ASTRID MANIA THE ART OF FUSION¹

To describe Thomas Feuerstein's works, while sticking to the format of a conventional text, is a veritable challenge. His art gives a voice to materials, forms and media that cannot be discussed in a linear fashion, in a text, or reduced down to the one-dimensional paper format. Feuerstein's oeuvre resists the logic of a linear essayistic narrative, for it is the semiotic networks that are complex here and not the artistic nodes, and numerous are also the links to other topics and disciplines. If we wanted to do justice to this complex aesthetic structure by means of words, and come anywhere near understanding its inner processes, its dynamic and its power of transformation, we would need linguistic models going beyond language. Which, though, describes one of the very characteristics of visual art.

Agent provocateur

The artist using language for his artistic material, follows a different logic. When Thomas Feuer-stein writes about his own works, he chooses a format much freer than the critical essay and tells stories, e.g. science fiction stories. His adventure story, entitled *Plus ultra*. *Das Herkulesprojekt*, grants a second life to Arthur Cravan – real name Fabian Avenarius Lloyd, notorious publicist, Dadaist avant la lettre, boxer, and agent provocateur at his own service, who went missing in 1918 – a second life in a not altogether implausible future governed by genetic engineering and biotechnology. The format of this meandering and delirious story allows Feuerstein to tap into all the subjects that have become a sort of nutrient solution for his oeuvre. It deals with biology, literature, art history, philosophy, medicine, cybernetics, with religion, sex, economy, and the mass media, the effects of biopolitics on the individual, the dream of eternal youth and eternal exis-tence. Putting it simply, this daredevil tale is a complex literary theory of life – and it holds the key to Feuerstein's universe.

Yet a text for a catalogue must follow other paths and only in symbolic fashion can take its readers along to different levels, viewing platforms and tributaries. The temptation is strong to approach Feuerstein's works, in the process, from the scientific point of view, as his oeuvre often appears in the guise of lab-like test set-ups. But such a perspective would be too short-sighted. In Feuerstein's flasks and apparatuses multifarious epistemological, historical, political, and aesthetic narratives are being fermented that set in motion the reference system of his machines. Of course, it is difficult, without prior knowledge of the workings of these stills, retorts, automata, to appreciate what their eventual products are, in which way they come about, and what they are meant to tell us. But quite irrespective of all that, these technical and retort-like creations are works of art, especially as they are not to be found, as logical as it may appear, in a laboratory, but in galleries and museums. One thing, above all, they have in common with conventional artworks: they look for their links not just in the outside world, but to some extent always also take an auto-poietic stance, are also at all times self-reflective art. Thus, for instance, the installation MANNA-MACHINE (2004/05), which grows microalgae from which Feuerstein again wins pigments for his paintings; in his installation MANIFESTO (2009) a seemingly autonomous hand creates a sort of écriture automatique on the wall; and in the biochemical experiment *POEM.* (2010) a number of apparatuses transform the talk about art into art by turning breathing moisture into an alcoholic liquid, that again is consumed by the visitors, thus setting in motion an eternal cycle of reflection.

Infusion machine

The *MANNA-MACHINE* is a bioreactor producing plankton. A mixture of water and fertilizer is pumped through a maze of transparent pipes, whereby the surface of this nutrient solvent is enlarged and the growth of algae, engaged in photosynthesis and therefore in need of light, accelerated. Green algae, or Latin chlorella vulgaris, have many admirers. A webpage, dedicated to their praise, euphorically calls them the universal superstar among the plants.³ They are rich in nutrients and grow extremely fast, which amply explains their significance for science, their role in finding solutions for global food problems, as well as their commercial potential.

Thomas Feuerstein produces his algae in a scientific manner, yet he uses them not for scientific purposes, but extracts from them a powder that serves as painting pigment. With which pigment he then creates large-scale,

¹ first published in: Hans-Peter Wipplinger (ed.), Thomas Feuerstein. TRICKSTER, Cologne: snoeck 2012, p. 45 - 50.

² Thomas Feuerstein, "Plus ultra. Das Herkulesprojekt", in: id., *Biophily. Better Dead than Read*, Vienna 2002, pp. 70–223.

