The Universal Datawork

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1. Introduction

At the height of the Information Age, Ars Electronica 2003 asks whether "the language of the computers [is] becoming the lingua franca of the global Information Society" and follows this up by voicing the presumption "that the materia prima" of this very society "are digital codes."

If we take up this formulation, we see that it includes the proposition that society in its evolution strives to counteract machine codability—not autonomously as in the evolution of languages but rather in dependence upon the codability of machines. What is all too readily overlooked in this assumption is the fact that a society oriented on data and information processing takes itself out of play as a referential system or, rather, according to the understanding of code as a system of signs. Information's claim to absoluteness in our structure of reality is transferred into the apparative structure derived from it, into the machines, computers and networks, and for their part, established absolutely. Thus, if one takes the concept of a "computerized lingua franca" to its logical conclusion, then this necessarily implies the legitimation of the techno-fetishistic and techno-fascistic principles with which we are all familiar and which Information Society would forever take as its foundation.

In contrast to the information-technological encoding of society, "information-aesthetic encoding" makes available a horizontal tool that does not continue to serve the purpose of verticalization—that is, hierarchical ordering—of segments of society, but rather makes it possible to completely penetrate them! And this on both a symbolic, information-theoretical level and on a real, pragmatic one. This tool enables society to take measures against its hierarchical ordering and further fragmentation and to take up the search for ordering structures that are binding (in both senses of that word). Thus, when Ars Electronica 2003 inquires into "code as law, art and life," it is quite properly inquiring into a metacode. The question, therefore, is not whether "software itself [can] be art, and according to which aesthetic criteria we are to assess this issue?" Rather, "art as code" alone is the generative answer to the penetration of all sub-realities.

Art as Code

For differentiated subsystems—social, economic, cultural, etc.—code always means an instruction or regulation as to how certain signs from this limited, fragmented set of signs are depicted. In contradistinction to this, art's code and set of signs are unlimited. Accordingly, art can be defined as an encoding process based on an infinite set of signs and designed to be self-renewing. With this, art is liberated from the dogmatism of its own "operating system" and, at the highest level of information technology, ultimately becomes "compatible" with informational reality.

From the perspective of encoding, we also recognize for the first time that art is a matter of the permanently new encoding of an infinite set of signs. The inconsistencies of style

within the arts are examples of this ongoing process of new encoding: all signs of the visible and imagined world were endowed with order in the perspectivist code of the Renaissance; the pointillist code of the Impressionists subordinated the entire set of signs of the single, boundless atmospheric reality; the film code of 24 images recorded and projected per second impose their order upon the entire visible set of signs of the one dynamic reality. The genetic code, finally, shows us for the first time the reality of the unity of life.

This most complex of all encoding procedures overarches and subordinates all previous systems of signs of re-vision. The arts are not immune to this. They teach us to read the "new encoding" from the stylistic inconsistencies. The divergences among the sets of signs of the various different subsystems were, almost a hundred years ago, determinative for Richard Wagner's artistic conception whereby "art and life" are not to be seen separately but rather in harmony. This idea ultimately led him to the grandiose conception of the Gesamtkunstwerk. In Wagner's wake, the unity of "art and life" became—with a few interruptions—the ongoing program of modernism. Dadaism, constructivism, suprematism, Bauhaus, pop art and, finally, the work and artistic personality of Joseph Beuys posed the question of the unity of art, life and society over and over again in new ways. Following upon this great idea, the "universal datawork" does not, however, define itself on the sensory level, but rather, at the height of information processes, under the radically changed circumstances of the electronification, informatization and digitalization of society. The actual interest of this project is focused not on the renewed creation of a Gesamtkunstwerk on the level of sensory perception by means of information and media technology (multimedia!) but rather reuniting the fragmented bits into a whole "beneath" sensory perception itself in code.

The stylistic inconsistencies never, in reality, specify an end to us but rather a direction: the striving of art tending towards unity—from the artwork of days gone by, to the Gesamtkunstwerk, to the "universal datawork." In stylistic inconsistency, it becomes clear that the "universal datawork" is no longer a matter of an external event that is to be perceived with the senses and that, as in the case of the Gesamtkunstwerk, is blended by the senses into an integrated experience, but rather a matter of the decoding of our own internal bodily structures. With this, we encounter the maximum level of integration anchored within ourselves, spiritual experience in the highest possible mass. The "universal datawork" has to do with this radical new experience, with the unified, integrated information structures and processes of all living things that are anchored beyond sensory perception.

The Universal Datawork

Let us define code as a common controlling structure maintaining an order between two sets of signs, from which we could derive a definition of metacode as the encoding of all codes or systems of signs. This yields the decisive shift of significance: the code of information technology recedes and that of information aesthetics comes into play. We are referring to "art as code" as a singular system of signs over and above all systems of signs.

As the term is applied here, the "universal datawork" is defined as a metacode. As in all imaginary concepts, this is a matter of the master plan of a universal encoding, though not timeless and spaceless but rather in the context of a particular biogenetic and information technological state, archaically and biogenetically encoded into us, open into the future, information technologically encodable outside of us.

