Digital Apparition

Vilém Flusser

Before our doubting eyes, alternative worlds begin to emerge from the computers: lines, surfaces, and soon also bodies and moving bodies, made up of point elements. These worlds are colorful and emit sounds, and in the near future they will probably also be touched, smelled, and tasted. But that isn't all, because the moving bodies that will soon be realized through calculation and which are beginning to emerge from computation, will be equipped with the artificial intelligence of Turing's man, so that we will be able to enter into dialogical relationships with them. Why is it that we distrust these synthetic images, sounds, and holograms? Why do we disparage them as "apparitions"? Why are they not real for us? The precipitous answer is: because these alternative worlds are nothing but computed point elements, because they are hazy figments hovering in nothingness.

This answer is precipitous because it measures reality by the density of distribution, and because we can rely on the fact that, in the future, technology will be able to distribute the point elements as densely as is the case with objects in the given world. The table on which I am writing this is nothing but a swarm of points. When the elements can be distributed as densely in the hologram of the table, our senses will no longer be able to distinguish between the two. The problem therefore can be posed as follows: either the alternative worlds are as real as the given one, or the given reality is as ghostly as the alternative ones.

There is, however, also a completely different answer to the question about our distrust regarding alternative worlds. It is based on the fact that they are worlds that we ourselves have designed, rather than something that has been given to us, like the surrounding world. The alternative worlds are not givens (data), but artificially produced (facts). We distrust these worlds because we distrust all things artificial, all art. "Art" is beautiful, but a lie, something that is implied in the term "apparition." However this answer also leads to a further question: why does the apparition deceive? Is there anything that does not deceive? This is the decisive question, the epistemological question, which the alternative worlds pose for us. If we talk about the "digital apparition," this and no other question has to be addressed.

Obviously it is not a new question, because it has been worrying us ever since our eyes became doubting, i.e., at least since the pre-Socratic philosophers, even if it achieved its full radicality only at the beginning of the modern period. The alternative worlds with their digital apparitions propel these irritations toward culmination. Therefore it is apt to begin a consideration of digitization with the beginning of the modern period.

What happened at the time? Briefly speaking, people discovered that although the world may be unimaginable and indescribable, it is calculable. The result of this discovery becomes apparent only now, with respect to the alternative worlds.

In the following section of his essay, Flusser describes how, at the beginning of the modern period, artisans and theorists developed a linear, processual, logical, and historical mode of thought that was opposed to the assumption of fixed, ideal entities and values. He talks about modern, formal, theoretical thought, which, at least since Nicolas Cusanus, Galileo, and Descartes, has been recoded from being letter-based to being figure-based, and how this has created the problem of "filling the gaps" of the intervals. This way of thinking has also afforded the increasing projection of the calculatory model onto notions of reality, which has caused continuous frustration with the elite of scientists and thinkers who, in trying to get control over the world, have consistently been let down by the impossibility of shaping it according to their mathematical projections. According to Flusser, the computer might change this because it is not merely a machine that can calculate at an extremely high speed. It can not only analyze, but also synthesize, and thus actually create artificial spaces and beings.

At this point in the dizzying considerations of "digital apparitions," it is apt to pause in order to review the path we have taken. The view can be described as follows: people have thought in a formal manner at least since the Bronze Age, e.g., by designing sewage systems on clay tablets. In the course of history, formal thought has been subjected to developing processual thought and only returned to the foreground at the beginning of the modern period in the form of "analytical geometry," i.e., as geometrical forms that are recoded into figures. Having been disciplined in such a way, formal thought affected the emergence of modern science and technology. Eventually, it ended in a blind alley. In order to alleviate the practical obstacles, the computer was invented, which in turn radicalized the theoretical problems. At the beginning of the modern period, people were searching for something that would not deceive, and they were certain to have found this in the clear, precise, and disciplined thinking in figures. Then they began to suspect that science was only projecting the figure-code outwards, so that for instance natural laws were equations that had been imposed on nature. Even later, the far-reaching suspicion emerged that perhaps the entire universe, with all its fields and relations, from Big Bang to heat death, might be a projection which calculatory thought attempts to retrieve "experimentally." Ultimately, computers demonstrate that we can not only project and win back this one universe, but that we can do the same with as many as we want. In short: our epistemological problem, and therefore also our existential problem, is whether everything, including ourselves, may have to be understood as a digital apparition.

Here the bull of the alternative worlds can be grabbed by its horns. If everything is delusive, if everything is a digital apparition — not only the synthetic image on the computer screen, but also this typewriter, these typing fingers and these thoughts being expressed by the typing fingers — then the word "apparition" itself has become

meaningless. What remains is that everything is digital, i.e., that everything has to be looked at as a more or less dense distribution of point elements, of bits. Hence, it becomes possible to relativize the term "real" in the sense that something is more real the denser the distribution is, and more potential the more scattered it is. What we call "real," and also perceive and experience as such, are those areas, those curvatures and convexities, in which the particles are distributed more densely and in which potentialities realize themselves. This is the digital world picture as it is being suggested to us by the sciences and presented to our eyes by computers. We will have to live with this from now on, whether we like it or not.

