Polona Tratnik

Art as Acting Against the Program of the Apparatus[1]

It is interesting to focus on the concept of an artist in Flusser's thought because Flusser is one of the first scholars to address the systems of technical media, as well as the biotechnological manipulation of the living world, in relation to the issue of programmability. In this regard Flusser questioned the position of the actor, the operator or perhaps the creator in these systems. If the functionary and the apparatus merge into a unit and apparatus has its program, what is the role the artist if he or she is not just anyone who is exhausting the options offered by the program? This is the central question to which I devote my attention in this paper. I will compare the functionary of the apparatus of the camera and the "creator" in the field of biotechnics to establish the similarities in both "creative" practices of an (artistic) photographer and of a biotechnological artist, as well as discuss the similarities with other artistic practices discussed by Flusser. Because the subject involved in the game of the apparatus is subjected to its structure, the issue of power also needs to be address. This transposes the notion of an artist as a supposed creator to the notion of an artist as the one who resists the structures of power.

First of all, to get to the notion of apparatus, it is relevant to pay attention to the notion of information. In *Towards a Philosophy of Photography* Flusser defines information in the lexicon of basic concepts: *information* is an improbable combination of elements and *inform* means 1. create improbable combinations of elements; 2. imprint them upon objects (Flusser 2000: 84). In this book information is in the center of his discussion, since the book is about technical images, which are images produces by apparatuses, and technical images that belong to the information or postindustrial age, even post-historic context. Yet, the process of informing is not something that would belong only to the information age or the functioning of the apparatuses. In the triad tools – machines – apparatuses, tools were already informing objects, meaning they were involved in the production of information.[2] Yet there is basic difference between the industrial society and postindustrial society, between the functioning of tools and machines and apparatuses. The category "work" must be replaced by the category "information". "The basic category of industrial

[2] "Tools tear objects from the natural world and change the form of them. They inform them. They get an unnatural, improbable form, it becomes cultural. This production and information of objects is work and its result is called work. The traditional works of art fit in this category." (Flusser 2000: 23)

society is work. Tools and machines work by tearing objects from the natural world and informing them, i.e. changing the world. Apparatuses do not work in this sense. They change the meaning of the world. Their intention is symbolic. Photographers do not work in the industrial sense /…/, but they do do something: they *create* [my accentuation], process and store symbols" (Flusser 2000: 25).

Photographer, who is involved in producing informative images (since the production of redundant images does not interest Flusser) is a creative individual. However, more attention has to be devoted to this concept of creativity. The way, how the process of taking photographs is described by Flusser, does not seem very creative. It rather means exhausting the program, which preexists the action of the photographer, so photographer's activity is a realization of something given *a priori* and also *to everyone*: "The camera is programmed to produce photographs, and every photograph is a realization of one of the possibilities contained within the program of the camera. The number of such possibilities is large, but it is nevertheless finite" (Flusser 2000: 26). Two issues that are central for this discussion, require to be addressed further on. 1. If the program is given *a priori* the act of photographing, which is to be comprehended as a creative activity, and it defines the activity itself, it is a matter of power, to which the photographer is exposed to. Photographer's activity therefore has to do with the relationship to the power structures. 2. If the same program is given to everyone and the activity of the functionary is about exhausting the program of the apparatus, then anyone involved in the apparatus is positioned in the same situation. "Photographer is not a worker but a player: not *Homo faber* but *Homo ludens*. In this function human beings are neither constant nor the variable but they merge into a unity. Therefore, photographers are functionaries of the apparatus of the camera" (Flusser 2000: 27). The activity of photographer looks more similar to a player of roulette than to individual creative activities that differ much in accordance with the differences between the individualities. In other words, is artistic photographic activity specific in any respect or should be all photographic activities comprehended in the same manner? Perhaps here we can find a bit of an answer to this question: "With every (informative) photograph, the photographic program becomes poorer by one possibility while the photographic universe becomes richer by one realization. Photographers endeavour to exhaust the photographic program by realizing all the possibilities. But this program is rich and there is no way of getting an overview of it. Thus photographers attempt to find the possibilities not yet discovered within it: they handle the camera, turn it this way and that, look into it and through it" (Flusser 2000: 26). There is a bit of an answer because we can see that the photographer is in a kind of a struggle with the apparatus of the camera. The general definition of apparatus is to be found in Flusser's lexicon of basic concepts: "a plaything or game that simulates thought; organization or system that enables something to function" (Flusser 2000: 83). Apparatus is thus a power structure to which a photographer

