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Atavism
*as a creative method in media art*
An ontological and epistemological enquiry in the possibilities of the combined use of artistic and scientific cognition
Media-archaeological experiments in combining low-tech and high-tech methods

Thesis

Supervisor
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The starting point of my DLA thesis is the tacit premis of the doctorate studies in the field of art that postulates implicitly that artistic activity is, in effect, research that generates a certain kind of knowledge. My study places the experiments I carry out in my artistic work in a broader context, identifying their ontological and epistemological bases. In doing so, I analyse the recent changes in the concept of science, the variety of approaches adopted in epistemology, cognitive science, the history of science and cultural anthropology when studying scientific methods and scientific truth, and I draw parallels between these approaches and the methods of art history and art theory.

The main directions of my research are
- the possible relations of art and science;
- the changes of views in relation to one another;
- attempts at classifying the common and different histories of these views by linear or non-linear structures and the demonstration of the patterns apparent in those structures.

My focus is the media-archaeological practice that takes as its basis and reinterprets earlier theories and abandoned premises, experiments or technical apparatuses. Borrowing the term ‘atavism’ from biology, I extend its meanings for the purpose of studying such products and methods of art, science, contemporary media art and medium-art that may be related to or derived from artistic or scientific media of earlier periods, and entail references of present-day practices and forms to those of earlier periods. This meaning of atavism clears the term of any negative connotations.

I found the traditional PhD structure inadequate for my thesis. Its linear structure is determined by a set of circular systems of associations for which I have coined the term ‘foam structures’¹.

In my overview of epistemological trends I use Kuhn’s concept of the paradigm, which he replaced later with the concept of the disciplinary matrix. I find his concept compatible with a certain interpretation of the ‘uncorrupted eye’.

**Thesis 1** – Ruskin’s concept of the innocent eye, the gaze freed from the bondage of prejudices, can be interpreted meaningfully most of all as a faculty to “see things differently”, defining the gaze burdened with prejudices adhering to any one paradigm. Breaking away from that makes possible the shift to the acceptance of a new paradigm. Comparing prejudice and paradigm seems logical to me: in the age of normal science, the generally accepted paradigm prevails in the scientific community as a system of prejudices. In my understanding, when shifting paradigms, the observer “shifts worlds”, that is, the Umwelt perceived and constituted by him changes with the change in the mode of perception.

**Thesis 2** – Art historical hermeneutics interprets the work’s field of experience, its particular world model. In my understanding, interpretational recourse is an atavistic gesture, permanently leaping backwards and then moving forward, calling forth new operations of enquiry in the new circles of interpretation on Bätschmann indeterminate

¹ This structure corresponds to the ‘spherical association system’ Miklós Erdély outlined for me as a method governing the interpretation of his works in the summer of 1985 in a private conversation at his home in Virágárok Street (Budapest). In his theory, we can arrive at interpretations in various ways, with the circles of associations or, modelling in 3D, the spheres of associations connecting to one another, the interpretation moving from the surface of one to that of another. They are to be constructed in a work in a way that one can arrive at the interpretation in various ways, and it can be expanded in many ways, too. In my reading, Koestler’s theory of bisociation, is equivalent to Erdély’s 3D system of the connected interpretative circles, their foam structure, where the meanings of the original sets are neutralized, overwritten, and new, different perspectives emerge. This we can no longer interpret as a disciplinary matrix but as an interdisciplinary matrix.
plane of interpretation, on the infinite Möbius plane.

**Thesis 3** – When shifting paradigms, researchers often returned to an earlier theory that had been and considered outdated, placing the earlier tenets into a new light, making the “recycled” theories the bases of the new (inter)disciplinary matrix. We can call these cases atavistic too, as referring back to earlier tenets and re-interpretation are characteristic of scientific and artistic thinking in general. In fact, any paradigm with a name starting with ‘neo’ uses the atavistic method of hitting back to their predecessors. But references and reinterpretations are characteristically present all fields of science and culture.

