Christian LAVIGNE (France)
> multimedia artist and writer, pioneer of the digital sculpture, Co-founder and President of ARS MATHEMATICA.
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Biography

Born in 1959, Christian LAVIGNE, after a few years in studying mathematics and ethnology, decided to devote himself to art and poetry, in the 80's. He contributed to several magazines, poetry cabarets and radio shows. Proposing the concept of "Graphènes" (graphical/geometrical words), in the thread of the modern Abstract Art, he developed a coherent personal poetical aesthetic universe, based on mythologies and symbols. For 30 years, the artist uses computers, Numerically Controlled devices or (since 1993) Additive Manufacturing machines, and is now well known as a pioneer in digital sculpture.
With Alexandre VITKINE he created ARS MATHEMATICA, which organizes the worldwide computer sculpture biennial INTERSCULPT since 1993, and numerous events related to art and science, among them the WEB CAST – Café des Arts des Sciences et des Techniques – co-founded by Simon DINER († 2013) and Christian LAVIGNE. The artist also created the TOILE METISSE association, for the meeting of North and South cultures. Considering the rising obscurantism, Christian LAVIGNE thinks that the artists have to defend and promote the freedom of expression.
With the Prof. Mary VISSER (Southwestern University, Texas, USA . Vice-President of ARS MATHEMATICA), Christian LAVIGNE is currently writing the first book on the digital sculpture history.

Lecture title and abstract

Sculpter avec des machines: histoire et mythologie, réalisations et perspectives
/ Sculpting with machines: history and mythology, achievements and future prospects

For an human being who doesn't pretend to be a god, only 3 ways are possible to make physical objects: the Subtractive Manufacturing (to carve, to abrade, to remove part of a material); the Additive Manufacturing (to add and shape a plastic material, eventually layer by layer); and the Assembling Manufacturing (to link various things together). In some cases, and we can say in most cases, the bare hands are insufficient. Even some animals know that .. and make tools. The word "manufacturing" comes from "manufacturer", whose etymology is Latin: "*manu facere*" = perform by hand. Thus, the semantic field is misleading, and demonstrates the persistence of an ambivalent archaic thinking about the hand: skill, virtuosity of the man who uses his hands; poverty of the laborer (in French: [man-]ouvrier, manoeuvre), compared to the man who uses his mind. This kind of paradox continues throughout the history of art, especially that one which is written by philosophers and critics who are not artists. In fact, it is sterile and incorrect to contrast the hand with the mind, to bring into conflict the hand and mind with the tool and the machine. Because the main quality of the human being is a capacity to combine the "mètis" and the "tekhné" (cunning, intelligence and technique), according to the famous Greek concepts.
That is why artists, scientists and engineers have the same intellectual approach: they try to solve problems, and provide the means to do so. According to the people, cultures, eras, these problems can be individual or collective. When the solution is extraordinary, mythologies are born.
Historians of techniques are rarely interested in mythological roots of discourses and practices of modern technology - which think itself in separation with an irrational past. You can find ethnologists, archaeologists who have studied or are still studying the primitive tools or machines in distant cultures, past or exotic, in terms of myth and religion, eg the potter's wheel, the loom - in their traditional versions. You can also read philosophical and sociological essays speaking of "contemporary mythologies" - beginning with the great book by Roland Barthes, written in the 50s. But, oddly enough, only a tiny handful of specialists have given our technological history with perspective millennia. In this regard, the work of Lewis Mumford is considerable, but needs to be updated.
The 3D technologies and the Digital Sculpture are ideal subjects for transdisciplinary studies (and realizations). We will propose a quick survey on their history, from potter's wheel to 3D printers and NC machines, via the Rose Engine, and from the pantograph to the 3D scanner, via the Perspectographs. We will see that the most modern works and machinery can be connected to ancient traditions. Thus, the present rhetoric about a "new revolution" must be seriously questioned.
The conference will conclude with an overview of topical artists of the digital sculpture, and with a discussion of the immense possibilities of new techniques and materials for the sculpture.