gets subjected, subordinated. "All apparatuses (not just computers) are calculating machines and in this sense 'artificial intelligences', the camera included" (Flusser 2000: 31). For the photographer, it must have been a challenge to ascend to the position of domination, the position of thinking (instead of the apparatus). "Creative" photographers therefore perhaps aspire to use the camera as a tool, which means in this game they are playing with the camera, they aim to subvert the system of power – instead of being subjected to the apparatus and its program, they strive to subject the apparatus to their agency. In such a manner I would say, the "creative" photographers tend to *misuse* the camera and not use it according to the primary program, as other functionaries of the apparatuses would do.

In his writings Flusser does not use these "heavy" terms that perhaps best describe photographing as "artistic" practice: *resistance to the program and the power of the apparatus*, *misusing the program* and *subversion and subjection of the power structures*. In his words photographer's creativity is to be found in his tendency *to inform*, to *produce information*: "photographers wish to produce states of things that never existed before; they pursue these states, not out there in the world, since for them the world is only a pretext for the state of things that are to be produced, but amongst the possibilities contained within the camera's program" (Flusser 2000: 37). The practice of photographer is to create, process and store symbols according to Flusser and there have always been people who have done such things: writers, painters, composers, book-keepers, managers. In the process these people have produced objects: books, paintings, scores, balance-sheets, plans – objects that have not been consumed but that have served as carriers of information (Flusser 2000: 25). Flusser even writes that writers can be considered functionaries of the apparatus "language" that plays with the symbols contained within the language program – with words – by combining them. Their intention is to exhaust the language program and to enrich literature, the universe of language. Similar as before, just that language is not a true apparatus, because it was not created as simulation of a body organ and it is not based, in its creation, on any scientific theories at all (Flusser 2000: 28).

Before passing over to the field of biotechnics, let me expose one more issue that is to be relevant in both cases, the photographic activity and the biotechnological intervention. We have seen that photographer's practice is fixed to a program. Even if the "artistic" activity of the photographer was subsumed above a practice of resistance and Flusser did expose this oppositional stance of the photographer towards the apparatus explicitly: "photographers do not play with their plaything but against it" (Flusser 2000: 27), there are spots in Flusser's writings where one could say he does not ascribe some real powerful action potential to photographers, as for instance here: "Photographers can only act within the program of the camera, even when they think they are acting in opposition to this program. This is true of all post-industrial acts" (Flusser 2000: 38). There is not much room for resistance in the post-industrial era of the apparatuses. Yet, so far we

have overlooked a position and a role of somebody else, another human agency involved in the functioning of the apparatus. And here the situation with apparatuses is unique in comparison with the elder systems with machines and tools. There is a clue Flusser gives: "Programming is post-ideological manipulation" (Flusser 2000: 38). The one who programs the program of the apparatus is the one who establishes the system, not the one who plays and gets involved in the game, but perhaps the programmer is to be considered as the creator. In the continuation I will discuss the issues of power and resistance, as well as of creativity in further reference to biotechnology.

Is the program of the evolution to be compared with the program of the camera? One could say that for Flusser biological morphogenesis means exhausting the genetic program. One could say that similar as what photographer or the writer does, through biological morphogenesis every new biological form realizes one of the possibilities contained within the program of the evolution. In such a manner, the number of such possibilities is large, but finite. With every new form the evolutional program becomes poorer by one possibility while the evolutional universe becomes richer by one realization. We need to reconsider the significance of the information to consider this issue properly.