**Thesis 4** – In the scientific and artistic communities the canon is shaped by grassroots and top-down forums. Demarcation decisions are ultimately made on this basis: determining what is science and whether a product can be called art or not. This is true even of artistic programmes that reject the canon, as the demarcation strategies of the counter-canon define their borderlines by way of over-writing those of the existing canon, determining what is within and without the new canon, defining the overlapping areas and the limits of movement inside and outside the canon. As spheres, canons are related to intellectual spheres within and without their domain, as interactions of *Innenwelts* and *Umwelts*. Extending Jakob von Uexküll’s biosemiotic theory, we can define these Innenwelts and Umwelts and their interactions, and using Vladimir Vernadski’s concept of the biosphere we can call them the topologies of semiosis as understood in Thomas Sebeok’s theory, or using Yuri Lotman’s term, as semio-spheres, the space of culture. In fact, the semio-sphere is a relational biosphere, which, according to Lotman, is a structured system, similar in its complexity and dynamism to living organisms.

**Thesis 5** – Analysis of the notion of time manifest in art and science reveals that the concept of art is fundamentally different in art from that in science in its concept of the past: it is self-referential and recursive – in essence, it is atavistic.

**Thesis 6** – Based on George Kubler’s tenet of art historical time, the domain of media-archaeology I explore is the return to tools defined as ‘arrested class’ things, a reinterpretation of an older product now, in possession of knowledge of a more advanced set of tools, the identification and recycling of unused potentials and possibilities, while also producing a new quality at the same time. It is this method, re-using old techniques that I call atavism, a method of creation that involves the reinterpretation of a seemingly outdated medium and producing works based on that medium.

**Thesis 7** – The atavistic tendency is also essential in Arthur Koestler’s study of the creative act, where he argues that in the process of bisociation, the mind temporarily returns into a less specialized, more primeval and primitive level – *“Reculer pour mieux sauter”*2, that is, it steps back to gain impetus for a bigger leap. Reconsidering the relations of old elements, backing out or stepping back lead to the establishment of bisociative relations, leaping forward and reunification – these are present in all creative processes.

**Thesis 8** – Every work of art is a world equation, as the entirety of its meanings condensed in its unique form can be interpreted as a world model. The tenet that it does not make concrete statements about the essential nature of the word and it does not describe the world but only proposes ways to observe the world is true of science as well as art. Therefore, both science and art create cognitive perceptual codes, that is, various metaphors of the modes of seeing and perceiving the world. Consequently, like myths, scientific theories or works of art are enclosed, homogeneous “round worlds”, attempts at

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interpreting the world, presenting a world model from various aspects.

**Thesis 9** – In light of the findings of neurobiological research and the latest cognitive theories, the notion of the contradiction between nature and culture, prevailing since the age of Enlightenment, is to be abandoned. Nature and culture can be studied and understood as parts of a system, in their relation to each other, in their complementarity.

**Thesis 10** – Controlled by the mirror neurons, activating the atavistic, most primeval system of our perception, the one with the lowest level of reflection, mimicry is the basis of the existence and working of art.

**Thesis 11** – In opposition to Frederick Turner’s findings, I consider culture not as the primary system to produce the esthetic, not as a calognetic system but one that is based on the mimicry, the mimesis of structures of nature, producing world models based on recognition and the use of the self-constituting algorithmic patterns, constructed and formulated in world models with the method of bricolage – be its concrete forms myths, rites, art or science. In these practices, a “beautiful”, witty and elegant world interpretation does not necessarily comply with the notions of “good” and “just”, as they are always determined socially, and can only be studied in that context.

**Thesis 12** – Instead of a polarized and simplistic approach, my artistic practice is determined by the complex “one-package” exploration of the intentions and products of science and art. It is movement backward and forward, in space and time, between the discipline, reaching back (this is what I call atavism), and then moving forward that determines them on the basis of various spatial and temporal coordinates (where/when) as science or (when/where) as art in the art of the medium and media art based on a dynamically structured history of techniques and technologies, and also on the history of art and the history of science.

