward advanced tool with the ability to answer to possible unpredictable requests.

Not only. At least in the advanced approach, the axiomatic concept of optimisation, understood as an objective standard to be achieved in the AI response to requests, has been overtaken. The concept of adaptivity understood as the search for the possible within a subjectively identified and "unique" logical vision, with respect to possible parallel visions, become the future.

Generative Art finds in this new wave its peculiarity. The future of Generative Art is to free

itself from having to be catalogued in categories belonging to the techniques used to achieve it. Instead, it becomes the bearer of what, today, is not only a rediscovery but also an innovation of digital civilization: the identity of the author, of the artist, of the multiplicity of interpretative logics capable of creating not only culture but a pertinent response to the request for complexity.

So let's not talk more about what Generative Art is, there are more than a thousand texts and experiments presented in these 22 years at Generative Art that tell us about it, but let's ask ourselves what the future of Generative Art is. And let's start from the work done in these 22 years by the participants of the GA meetings.

The GA conference has opened the doors to many scientific works and experiments, to different theoretical approaches that have, every year, generated even hard debates. What appears after more than two decades is precisely the re-emergence of subjective visions, of the multiplicity of ideas based on the logical interpretation of the world around us. This appears even if these subjective visions are, very often, hidden because of the current overestimation of technology as a "collective work", each subjective logic emerges and conquers its space as it is the only chance to successfully face the complexity of the context that surrounds us.

The future of Generative Art therefore does not depend on identification in possible techniques, in the use of advanced technologies, but is concentrated in:
1. To support the new course of AI by managing the complexity of these systems through the "singularity" directly connected to logics based on interpretative visions, to the author-artist who defined them. The aim is to create a new man-machine relationship that is not axiomatic but interlocutory and "cultural".
2. Rediscovering the role of the author-artist because the Generative Art results are multiple, different and sometimes unexpected but always linked to a logical interpretative vision of an artist, an author, a software designer. The production of variations by machines tells, with complexity and progressive relevance, the idea of an artist.

The machines can therefore work partially autonomously but, within the machines, we will finally find the author, his recognizability and identity, and his ability to give us answers not only objective and optimized but complex, different, unexpected, certainly more relevant and more useful to choose how to broaden our vision of the world.

Celestino Soddu and Enrica Colabella

Chairs of Generative Art annual conferences since 1998

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