In his essays "On Discovery" Flusser pays attention to the biomass and writes, "'biomass' forms a sort of slime that covers the globe; its weight can be calculated with some precision. It consists of individual microscopic drops containing information. Those drops tend to divide, and they transmit their information to their successors. Yet information is not only transmitted, which would mean it never changes, but during the transmission variations or mistakes may occur, and the information changes. These mistakes are called mutations. Thus living matter as a whole carries a stream of ever more diversified information" (Flusser 1988a: 14).What is going on in this process of evolution is the production and transmission of information by living matter. Flusser writes: it applies an extraordinary stupid method – new information – creativity, as he even names it – comes about by mistake, or if you prefer, by pure chance. So the complex information such as the nervous system of an octopus, or the human brain, are the results of blind, hazard variation. Thus, what evolution does, is *variational creativity*, which does its work by a chance. Considering the question, has evolution a program, we would need to answer, no, there is no deliberate program at work. But still, evolution does perform the production and preservation of information. And here is an interesting point – Flusser also writes: "Art is always the production and preservation of information" (Flusser 1988a: 14). So how does the activity of an artist differ from the evolution processes?

Flusser acknowledges: once the "microscopic drops" of the biomass were discovered, and the information they carry, molecules of complex acids, which are even smaller, it became possible to manipulate them. It has now become possible to create information that can be inserted into living matter, that can become hereditary. It has become possible to create a work of art that will live,

will multiply, and will itself create other works of art, practically forever. This, Flusser recognizes, is the essence of what biotechnics is about – this is the new "art of living" (Flusser 1988a: 14). It is art, he acknowledges, thus to the artists who put information into stone, canvas, paper, celluloid, electromagnetic fields, whatever, must now be added those who can create living beings, and who do so by a method apparently more intelligent than the one that brought us ourselves into existence. If this "intelligent method" is obviously not doing creations by mistakes, by a chance, it must have been by a deliberate program. Biotechnology could therefore be comprehended as an apparatus with a deliberate program.

Another emphasis in this regard has to be given at this point – Flusser differentiates between *variational* and *true creation*. "The artists", as he names those getting involved in the "art of living", don't discover the shapes, the contemporary "morphogenesis", the "birth of forms", is about creation, today we "invent" or "create" forms, "Our artists are 'creative'" (Flusser 1988b: 17). Art, biotechnology and creativity are even more explicitly interconnected here: "This new 'art of living' enables us to become not just metaphorically but literally creative. Thus it might be said that biotechnics is art in the literal sense of the term" (Flusser 1988a: 15).

The notion *true creation* is linked to the notion of God's creation. When artists "invents" forms, "The artist becomes godlike" (Flusser 1988b: 17). In the domain of biotechnics, if a form was created that had never existed before, this would be an instance of true creation. True creation or transcendental creation is the province of a genius: "we might suppose that an artist – or a genetic engineer, or any kind of 'creator' for that matter [i.e. living matter] – is the more godlike the more he or she has access to it" (Flusser 1988b: 18). The model of variational creation is evolution. It is used in computing, but also in genetic engineering (including synthetic biology) since it produces combinations and permutations of already existing elements of information. By contrast, true creation would challenge the very idea of evolution, which is exactly the aim of present-day life-engineering. Perhaps Flusser's distinction between the two simply has to be discarded. Genetically modified and synthesized organisms are not *created* in the sense of bringing something formed from dead matter to life, which was actually the original, Biblical sense of creation: "And the LORD God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul" (Genesis 2: 7). This dualism between dead matter and a living soul is present in Craig Venter's aim to *create* a life-form originating from another, non-living source (as for example from a computer program) as in the case of synthetic biology. I would claim that the achievements of biotechnology in the manipulation of life do not simply re-present this ancient dualism between body and soul. The boundaries between living and non-living matter have become blurred, and the concept of life has acquired novel dimensions that are quite incomparable with traditional ones. The notion of having life "on" and "off" is simply obsolete, since life can get dissolved,

dispersed, diluted, or delayed. Here this is relevant because in the tradition of comprehension of an artist as a creator, the artist produces a creation from a scratch.

