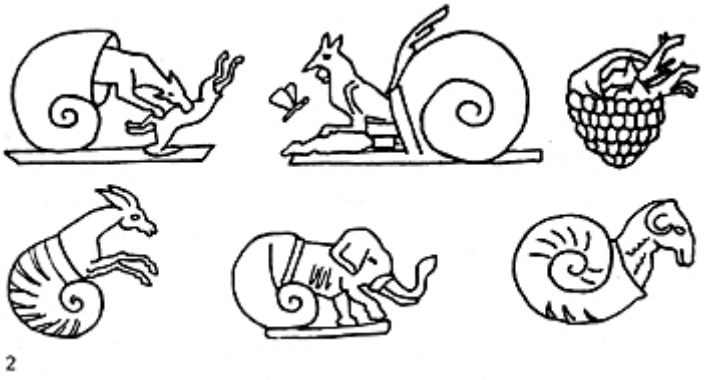
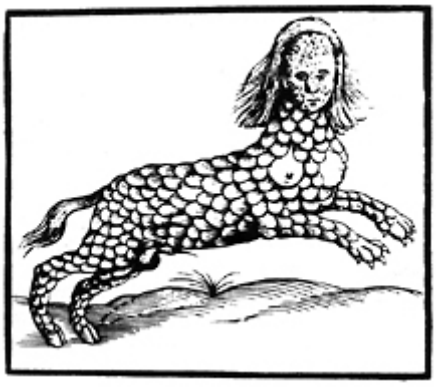
REMAKE ♠ REMODEL
JOHANNES DOMSICH

1



2

2



3 "Lamia", London, 1658

4 Antidarwinistische Karikatur aus der englischen Zeitschrift "Punch" mit dem Text: "Bin ich ein Mensch und ein Bruder?" 1861.

Genetics and microbiology as motives of art — of Ars Electronica — of "electronical" art can only be explored by examining "concepts" of creation and the human being in his/her dualistic nature of creature and (re)creator.

I consider it indispensable to penetrate to the sometimes bizarre extremes of the history of civilization and art and to study them more closely than molecular biology which within the dimensions of scientific tradition has been effective only over an extremely short period and to analyze any possible influence on artistic, social and philosophical thinking, i.e. on creative imagination.

It will be mandatory to screen the histories of theology (religion), art, physical science or metaphysics for signs of a structure — for models and images of genesis and generation[1] (*Fabrica* as used by Steinbach).

Is there a method of creation or of reproduction? Or is creation a never ending chain of copies and the creator his own model?

I suspect or rather I divine that there is a strategy — a process or even a plan — of thinking, a model of all ideas men have concerning production, origin, creation. Since there has been historical evidence of him in the form of products, plans and interpretations, man has been thinking of concepts and rules according to which he himself was "produced" and which he in his turn can or may apply to "produce".

One model, if not the initial one, is the "image", the duplicate, the clone which differs from the (divine) original only as to its competence and responsibility and last but not least its durability — it is the human being.

In the beginning God created heaven and earth, and the earth was without form and void, with darkness over the face of the abyss and the spirit of God hovering over the surface of the waters. (…) God saw that it was good. Then God said, "Let us make man in our image and likeness to rule the fish in the sea, the birds of heaven, the cattle, all wild animals on earth, and all reptiles that crawl upon the earth So God created man in his own image; in the image of God he created him; male and female he created them.
(Genesis 1, 1+2, 1,26+27)

And simultaneously there was the word in the beginning — God said (…) (Genesis 1,3), a technical model of communication as well as of reception starting the series of technical

procedures of formulation and reproduction in a dialoged articulation of intent, God becomes manifest in his intent, his word and his image, in the human being — he communicates. By the way, only the word, the name of the creator is more powerful than he himself. This being the reason for some religions and mythologies not to pronounce or utter this name.[2]

Remake.

If the history of man is a history of his tools, his techniques (of civilization), then these may rightfully be considered the means of a creative process, of the emancipation of the human species from a world of preset cirumstances to an environment remade and changed by him. From the primeval forest, from nature to landscape (... *Nature is not only the product of an incomprehensible creation but it is this very creation.* Hamann 2, 283, Grimm on the term creation). From the garden Eden — the divine cultivation to the landscape garden[3] — the human cultivation.

The idea suggests itself that the achievements of our evolution are not products — works in the first place, but rather tools. That they are instruments reshaping and even determining our sensoria, our sensuality and guiding our productive attention and our desires, intensifying and amplifying is tantamount to focussing. Sensory selections must be made and only few of these would reach our senses without such instruments of perception.

