

MOLECTRONIC NETWORKS

FRANZ XAVER



NO END OF THE PARABEL

Culture was founded as a step away from nature. In this way art assisted in the creation of a symbolic universe. Explosive innovation not only questions the socio-cultural status of the symbolic order but also takes aim at a meta-nature. A quasi-life — molecular/electronic creations, replicas, clones, doubles, etc., - break through the barrier (/) between s/S, i.e. the signified on the signifier after Saussure, likewise the "barre" of the Lacanian reversing of S/s ("a signifier is what a subject represents to another signifier") and radically undermines the symbolic contract. Quasi-life (AL and AI) is the subjectification of that which the barrier (the Freudian censor) was supposed to control. Constituted not merely through relations, it occupies a place that Freud called "the detour of a reality-tasting imagination". In dialogue, in the speech of the other, respective to the other nature, the suppression of our elementary insufficiency becomes an entity.

In 1986, before the mind boom, Franz Xaver had two conversation partners send each other visualized brain signals. At Ars Electronica 1987 he installed RadioARTive chairs where the body and environment temperatures of the conference participants were transformed into sound by a computer. At the 1990 APERTO Biennale in Venice he realized an interactive installation with the considerable height of 36,000 km. The data flow of a weather satellite positioned over Central Africa balances out the flow of a dynamic system arrangement whose components consist of satellite, antenna, receiver, computer and video beamer on the one hand and their effects on the other, the latter being interactively played out in a further component, an organic / psychological system (Recipient). In Summer 1992 Franz Xaver experimented together with Just Merrit and Leo Schatzl on an industrial site, Schrottplatz West Linz, with robots built at the location. With like-minded speed freaks, code poets, data surfers, cyber junkies, reality hackers, hypermedia installers, etc., he founded the KUNSTLABOR, a further node in the electronic subcommunity. In 1993 he again traversed orbital timespaces with a weather satellite sculpture, experimented with computation operations and chaotic structures in the mathematical approach to zero, showed wave-sensitive images which react at 496.025 MHz, and takes all the above to the Kultur-Kamikaze-Projekt MS STUBNITZ in Rostock. In the same year he is represented at Ars Electronica 1993 with molectronic networks of a nature significant to the history of earth: bacteria and algae in their biotopic milieu.

He had presented such networks the previous year in his exhibition "Fractal Geometry, Art and Bionics" in the Stifterhaus Gallery, Linz. Other works include the kinetic sculpture "Channel 38" (1991) where a Video-art transponder/generator transmitted the modulated decay of an apple on TV channel 38, and "Gnathonemus", an ornamental fish also known as a trunk-fish. In a special hardware / software configuration the artist demonstrated communication between the fish (living system) and a computer (artificial system). The gnathonemus proves capable of great variation in its basic frequency, traceable to external influences and of a scale of 6 Hz deviation, leading the artist to interpret frequency swings of over 6 Hz as the fish's response to triggered stimuli. The communication process could be followed on a digital frequency counter. But the molectronic networks Xaver has prepared for Ars Electronica 1993 need no power socket. A trend reversal for Xaver? By no means.

Like the previous generation of media artists, Franz Xaver is occupied with problems centred around the evolutionary factor information and which have become acute in today's post-bourgeois, telecommunications-based, mass democracy. (In these capitalistically organized societies, which are based on their economic capital as a social condition, communications means the mobilization of the social energy, capital-cultural goods are equal to economic capital, equal to sense-orientation, self-support and reproduction). The multiple presence of the cellular machine increases the efficiency of the organism as a whole. In contrast to single cell organisms, the creature with multiple cells is more able to reproduce, which is good for its life span, and for the development of morphologically differing bodies. Its evolutionary development lead to a cell differentiation with special functions and therefore to an improved physiological independence. Multi-cell organisms become different through their lifestyles and their means of obtaining energy. Funguses and animals feed on organic material. Plants need inorganic food; energy from the sun allows them to build up living material through photosynthesis. All multi-cell plants and animals developed out of the early single cell creatures, networks of molecular interaction that were the first living things. They are available to science in the form of fossilized remains and are up to 3400 million years old. Bacteria and algae, the first fossilized creatures, still exist today.

What biochemistry terms cellular metabolism, or cellulose exchange, already implies an organization and structure of molecular components. This means that these components are dynamically connected together in a continuous network of mutual interactions. The development of the first cells implied molecular substance classification having the ability to form units that based their situation in the environment on circular closed operative connections. In honour of the biologists and neurocyberneticians Humberto R. Maturana and Francisco J. Varela these units are named autopoietic systems. As these systems have molecular components, they satisfy physical laws, are spatially defined, but are not defined as autopoietic by virtue of their physical characteristics. The term depends rather on the organization of the unit and the means of its realization. Changes, for instance, that come about in a molecular system as a consequence of interaction, are defined as cellular units by their own structure. Various autopoietic systems differ in their structures, but are closely connected to their organization. Autopoietic, i.e. self-organizing systems have only one goal — their self-preservation. Evolution always selects according to the efficient and effective use of relevant information.

We, the individuals of the human species, are an accumulation of millions of complex cycles of an autopoietic system, maybe only "a kind of evolutionary inter-stage of a species of self-organizing systems." (Dieter Hombach: *Die Drift der Erkenntnis — The Drift of Knowledge*. On the theory of self-modifying systems with regard to Gödel, Hegel and Freud, Munich 1990, P. 131) The revolutionary trio atomic energy, micro-electronics and micro-biology has

embraced all areas of life, and its consequences are, like the processes of mechanical and dynamic technology before it, definitely irreversible. We communicate with digital assistants, almost life-like with virtual actors by Nintendo, and will in the not too distant future be surrounding ourselves with Genghis and Gnats (robots), etc. in our private lives, unaware that the metatheory of the organic/psychological system, the human being, is being drawn up by expert systems (AI).

The molelectronic networks of Franz Xaver are an out-sourcing variant of media art, and therefore to be read as a contextual hint; taken intertextually, they release a multitude of cognitive information — provided that the areas of cognition of the producer and the recipient overlap sufficiently with each other.

F. E. Rakuschan