According to Flusser, variational creation is a method requiring a lot of work being done not just with computers, but also with biotechnology: "biotechnics is doing the same thing natural evolution does – variational creativity, the sole difference being that it does its work not by chance but according to a deliberate program" (Flusser 1988a: 14-15). Variational creation operates within given possibilities, one could say within the natural apparatus, similar to how Flusser once considered pictures produced within the apparatus of photography, how every particular realization within this program exists as a potential, even if it will never be actually realized: "Every shape in which Earth's living beings could manifest themselves is encoded within the existing genetic information as a potential, a virtuality" (Flusser 1988b: 18).

There is another relevant dimension of the notion true creation with biotechnics to be mentioned at this place. In the case of true creation, we would be dealing with magic, magical power that is characteristic of artistic creation. This bringing to life will result in something its creator will be incapable of understanding: "we shall be incapable of understanding the spirits to which we shall be giving life" (Flusser 1988a: 15). This idea shares similarities with the production of technical images and Flusser's notion of *projection*: technical images are projected into space without being decoded, thus we are incapable of understanding the technical images we produce.

There are similarities between the activity of the biotechnologist in the apparatus of biotechnology and the photographer in the apparatus of camera. If Flusser is to introduce the same logic as he used in *Towards Philosophy of Photography*, then he must have appreciated the resistance to the program that is to be performed by the creative agents. If biotechnology is to be comprehended as apparatus with its program and if "creativity" is to be comprehended by analogy as an oppositional or resistant activity, it is not the biotechnologist who performs the resistance. There are analogies between the idea of a "creation" of new (biological) forms and producing informative photographs, both essentially have to do with production of information. Thus one could understand why according to Flusser there is no difference between a biotechnologist and an artist. Yet, if we are to follow the notion of an artist as one who opposes or resists the apparatus, to be consistent with the theory on photographic apparatus, Flusser would have to establish a concept of a biotechnological artist. According to this logic, biotechnological artist could not be the same as biotechnologist. The latter is a functionary in the sense to merely execute the options of the program, there is no struggle with the apparatus at work, no opposing, no subversion, just a passive acceptance of the game. This brings us to the issue of *power* as the central theme for this debate.

There are two dimensions of power to be discussed. One is related to the functioning of the apparatus, the "power of the apparatus" as the "intelligent" system. The other issue is power in a

broader and more "traditional" sense, i.e. related to the access to the functioning system, the apparatus. In this sense the issue of power is related to the question, who benefits from it and what.

If the apparatus is to be understood as an "artificial intelligence", a kind of brain by itself, it "thinks", which questions the thinking of the functionary. For Flusser, humans get liberated with the "smartness of the self-functioning systems": "These 'smart tools' replace human work and liberate human beings from the obligation to work: From then on they are free to play. The camera illustrates this robotization of work and this liberation of human beings for play. It is a smart tool because it creates images automatically. Photographers no longer need, like painters, to concentrate on a brush but can devote themselves entirely to playing with the camera" (Flusser 2000: 29). Yet such liberation for play is suspicious. Theodor Adorno and Max Horkheimer were aware how dangerous is the moment of fun for people and how it is directly linked to the actual manipulation, they were warning that the suggestion to switch off your brains for the enjoyment means switching off the brains for thinking. Today, we are invited to play and not think almost everywhere – when we sit down in an airplane, first what we see are the instructions for getting the enjoyment. We are called, even required to buy smart apparatuses, smart phones and other smart tools for everyday life, even smart cars. The apparatuses are getting smarter and smarter so that human can get more and more stupid.