This imposes on us not only a new ontology, but also a new anthropology. We have to understand ourselves — our "self" — as such a "digital distribution," as a realization of possibilities thanks to dense distribution. We have to understand ourselves as curvatures and convexities in the field of criss-crossing, especially human, relations. We are "digital computations" of swirling point-potentialities. This new anthropology, going back to Judeo-Christianity, where humans were conceived of as mere dust, not only has to be worked through epistemologically, e.g., psycho-analytically or neuro-physiologically, but also put into practice. It is not enough to acknowledge that the "self" is a node of criss-crossing virtualities, an iceberg swimming in the sea of the unconscious, or a computation that leaps across neuro-synapses: we also have to act accordingly. The alternative worlds emerging from the computers are a transformation of this understanding into agency.

What do those do who sit in front of the computers, who are pressing keys and who produce lines, surfaces, and bodies? What do they really do? They realize possibilities. They gather points according to precisely formulated programs. What they thus realize is an outside as well as an inside: they realize alternative worlds and thereby themselves. From possibilities they "design" realities which are more effective the more densely they are structured. Thus, the new anthropology is put into practice: "we" is a node of possibilities that increasingly realizes itself — as it gathers more and more densely the possibilities swirling in itself and around itself, i.e., as it creatively shapes them. Computers are apparatuses for the realization of inner-human, inter-human, and trans-human possibilities, thanks to exact calculatory thought. This formulation can be understood as a possible definition of "computer."

We are no longer the objects of a given objective world, but projects of alternative worlds. From the submissive position of subjection we have arisen into projection. We grow up. We know that we dream.

The existential transformation from subject into project is clearly not the result of a "free decision." We are forced into it, just as our distant ancestors found themselves forced to stand up on two legs because the ecological catastrophe of the period compelled them somehow to cross the spaces between the more widely scattered trees. We, on the other hand, have to learn to perceive the objects around us, as well as our own "self," which was formerly called "mind," "soul," or simply "identity," as computations of points. We can no longer be subjects, because there are no more objects whose subjects we might be, and no hard kernel which might be the subject of some object. The subjective attitude and therefore also any subjective insight have become untenable. We have to leave all that behind as a childish illusion and dare to step into the wide-open field of possibilities. With us, the adventure of becoming human has entered a new phase. This becomes most apparent in the indistinguishability between truth and apparition, or between science and art. We are "given" nothing but realizable possibilities, which are "nothing yet." What we call "the world," what our senses, by not entirely clear methods, have computed into perceptions, into emotions, desires, insights, even the senses themselves, are reified processes of computation. Science calculates the world as it has already been conceived. It deals with facts, with things made, not with data. The scientists are computer artists *avant la lettre*, and the results of science are not some "objective insights," but models for handling the computed. Understanding that science is a form of art does not debase it.

Quite the contrary: science has become a paradigm for all other arts. Indeed, all forms of art only become truly real, i.e., they only construct realities, when they strip themselves of their empiricism and reach the theoretical precision of science. This is the "digital apparition" that we talk about here: through digitization all art forms become exact scientific disciplines and can no longer be distinguished from science.

The German word *Schein* (apparition) has the same root as the word *schön* (beautiful), and will become of prime importance in the future. When the childish desire for "objective insight" is abandoned, then insights will be judged according to aesthetical criteria. This is also nothing new: Copernicus is better than Ptolemy, and Einstein is better than Newton, because they offer more elegant models. What is really new, however, is that from now on we will have to embrace beauty as the only acceptable criterion of truth: "art is better than truth." This is already observable in relation to computer art: the more beautiful the digital apparition, the more real and truthful the projected alternative worlds. Man, as a project, this formally thinking systems analyst and synthesist, is an artist.

This insight returns us to the starting point of the train of thought developed here. We began with the notion that we are distrustful of the emerging alternative worlds because they are artificial and because we have designed them ourselves. This distrust can now be placed in context: it is our old, subjective, linear-thinking, and historically conscious distrust of the new that expresses itself in the alternative worlds, and that cannot be grasped by the received categories like "objectively real" or "simulation." This distrust is based on a formal, calculatory, structural consciousness for which "real" is everything that is experienced concretely (*aisthestai* = experience). Insofar as the alternative worlds are felt to be beautiful, they are realities inside which we live. The "digital apparition" is the light that illuminates for us the night of the yawning emptiness around and in us. We ourselves, then, are the spotlights that project the alternative worlds against the nothingness and into the nothingness. □

TRANSLATED FROM GERMAN BY ANDREAS BROECKMANN.