**Thesis 13** – The gap between the world perceptible through the senses and the world interpretations accessible to the intellect has always been there in the history of mankind. As myth, religion, art and science stem from the same root, due to their common origin, art can have an increasingly significant function in filling up that gap between perception and knowledge in our millennium.

**Thesis 14** – Deleuze and Guattari’s concept of the ritornell – which is a reiteration of a musical pattern, the chorus, a kind of atavistic recurrence –, the circle of musical sounds, sound sequences and frequency patterns can be extended to the patterns created by light, to visual perception, and to a concept of ritornell that can be related to imaging, considering that, since the early days of mankind, the methods and techniques of representation in images have been used as means for the domestication of the Cosmos, as parts of the ritual sequences of acts in the myths of the Universe. The ritualistic coding, decoding and recoding of the ritornells of a tribe, nation or community constitute style, iconographic form.

The ritornell defines the safe and domesticable areas – the ritornell constitutes revir. With its patterns, the ritornell fills up the gap between biological and cosmic time, between profane and mythical/scientific knowledge.

**Thesis 15** – The gap between direct experience and the world-view of science seems to be growing.

It is in order to fill this gap that an artistic programme emerges, one that provides sensory experience through presenting the principles of abstract, non-empirical knowledge, visualizing philosophical content, lending a concrete shape to philosophical content,
creating the shapes of thinking. Art has always been suitable for that, and with Eco we can say that art is always the metaphor of the science of the age. In my view, resulting from the social embeddedness of science and art, art is not only a metaphor of science but a reflected phenomenon with a social function, suitable for filling the gap between art and science, and as such, it has intellectual significance too.

**Thesis 16** – From the wax tablet to quantum computer, in any age the mind sees the essence of its working principle in the expansion of the main technological medium of the age, with that expansion influencing cognition, it has an effect on it, and provides models of it. In my view, this does not result from the technology itself but from the social-economic-political need that breeds the main technological medium of the age and constitutes it through inventions, modeling, and at the same time, the working of the mind. In other words, it constructs a new world-view, referring and adopting its being-there recursively to the pattern offered by the medium. With Kittler, se can say that: “...we knew nothing about our senses until media provided models and metaphors.”

**Thesis 17** – Curatorial practice, like any form of connection with the institutions and power structures is to be rejected consistently; utopistic attempts at diverting them, changing them from inside have been unsuccessful – this is especially apparent when studying the conditions of culture in Hungary. The traditional gallery and its visitors are no longer competent to evaluate works of art. Consistency in staying away and in abstention from the spheres of official art institutions and the world of galleries, turning non-spaces into spaces, turning times into durations and occasions; artist-run productions based on self-organisation; projects, exhibitions and venues based on social networks seem to be the only viable ways, with shared authorship, and generating open works that encourage participation, constituting community knowledge. Art – as also conceived by Nicolas Bourriaud, whom I criticize in many places in my thesis in relation to Guattari – is a form of cognition: “a construction created for the purpose of obtaining knowledge about the world with the help of concepts and perceptions ...”

**Thesis 18** – In my thesis I analyze a particular method of creation that I call atavism. In addition to bringing new finds to the surface, media-archeology, or rather medium-archeology reveals relations neglected until now, calling the attention to such interrupted technological and intellectual processes that could not unfold fully in their own historical period but are seminal for today’s media-archeological thinking and for the artistic practice that uses this thinking. In their research and practice, medium(archeology)artists use the possibilities and opportunities emerging from chance coincidences that lead to “unforeseeable discoveries instead of futile search”. Thus, the artist reconstructs the moment of invention, based on the analysis of the inventor’s lucky moment. He/she includes this moment in his/her art, mixing high-tech and low-tech, digital and analogue methods. In this sense, the artist uses atavistic methods too, but his/her atavism is never retrograde. Using the technologies of earlier ages, employing or reconstructing old methods, referring back to them means reinterpreting them, creating a new quality, a synthesis of old and new media, high and low, digital and analogue, neutralising the dipoles with the method of “Reculer pour mieux sauter”. The creator of medium(archeology) design domesticates the past from the direction of the future for his/her present – designing his/her Dasein.

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