What could be the resistant position in the world of apparatuses? An easy answer would be – total rejection of apparatuses. Yet almost nobody is capable of doing this, because it would ultimately mean complete social exile, since everybody is connected to apparatuses in the technologized society. However, even other sorts of apparatuses suck us with their programs: could we imagine not to go to kindergarten and to school, some do not have a job and some do not to have a family, thus they are not included in these apparatuses, but at the end of the day everybody is included in some apparatuses. The state apparatus, for instance, mentioned by Flusser as well, is an apparatus in which everybody take part; it is unimaginable not to be a citizen. With the family, the school, kindergarten etc. I am intentionally mentioning apparatuses, which Luis Althusser listed as ideological apparatuses. Each of us belongs to several of them even before he or she is born – before the baby is born, he has a name, the pink clothes wait for her, the cars for the boy, etc. The essence of the apparatuses for Althusser is ideology. One can never escape it. Yet, one can aim to get aware of it and avoid getting so much manipulated by it.

The challenge is how to establish a critical or perhaps oppositional relationship with the apparatus, how to get into a position, in which one can minimalize the absorption of himself by certain apparatuses, perhaps even one could decline inclusion in some of them. How to establish certain distance from which one is able to get a better overview of the system and a better insight into its functioning? It would be naïve to believe in an external position, a noninvolved observer, which

was strongly criticized by Maurice Merleau-Ponty. Primarily the criticism referred to Descartes' conception of space, whereat Merleau-Ponty claimed that space is not, as it was in the *Dioptrics*, "a network of relations between objects such as would be seen by a third party, witnessing my vision, or by a geometer looking over it and reconstructing it from outside. It is, rather, a space reckoned starting from me as the null point or degree zero of spatiality. I do not see it according to its exterior envelope; I live it from the inside; I am immersed in it. After all, the world is around me, not in front of me" (Merleau-Ponty 1993: 138) There has to be the way to do it from within. Flusser says, camera is a black box (Flusser 2000: 27). It is not transparent; one cannot see its interiority from the outside. Obviously, one needs to get involved and get experienced to be able to develop a critique. Flusser himself was loyal to this idea, he got into experimentation with new media, video and computer (Bernd Wingert, *Flusser-Hypertext Prototype 2*, 1990) in relation to the media of language (as a system) and speech. He participated in the production of art and at the same time practiced theory about it with the means of it. The exhibition *Without Firm Grounds. Flusser and the Arts*[3] demonstrated that.

In his experimentation with video, there is not only a criticism of the media from within, i.e. with the media, there is also another person involved, Fred Forest, the video artist, who is shooting the video (*Les gestes du professeur*, 1974) as long as the professor has something to say about the issue. This creativity is crucially arising from a dialog: with the media, between media (speech and video), between theory and art. Marcel Rene Marburger ascertained that dialog is a creative act according to Flusser. In Marburger's reading of Flusser, it is relevant that one understands the apparatus, then the intention to break the black box lies in a further step to develop artistic strategy with which to go against the program of the apparatus: the more complex the technical apparatuses are, the acting against the program can only be possible with collaboration of several people (Marburger 2011: 139). Both mentioned projects (*Flusser-Hypertext Prototype* and *Les gestes du professeur*) show that Flusser bore that in mind in his artistic involvements.

Furthermore, the program of an apparatus has almost infinite possibilities: "this program is rich and there is no way of getting an overview of it" (Flusser 2000: 29) In this regard an overview is not possible because of the multiplicity of options. In playing with the apparatuses as well as in criticism about them, it is not the point to know or to master all the possibilities that the apparatus offers. Perhaps here lies the challenge to criticize the apparatus, even if one does not master it totally, because such mastery is not even realistically possible. For instance, Facebook is a program where one can theoretically get everybody for a friend, make an absolute global network of friends. But nobody will do it, will not be able to do it, although some do compete in getting as many

---

[3] West den Haag, March 19 2016—May 07 2016. <http://www.westdenhaag.nl/exhibitions/16_04_Flusser/> July 17 2016