The name is owed to the fact that the cells of Chlorella contain more chlorophyll than any other plant cells. The use of Chlorella in the MANNA-MACHINE installation moreover refers to various chapters in the history of science. In 1919, the German biochemist Otto Warburg made his groundbreaking experiments on photosynthesis with the help of Chlorella algae. And in 1961, Melvin Calvin was awarded the Nobel Prize in Chemistry for his work on Chlorella.

monochrome paintings of a deep and sumptuous green (e.g. *HARVEST*, 2004–2012), whose surface structure in each case is different. The number of paintings depends on the harvest. The Harvest pictures could well be taken as textbook examples of traditional ideas of artistic autonomy. However, under their apparently meaning-less layer of paint they address pressing economic questions of our time. By bringing together a lab reactor and a chapter from the history of twentieth century art, and turning a self-reflective formal language into one reflecting the world, Feuerstein infuses the narcissistic, colour-besotted monochromy with economic and political complexity. Such works are neither documentary nor are they activist. They neither observe nor do they get involved. They rather illustrate processes and correlations beyond art, while communicating these through and within art. Although he never leaves the latter's system of references, Feuerstein follows complicated, twisted, laborious paths in order to arrive at conventional aesthetic products such as paintings, drawings, or sculptures. As these rarely stand only for themselves, we observers have to witness their processes and modes of operation. If we want to know how these moss-coloured paintings work, we will also learn something about how a piece of the world works.

Écriture automatique

In an installation, entitled *MANIFESTO*, a carved hand – pierced by a charcoal crayon, stigmatized as it were – automatically traces gestural, serpentine lines across the wall. Taken at face value, this setting appears as the apotheosis of the principle of écriture automatique – the hand has literally freed itself from the head, from the rational as well as the irrational ego. But with Feuerstein there is something else that manifests itself here, namely the transition from the subject to the system, from the writing of the unconscious to the writing of a joined-up structure: there is a black model ship in the room, like a satellite, whose hulk houses a server. The container ship *DAIMONIA* processes the stock market rates of large reinsurers and with these data steers the movements of the hand. Against this background, Feuerstein's drawing hand is nothing but an update, a 2.0 version of a process long part of art history. Whereas Surrealism, with its predilection for écriture automatique, drew on the then new insights of psychology, Feuerstein relies on the new knowledge of the digital world, his wall drawings reflect the interior, the hidden side of our global world of commodities.

But in the process Feuerstein touches on a further topos of art history, rooted even deeper, namely on the mythical idea of the acheiropoieton, an image created not by the hand of man. -Images produced by higher powers, dropping down to earth, to the present day are seen as particularly sacred and precious. The hand's gestural drawings, reminiscent of Art Informel or Abstract Expressionism, are not brought forth by the artist himself, though, nor by his subconscious, nor by metaphysical powers, but they are the result of systemic fluctuations of the market, i.e. ultimately the result of collective (economic) behaviour.

In its hulk the container ship *DAIMONIA* holds further, highly symbolical freight. After all, the origins of the highly lucrative business of reinsuring are to be found in European seafaring and the voyages of discovery of early modern times, especially by the Italians, as well as in colonial trade. The insurance market Lloyd's of London too is closely linked to the sea. The first policy holders, after all, were exclusively ship owners, who met up at Edward Lloyd's coffeehouse as early as 1688. That the economic and political power of Western Europe to some extent is rooted in colo-nialism is a fact that will not have to be reiterated here. With its image of European commercial seafaring, *MANIFESTO* provides a wonderful pars pro toto for the capitalist system as a whole, from the early circumnavigations of the globe down to modern container shipping, which once more has revolutionized trade, global economy, and the working world.⁴

DAIMONIA, we might say therefore, is an angel or demon of allocation, comparable to the daimon of antiquity, the allocator and distributor of fate, in the shape of goods and resources. In the old Greek myths, the daimon generally bears positive connotations, as a sort of fate companion to man, or as a personification of his allocated fate. Today we encounter demons in philosophy and physics, e.g. in the shape of Laplace's demon, an as it were fictitious, intelligent computer that, taking into account the entire body of human knowledge, could predict the development of the universe in all directions. And there are also demons, today, taking the form of computer programmes, automatically controlling processes without directly interacting with us users. They owe their name to yet another demon, namely Maxwell's demon, a thought experiment of thermo-dynamics in the context of which the demon represents an imaginary, regulatory being. Accordingly, in computer environments the term refers to structural working routines in operating systems, e.g. to automatic backups. The scientific and technological demons, as we can see, are no supernatural creatures, but regulatory, allocating and supervising beings deciding independently on what to grant us. Even though we rarely come upon demons, except in the shape of mailer daemons when an e-mail

⁴ The drawings and prints coming with *MANIFESTO* quote and update numerous references, such as to Adam Smith's concept of the "invisible hand," to the metaphor based on the question how individual self-interest could lead to the welfare of all. Ironically, Feuerstein's hand is not invisible, but cut off and amputated.

In 1963, in reference to Maxwell's demon, Fernando J. Corbato at MIT gave the name DAEMON to a computer program creating automatic backups. The term subsequently became a backronym (an acronym formed in retrospect) standing for "Disk And Execution MONitor."

is returned undelivered, they are omnipresent and inhabit every corner of our everyday technical lives. Most strongly their influence is probably felt in algorithms of search engines, which increasingly control our fate.