We see that all encoding procedures that have ever been thought up and practiced by

mankind—linguistic, textual, information technological, spatial, digital and binary—are present in the biogenetic code. This phenomenon is of fundamental significance for art because, heretofore, art as the sole system of rules (e.g. in the Wagnerian Gesamtkunst-werk) postulated the unity of life and reality. What was once "only" a programmatic idea now becomes an all-encompassing reality. With the "universal datawork," the claim on the level of information technology and biotechnology is lodged in a radically new way. In the "universal datawork" and explicitly in the "datawork: man," the archaic, biogenet-ically networked world within us is short-circuited with the technological, information-ally networked world outside of us. We experience ourselves for the first time in absolute time—in the biogenetic time within us, in the cosmic without—and thus in the interlocked present between the two.

Datawork: Man

Code was the key with which artists created images about the external world in order to decode it. With the insights generated by and the decoding of the biogenetic code, every human being become an artist, and this with much more profound and far-reach-ing significance than was seen by Joseph Beuys, the one who first recognized this. Human beings become the objective witnesses of the encodability of their subjective selves. This, our radical new condition, is the core of the entire modern reality of the Information Age. "Datawork: man" is committed to the data processing processes of life itself. "Art as code" makes the social implications that arise as a consequence of the interweaving of infor-mation technology and biogenetic sciences visible. In "datawork: man," not only do the sciences erase the borders between them and art and vice versa, but the investigating subject also liberates himself/herself from the borders setting off the living object. Accord-ingly, experts in biomedicine and information artists are simultaneously the subjects and objects of investigation of their artistic science and scientific art.

In light of these new findings and insights about the informational-biogenetic nature of human beings, previous conceptions, practices and systems of art are finally taking their leave from the historical stage. As bearers of significance, sense or nonsense, they all had one thing in common: they were the antithesis of nature. On the level of bio-infor-mationally encoded reality, they stand before a universal paradigm shift from which there will not emerge yet another "new" art in contradistinction to nature but rather the "nature of art."

More and more life processes—even the most internal ones—are being converted into data, becoming calculable and thus externally controllable by anyone. And because they are encoded and thus predictable, they must, therefore, according to the way I see it, first of all be recognizable—that is, decodable—for the individual. By now at the very latest, art itself has become the code of human beings in the Information Age in order for individuals to be able to formatively, proactively confront their inner, subjectively expe-rienced world. (This art supported by information technology and biotech calls for its own self as the primary object of investigation and art—a belated elegy for the avant-garde!) Since we know that mankind is formed by information, it is the job reserved for art to form information in a way that is in accordance with human needs. In the future, no indi-vidual will be able to avoid assuming a major share of the responsibility for "doing the bookkeeping of life"—i.e. decoding that individual's own images—since biomedical progress forces the individual to use the power to control his/her entire bio-capital in order to deal rationally and economically with this. Or, to put it in other words: to design this very same bio-capital oneself. With design, art, endowed with an existential signif-icance unknown until now, comes into play. A sociopolitical consequence of control in

the utilization of ones own bio-capital is the necessity for everyone constantly to take precautions. Art as the design of life attains—as life arts parallel to life sciences—its ultimate significance.

"Datawork: man" is conceived as the location of this artistic-scientific practice.

The Data Paradigm

We understand code to be a system of rules that allows for a clear classification (encoding) of signs between two different systems of signs.

"Art as code" is meant as a system of rules that, in the classification of signs, is not exactly clear and that is not limited to two systems of signs. Art as code is ambiguous; art as a system of signs is the tendency towards a system of rules whose classification extends across all systems of signs.

In "art as code" interpolated to all other codes, art attains its singularity as a highly functional system of signs based exclusively on errors. "Art as code" is a unique system of errors and this is the basis of the uniqueness of the work of art and the uniqueness of the arts with respect to all other systems of signs.

Art experiments with and celebrates the erroneousness between systems of classification, since a code can be solved only when the particular opponent makes mistakes and one becomes cognizant of the system at the basis of these errors. On the informational level, this is the turf of hackers and crackers who, by definition, "gain unauthorized access to information or computer networks," check out the code for weak spots or errors in order to finally be able to crack the system, get inside it, and modify or disable it. The appearance of errors in the genetic code works similarly. These are the errors that emerge due to cosmic radiation. In the simplest case, they appear in an amino acid sequence where a certain amino acid takes the place of the one that is supposed to be there. According to the concept of the genetic code, one nucleotide would then be replaced by another in the corresponding nucleotide sequence.

What, on the informational level, in the case of hackers and cosmically caused mutations, are isolated, unexpected interventions into a subsystem take on constitutive significance for "art as code." In the ambiguity of encoding, that which is seemingly erroneous is immanent in art. In accordance with the principle of absolute erroneousness, we have "art as code" to thank for the preparation for that which cannot be prepared for. With "art as code," we finally have at our disposal a tool both for the explanation of art's fundamental social meaning with respect to technology as well as the personal way one goes about living one's life in the face of external control.

The way that crackers intervene into information technology's system of rules, the way cosmic radiation penetrates into the biogenetic system of rules and brings about unknown changes and mutations thereby so that evolution continues on its way is the art of the intruders into social systems of rules. What do we learn from art in the context of encoding? Art is the search for errors in the social system of rules. It is only where errors exist in the system of rules that crackers can intrude into the technological, cosmic radiation into the biogenetic, and the arts into the social system of rules. Art is eo ipso a code system for decoding social reality at its weak points.

Translated from the German by Mel Greenwald