Facebook friends as possible. To be able to establish a criticism, it is relevant to master the functioning of the apparatus, to know the rules and certain functions of it. Yet there is not much sense in directing the criticism towards the bare functions of the program. It is relevant where do these functions connect to, what is their significance, what do they do, why are they there, what is happening with launching the system, what are the functionaries of the apparatuses doing in a broader sense, as social subjects, who they are working for, which interests are fulfilled. A former secret service agent explained, how much work the agents had in the past to collect information about people, their habits, social networks, etc. With Facebook their work has become so much easier, people voluntarily, in the name of the game, devote themselves to the surveillance and they get themselves wounded to get susceptible for manipulation, at the same time believing that they are free to play and they spend their time for having fun.

As regards the issue of power, Flusser acknowledged: "Power has moved from the owner of objects to the programmer and the operator" (Flusser 2000: 30) There is certain power that the programmers have in today's world, they are masters of the technological apparatuses. Yet, their power that originates from their work of programming or establishing the system is located in somewhat external position, a preceding one. When the system is launched, it goes on its own way. It is not the programmer who is in power of the running system. The programmer is a person with professionalized knowledge in the program of the apparatus, which gives him or her certain power. It was already mentioned that understanding the apparatus is a condition for acting against the apparatus. This person is the programmer. The programmer therefore has a potential to act against the program. The way to do it from within is perhaps to re-program, which means *to intervene*, make a disturbance. There are two categories of programmers at work in the sense of this discussion, one is the producer of the program of the apparatus and the other is the one who acts against the program of the apparatus, which could rather be called the *hacker*.

It is difficult to agree with Flusser that power has completely moved from the owner to the programmer. The programmer is yet another worker for the owner of the system. Contemporary "owners" are not that much owners of the objects, as they are owners of systems and through them of different sorts of capital, information, for instance. A contemporary owner owns an apparatus, which generates information, with the help of the functionaries that join the system. The question is who has the power over the apparatus and how can the information produced in it get used. Information has enormous strategic and economic value. When you decide to take part in a game of an apparatus, a seeming plaything, the question is, who do you devote yourself to, who do *you let yourself get subjected to*.

When speaking about power relations, there are two main interests at work according to Marxist theory – carrying into effect ideology and accumulating the capital. I would say, both are very much at work also in the cases of today's technological, digital or smart apparatuses.

To conclude: if an artist is really to play with the program of the apparatus, there must have be a difference between an artist and an ordinary social member subjected to power. Is the kind of activity that everybody is invited to practice with today's smart apparatuses, such as the choosing of certain colors, motives, backgrounds and other appearances as offered by the program, creativity? Are we getting more and more creative if we exhaust the options given by the apparatuses offered on the market by the huge multinational corporations, if we take part in their business? If an artist is to be comprehended in such a manner, he or she completely loses his social significance and there is no point to insist on the concept of an artist. The role of an artist is to be based on revealing the hidden mechanisms of power, the power relations, in resisting the apparatus, in subverting the program, in misusing the apparatus, in revealing the mechanisms of manipulation, in looking for the alternatives, in developing a criticism of the established systems, in challenging the mechanisms of power etc. This emancipatory engagement is a very relevant social function that art has inherited from the era of romanticism.

Bibliography

Flusser, Vilém (1988a): "On Discovery". In: Artforum, New York, Vol. 27, No. 7.

Flusser, Vilém (1988b): "On Discovery". In: Artforum, New York, Vol. 27, No. 10.

Flusser, Vilém (2000): Towards a Philosophy of Photography, London, Reaktion Books.

Marburger, M. R. (2011): Flusser und die Kunst, Köln, Edition/Bücher Weyer.

Merleau-Ponty, M. (1993): "Eye and Mind". In: Johnson, G. A. (ed.). The Merleau-Ponty Aesthetics Reader. Philosophy and Painting, Evanston, Illinois: Northwestern University Press