Genies in a bottle

Art merges with science and mundane issues also in the dialogue between the sculpture *WHERE DEATHLESS HORSES WEEP* (2010) and the complex distillation apparatus *SOME VELVET MOURNING* (2010) (both are part of *POEM*.). Feuerstein here takes a closer look at the creation myth, and he does so from the points of view of religion, science, and the mythology of art. The artist presents the demon of life as a prebiotic evolutionary moment determining the allocation and distribution of molecules. *SOME VELVET MOURNING*, a complex structure of connected flasks, reconstructs a legendary experiment, namely the primordial soup experiment of the biologist and chemist Stanley Miller and his colleague Harold Clayton Urey from 1953. In this experiment, an atmosphere made up of simple elements is exposed to electric discharges, whereby organic molecules start to form. Life emerges – without divine intervention. Feuerstein further supplements his creation machine by incorporating a simulation of a hydrothermal spring as can be found at the bottom of the deep sea. The so-called black smokers enrich their surroundings with numerous chemical elements and, besides organic molecules, also produce ethanol. So much for creatio ex nihilo.

Feuerstein's installation feeds itself from the condensed breathing of the exhibition visitors. The moisture collects against the metal sculpture of *WHERE DEATHLESS HORSES WEEP*, cooled down below zero degrees centigrade, then to be transported into the reactor itself.⁶ The end product is alcohol, spiritus, spirit, that again is served to the visitors in drinkable form. Everything begins anew, according to Feuerstein's formula: drink – talk – distil. The tongues loosened by the ethanol talk about art, in order to produce new material for art, which again inspires them to further talk.

While the word stood at the beginning, what we have at the end is the spirit in the bottle. This perpetuum mobile of conceptual art is accompanied by the installation *GENIUS IN THE BOTTLE*, a glass-fronted drinks cabinet in which the products from the distillery, its molecular sculptures, are presented as golden, transparent, and colourful liquids in precious bottles. The containers bear individual labels, designed by the artist, that assign suggestive names to the individual beverages, steeped in art history references: *Le Grand Verre* echoing Marcel Duchamp, *GENIUS IN THE BOTTLE* referring to the cliché of the artist inspired by alcohol, but also to the etymological source of the word inspiration, *Daimon Revolutionaire*, with the sub-slogan "Modernité – Normité – Determiné" and the emblem of a blue cross against a white background, restoring to constructivist art its revolutionary esprit and once again, also in this context, smuggling in the idea of the demon.

What distinguishes Feuerstein's works from most other attempts at merging art and science is the fact that many of his apparatuses produce art in the traditional sense, even though this art not always comes about through and in the shape of the traditional media. Feuerstein's material is not dead matter that serves the conservation and inscription of a form in colour or stone, but more often than not organic substances, enzymes and catalysts, for instance, forming molecular sculptures. His works are processes at the end, or in the middle, of which something becomes manifest that we are familiar with from art history. What emerges here are not pictures of, but pictures through, science. At all times, though, it is art itself that guides us into these knowledgeable and many-layered works, and when we begin to wonder how they may have come about we will stumble on the issues, the areas of knowledge, and the connections characterizing our own reality, and consequently serving as material for Feuerstein's art. If we had any means of describing our world and our existence with the help of simpler image systems, Feuerstein's descriptions too would probably be less multi-dimensional, formally less complex. Does this mean we are facing a universalist here? Someone who is not prepared to accept the fragmentation of knowledge, the Babylonian confusion between the disciplines and their sub-segments? It would be a bold undertaking indeed to try and counteract the drifting apart of explanatory models, to throw analyses and theories that are worlds apart into the great fusion reactor of art. It means to have confidence in art and its observers. We might well take this for a naively hopeful gesture. Or yet for a productive proposal that lets us think a little way into the future. smuggling in the idea of the demon.

The horse sculpture *WHERE DEATHLESS HORSES WEEP* came about by using a cast of the work *L'Accolade* (1851) by the French sculptor Jules Mêne. The title and the horses refer to the two mythical, immortal horses Xanthos and Balios described in the *Iliad*. They can talk and weep and symbolise the crossing of the border between man and animal. Having a sculpture taken from French Salon art – that moreover has established itself as a popular horse image of the bourgeois drawing room, could perhaps even be seen as kitsch – cover itself in a dripping, weeping layer of ice, Feuerstein not least casts an ironic glance at the discrepancy between the rules of good taste, as often enough enforced by art criticism, and the triumph of an art that is widely ignored by the prevailing discourse.