Products of art, of science are the results of existing technical conditions and invariable - stagnant, constant or recurring — ideas.

What continues in civilization is the desire to engage in art and science. How this is done, however, is determined by the tools which guide our imagination and attention. Furthermore, I maintain that the "creation" of tools determines the production of science and the arts as to their themes and forms. Tools are the determining aesthetic authority of civilizatian.

Creating Instruments — Recording Instruments;

To give an example: microscope and telescope change our modes of vision (our desires), our interest and its interpretations as machines change our perception of speed and value. Science and also art turn into a game of answers and not of questions — as tools are the incidental instruments of our present contentedness.

Tools are a second authority — as it were — for evaluating the phenomena of our environment. They record and measure in dimensions that are beyond our senses. Putting it differently: They are either more competent or inferior to our senses. At any rate they are both status quo and compromise.

The notion of "how something works" cannot be separated from the notion of "how it is or was being done". Thus man is looking for the "elements of life" and is using metaphors of his own production in attempting an explanation of his origin. Any production, any work serves as a parable of his own origin and his own functioning.

The religious idea of man's creation is the matrix (the design, the draft) of human imagination and production. We consider us to be images, as nothing else seems to make sense.

This explains the enthusiasm with new methods or scientific innovations[4] : they are quickly incorporated into the theories of explanation (popular science journals and special interest

publications thrive on this enthusiasm), they are another draft of the many speculated blueprints of the world and of man — booty retrieved from a divine laboratary.[5]

Thus striking antagonists of man have arisen from the fantasies of writers, artists, or scientists . "Body and soul" produce ghosts, "gaseous vertebrates" in the words of Otto Neurath[6] . With the findings of electrophysics a seventeen year old girl[7] invents the electrically reanimating Frankenstein. Hoffmann succumbs to the charms of the machine and falls in love with Olympia[8] . Is Dracula a product of geography, history, and serology? Was he devised only to glorify the disc of the dictaphone and the blood transfusion or did Brain Stoker[9] intend the victory of women's emancipation over the male non — dead[10] ? He certainly is a monster of flesh and above all blood, not of clay like the Golem of a "non — dissecting" time. Knowing of nuclear energy, B-movie directors use giant ants to terrorize progressive Americans and not only simple tabloid journalists write about computers governing the world. Men create (their) images. And men strive to improve themselves and their environment, to carry on creation. Men are the evolution. They subdue the earth.

God blessed them and said to them, "Be fruitful and increase, fill the earth and subdue it, rule over the fish in the sea, the birds of heaven, and every living thing that moves upon the earth. "
(Genesis 1,28)

This is done not only in actual products, be they profit-oriented ventures like breeding, genetic manipulation and the like, but also in fictions and phantasmata. It becomes manifest in ornament, decoration or as whimsical result of fiddling around with a kind of "creative kaleidoscope" producing chimaera, sphinges, sirens, basilisks, grylli or demons.

Some common strategies of innovating perspectives can easily be observed: Innovation concerning the production of instruments — an indirect improvement for men; innovation concerning medicine — a direct improvement; innovation concerning manipulation — man imitates his creator even when producing "substitutes"; the fantasy of a leisure culture.

Delegating production is a basal pattern of human instrument creativity. Man is released of his "personal" responsibility not least by his absence. To me this constitutes an explanation of the lack of perfection; substitutes after all are not perfect, must not be so. We, however, want to be "perfect". Thus we consider ourselves to be redeemable substitutes of a creator, be it sometime in eternity, and we conceive ourselves as his very images, we even "act" like him (the seven-day creatures), however, we do not grant complete perfection unless they are mere prostheses (specific solutions), that is our very personal objects.

It (the DNA, author's note) no longer defines individuals but possible mutants. From a biological, genetic and cybernetic point of view all of us are mutants. There can, however, not be a last judgement nor a resurrection for mutants; which body should rise? Our formula, our chromosomes will have been changed, we will be programmed according to different material and mental variables, we will no longer be entitled to our image. (…)[12]

Basic matrix is the fiction or the desire to optimize: the competent human being, the optimal production, the maximal product. We opt for complete, optimal polarization: good and evil.

Remodel.

Next to religion, natural science undoubtedly is an important and very indicative source of human aspiration and human formulation regarding genetics. It computes and is computable. It reduces the description, i.e., the formulation to "the formula of life".

Very precisely, yet not completely along my line of reasoning, has this idea of reduction been expressed by Jean Baudrillard[13] :

> The religious, metaphysical or philosophical definition of being is given way to an operational definition within the conceptuality of genetic codes (DNA) and of brain structure (code of information and billions of neurons). We are part of a system where there is no longer any soul nor body metaphor — not even the tale of the unconscious meets with any response.

Yet there is also a frightening aspect; the fear of punished hubris with its well-known repertory of plagues afflicting us such as ecological catastrophes, malformation and Gomorrhan decadence[14] . Bosch's apocalypses are frightening — most of their details, however, were taken from the grylli which were positive fantasies[15] of the creative kaleidoscope mentioned before. They were amusement of antiquity and fetishes of the middle ages.

Of special intellectual as well as artistic appeal appears to be the idea that there must still exist further products, alternatives and results of creation: Though put down by the spreading of the "theory of evolution as a religion" they are still alive in fable and story and haunt the cinema as disney-type fantasy.

Even in the twentieth century the close relationship between mythology and medicine is documented: In his lecture on "Greek Gods and Human Monsters" given in 1901, the gynaecologist Schatz maintained that centaurs were modelled on human beings born with too many legs.[16] Scientists of different disciplines like Charles Gould[17] for example were misled by their interpretation when describing dragons, unicorns or the bird Phoenix as extinct species.

From a look at the exhibits in toy shops it becomes evident that there is at least one group of people who are highly interested in this other "vanished creation".[18] Is not the forming of mixed beings an attempt (be it a childlike one) at rationalization, at visualization and thus an early attempt at fighting the terrible, the frightening — an attempt at breaking the spell.

Saurian teeth no longer suffice to prove the existence of dragons and their knightly killers. But who would object to the thesis that all life comes from the sea? A view that has most charmingly been depicted long before the findings of modern times.

Phantasmagoria are not only the object of human manipulation they also serve to formulate, to allegorize, to convey ideas. They depict the inexpressible. They go beyond words. Synthetic creatures appear to be synonymous of certain characteristics, they are indicative of the two antipodes "good and evil".

The "entertaining character" has now disappeared from the fantasies (with the exception of toys). They have been surrendered to the soberness of physicalism and the calculable utilitarian approach determines the reasoning.

The wishful thinking of medical men and microbiologists nevertheless includes dream of healing and improvement that have nothing in common with rational conclusions. Hereditary diseases or cancer are to be defeated, to be taken from us like original sin. Aspirations since scientific disciplines have existed. Improvement towards the original.

This godlike intervention into the given facts is accompanied by the horror and the punishment mentioned before and the consequences thereof are strikingly similar to the weird

fantasies of antiquity or medieval times. We cannot boast of progress in the sphere of the irrational and frightening and the demons appear to be archetypes of the human obsession with fear and guilt. Yet, inspite of their almost bigoted seriousness they serve to amuse — in the cinema. Again they imitate, they also imitate us. They are strange and yet they take any form that we suggest. It is their trick to change into the nothing that they are — aliens[19] .

Not only the manipulation of the divine creation is punished — God being "the creator of every creature" so Ottokar or Luther (Sir. 1,7), "… the most high, the creator of all things, almighty" (quotes translated from the Old German). Those who surpass the Gods fare even worse. Literary history is crowded with such tragic figures. Orpheus, the better but careless musician; Lamia and Niobe, the better mothers; and many others suffer a variety of partly unjust fates. Divine plans can be stolen. Punishment is finite. What will happen to the creatures, however? What is their development like, what course do they take and what are their wishes? Prometheus-Pandora — what remains hidden if we see with Zeus's light? Let us return to the reasoning of our culture: When we speak of genetics we speak of a young discipline and tradition of one branch of biology, of natural science. The term genetics certainly reminds us of what we learned at school about the theory of evolution with its rather obscure ideas, conflicting arguments or the (speculating) "Mendel's Laws". The mistake of equating Darwin[20] , Mendel, the theories of heredity and origin and genetics right into our days has supplied abstruse racism as an aggressive argument or trivial polemics in human minds.

Art is closely related to traditions. The latter are signs of evalution, if evolution stands only for heredity and selection. Heredity can be something intimate — yet at the same time also fascist in terms like "clean", "cleansing", "select" or the naively romantic idea that only the strongest survive. Chance — an inherent factor of hereditary theory — is of no concern as a factor of selection in such a platitudinal approach.

There is the longheld tradition of teaching pupils "penultimate" techniques and findings.[21] I am thinking of all the instances where children should have applied fragments of the almost forgotten "Mendel's Laws" and how much bias and ambiguity has implicitly been passed on to pupils by their teachers.

At the end of this text I am going to quote a passage by Schrödinger to contradict the trite "computability" and to formulate with a new methodical approach. In short: I want to see the theory of evolution[22] and also genetics to be added as models of explanation to our field of concern "Art and Genetics". I think that they are very close to each other and are being treated as almost one and the same in the minds of those who only want to use the word.

A passage from Mauthner[23] underlines this synonymous use of genetics:

> A child's acquisition of language is linked to his consciousness just as is his learning to walk; with regard to the genetic development of language we also have to maintain that every acquisition, every bold new metaphor has been lined to consciousness. (…)

At a time of predominately optical media we tend to define reality and value in optical terms. Products of computer graphics and animation may serve as aesthetic proof — they provide sensual quality by focussing on the description of surfaces.

Communication and information are restricted to the surface, the cover. The optic argument dominates. This leads to a cosmetic endeavour which transfers problems exclusively via this visual channel.

This also explains the rather foolish simplemindedness of teachers and parents when they make pupils treat their environment, that is "nature" cosmetically by collecting (superficial) waste. This teaches them to reassure themselves by restoring the surface and to plan and interpret according to surfaces. Decay, sickness or genetic deficiencies are being diagnosed superficially. Skins are indicators of our aesthetics. Superficial signs condition our opinion. *Beware of those bearing a mark.* — Sickness as well as beauty have to be seen in order to be understood.

Having said all this I want to note that I consider genetics to be a producing, changing discipline rather than an analysing one. By disposition it is one of the practised possibilities of explaining the world and is placed very close to mechanist systems or the "yes and no" concept of computer nomenclature.

Speaking of the genetic code, the "language of the genes" implies a tendency towards formulating i.e. reproducing life — we can understand only what we can make or do — creator or dumb "learning by doing"?

The selections of the objects observed and formulated become exposed and manifest in art. Thus the focus of the aesthetic interest becomes the motif of manipulation and construction.

Putting it differently: We formulate only what we want to know, what we can perceive. In order to perceive we use instruments — artists, microscopes, media and the like — out of and in our interest we formulate not only products but also tools of new interest. And we do so increasingly beyond our genetically provided sensual capabilities.

The idea as program — wishful thinking as production program.

Man does not perceive without tools. Perception requires communication. This implies that the technology of his communication is also the matrix of his "idea". In E.T.A. Hoffmann's "Olympia" beauty[24] is formulated and produced as a machine. To Mary Wollstonecraft Shelley surgery and electricity are the ideas of functioning and biochemistry. A mirror (a cover) is conceived as an image which can be differentiated only by virtue of its lack of history.

This is different in the "genetic tradition" of describing children as the images of their parents — to the observer they represent the past and the future and simulate God-Father and creation within creation (cover, identical).

Parents cultivate their ambition to achieve their own perfection in their children similar to our experience of art as a "reproduction", a different, more perfected perception of the world.

At the same time we want the tools and the product man to be polyfunctional, although such strange fantasies as those of "warrior or thinker races" still persist in the fictions of authors and dictators.

Our notions of the media, technology or tools are also significant: Similar to a Swiss army knife they must be able to meet the vast diverse expectations as to their performance, quality and function. A personal computer for instance "can do anything". On its surface it imitates conventional, traditional tools as to their function and formality as icons. The haptic "formulation" is being cancelled by polyfunction and simultaneous uniformity: A computer remains a computer, it is no airbrush.

Remember also the jocular "genetic fantasy" of the farmer: the "woolmilkpig". Genetically manipulated animals turn into a caricature of human values, into ecstasies of function and usefulness.

I want to remind of the perfection regarding the revision of our environment. We change our spaces of living by shaping and manipulating nature, perhaps by even settling it one day with manipulations of a kind depicted in Bosch's paradise-garden or purgatory.

Similar to architecture within architecture the landscape gardeners of the baroque put nature within nature — they "transplant" and import vegetation and architecture from newly discovered distant lands according to arguments of taste. They treat nature as a theatre and in it they place the stages of their time — for instance the Salzburg Felsentheater. The world is turned into a stage for men, transferred animals like the pheasant become stage properties for their entertainment, their culture.

Remodel. If changed nature dominates its environment then traditional art, which is a fiction, has transgressed the limits of its production. This is where the quality of the disciplines is determined.

This is being counteracted by the aesthetics of ecology. Its dogma is: Fast change is destruction.

The indicated limit of arbitrary change must not be transgressed. Ecology claims a not clearly defined speed for the course of developments, a speed lying beyond human periods of life. It appears strangely religious as a suffering passive movement, not at all civilizatory. Man would turn into an observer, a recorder of time which according to these maxims, however, would have lost its significance as a standard of human distances. As a creator of art and science man would then only have to name, to describe — a fantasy of dictatorial naturalists.

Does culture stylize life? Do we resemble the "gallant shepherds" of the rococo living a secure but anemic life? This would mean that the security provided by economy and the achievements of medicine have turned us into dull and boring actors of a strange (rustic) "alternative" culture. There can be no returning to nature as there is no nature.

We only stylize according to preferred approaches — according to what we like to see or have learnt to interpret as being beautiful. The question remains: what changes when taste changes and different "cuts" are in.

Do we think differently simply because we act differently?

It becomes obvious, we do not only tend to newly assemble found phenomena (grylli), our taste as matrix (law) of action seems to function along similar lines. The focus of observation and the interpretations of the senses continue to be linked with each other in new and different ways. We work like kaleidoscopes: kaleidoscopes of the senses — kaleidoscopes of communication — kaleidoscopes of art, of science.

Remade — remodel.

Is then creating anew no more than sorting out once again, merely changing a structure perhaps? Assemblage.

Seen this way genetics can be compared to a "library" of sensualities, of capacities. It creates an architecture from continuously new "elements of creation, of life" like its information, which is called DNA. And I think of Dick's idea of fraud — a fraud of flesh and blood[25] and compare it to Lem's fraud, that of the memory of imagination[26] . I think of the kaleidoscopes of science and art.

If biology triumphs over the machine of mechanics — will there by the triumph of the "first divine biology" over the "other" — the second one of man?

Incredibly small groups of atoms, far too small to keep to rather exact statistics, are a dominant factor in the highly ordered, regular processes of the organism. The gene is much to small (…) to exhibit an orderly behaviour obeying the laws of physics.
Erwin Schrödinger

And nothing "has been here before" if we know that it has been here before.

Recover.

NOTES

1 As far as I know first used by Stieler in 1710.

2 Interesting to note how German-speaking people deal with "good and evil": The name of the devil must not be uttered nor "written" on the wall. The name of God is invoked instead ("Gottseibeiuns") to ward off evil.

3 In his "Wahlverwandtschaften" Goethe calls a garden "creation" (I wish to see the new creation.)

4 Particularly those pretending to explain the "where" and "why".

5 They remind one of espionage plots: A formula of global implications has fortunately or unfortunately only partially and incompletely been stolen …

6 Otto Neurath; "Gesammelte philosophische und methodologische Schriften", Published by R. Haller and R. Rutte. 1990.

7 Mary Wollstonecraft-Shelley: "Frankenstein or the Modern Prometheus." 1818.

8 In "The Tales of Hoffmann" by Jacques Offenbach. (First performed 1880) Quote: (…) I have spectacles animating any dead object at once. (…) Through these spectacles bright light is cast on everything, He who possesses them rules the world, is king!

9 Bram Stoker's "Dracula". 1897.

10 Tolstoi's "Wodelak" turns against his family, against everything he loves. He commits "genetic suicide".

11 The provision of God who in the law of the Covenant gave to Israel the seven-day week with the sabbath being the day of rest — a scheme he had adhered to himself when creating the world.

12 From Jean Baudrillard: "Das Andere selbst." 1987.

13 See footnote 7

14 We often find the motif of barrenness in connection with human arrogance. (Loth's daughters lose their husbands.) And genetic fantasies are also fantasies of fertility.

15 Talismans, charms, sacrid and profane ornaments ,etc.

16 This is being questioned by Eugen Hollander's "Wunder, Wundergeburt und Wundergestalt", published in 1921.

17 From Heinz Mode: "Fabeltiere und Dämonen in der Kunst. Die fantastische Welt der Mischwesen." 1983.

18 Many of the monsters are the result of misinterpreted nature watching.

19 "The Terminator" is a good example of this changing into any useful form.

20 1859 "Die Entstehung der Arten". 1871 "Die Abstammung des Menschen".

21 Schools that understand Newton's Laws of physics or where history ends with World War 1.

22 Actually a most religious theory as it describes an inescapable (quasi God — given) process into which man cannot interfere.

23 Fritz Mauthner: "Beiträge zu einer Kritik der Sprache. Volume 1: Zur Sprache und zur Psychologie 1923

24 Better: the idea of beauty.

25 Charles K. Dick: "Do Androids Dream of Electric Sheep?" 1969.