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Towards a Philosophy of Photography

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The Apparatus

Technical images are produced by apparatuses. In saying this, one presumes that the typical characteristics of apparatuses as such – in a simplified, embryonic form – are also contained within the camera and can be derived from it. To this extent, the camera, as a prototype of the apparatuses that have become so decisive for the present and the immediate future, provides an appropriate starting point for a general analysis of apparatus – those apparatuses that, on the one hand, assume gigantic size, threatening to disappear from our field of vision (like the apparatus of management) and, on the other, shrivel up, becoming microscopic in size so as to totally escape our grasp (like the chips in electronic apparatuses). However, one must first attempt a more exact definition of the term 'apparatus', since various conceptions of it exist in current usage.

The Latin word *apparatus* is derived from the verb *apparare* meaning 'to prepare'. Alongside this there exists in Latin the verb *praeparare*, likewise meaning 'to prepare'. To illustrate in English the difference between the prefixes 'ad' and 'prae', one could perhaps translate *apparare* with 'pro-pare', using 'pro' in the sense of 'for'. Accordingly, an 'apparatus' would be a thing that lies in wait or in readiness for something, and a 'preparatus' would be a thing that waits patiently for something. The photographic apparatus lies in wait for photography; it sharpens its teeth in readiness. This readiness to spring into action on the part of apparatuses, their similarity to wild animals, is

something to grasp hold of in the attempt to define the term etymologically.

But etymology on its own is not sufficient to define a term. One has to enquire into the ontological status of apparatuses, their level of existence. They are indubitably things that are produced, i.e. things that are pro-duced (brought forward) out of the available natural world. The totality of such things can be referred to as *culture*. Apparatuses are part of a culture, consequently this culture is recognizable in them. It is true that the word *apparatus* is also occasionally applied to natural phenomena, e.g. when speaking of the hearing apparatus of animals. Such usage is, however, metaphorical: We call these organs hearing apparatus because they 'lie in wait for sounds' – thus applying a cultural term to the natural world; if there were no apparatuses in our culture, we should not refer to such organs in that way.

Roughly speaking, two kinds of cultural objects can be distinguished: the ones that are good for consumption (consumer goods) and the ones that are good for produc-ing consumer goods (tools). The two have in common that they are 'good' for something: They are 'valuable', they are as they should be, i.e. they have been produced inten-tionally. This is the difference between the natural and the cultural sciences: The cultural sciences pursue the intentions hiding behind things. They enquire not only 'Why?' but also 'What for?', and consequently they also pursue the intention behind the camera. Judged by this criterion, the camera is a tool whose intention is to produce photo-graphs. As soon as one defines apparatuses as tools, how-ever, doubts arise. Is a photograph a consumer item like a shoe or an apple? And hence, is a camera a tool like a needle or a pair of scissors?

Tools in the usual sense tear objects from the natural world in order to bring them to the place (produce them) where the human being is. In this process they change the form of these objects: They imprint a new, intentional form onto them. They 'inform' them: The object acquires an unnatural, improbable form; it becomes cultural. This production and information of natural objects is called 'work' and its result is called 'a work'. Many works, such as apples, are admittedly produced, but have hardly been informed; others, such as shoes, are strongly informed, they have a form that is developed from animal skins (leather). Apple-producing (-picking) scissors are tools that inform very little; shoe-producing needles are tools that inform a lot. Is the camera then a kind of needle since photographs carry information?

Tools in the usual sense are extensions of human organs: extended teeth, fingers, hands, arms, legs. As they extend they reach further into the natural world and tear objects from it more powerfully and more quickly than the body could do on its own. They simulate the organ they are extended from: An arrow simulates the fingers, a hammer the fist, a pick the toe. They are 'empirical'. With the Industrial Revolution, however, tools were no longer limited to empirical simulations; they grasped hold of scientific theories: They became 'technical'. As a result they became stronger, bigger and more expensive, their works became cheaper and more numerous, and from then on they were called 'machines' . Is the camera then a machine because it appears to simulate the eye and in the process reaches back to a theory of optics? A 'seeing machine'?

When tools in the usual sense became machines, their relationship to human beings was reversed. Prior to the Industrial Revolution the human being was surrounded

by tools, afterwards the machine was surrounded by human beings. Previously the tool was the variable and the human being the constant, subsequently the human being became the variable and the machine the constant. Previously the tool functioned as a function of the human being, subsequently the human being as a function of the machine. Is the same true for the camera as for the machine?

The size and high price of machines meant that only capitalists were able to own them. Most human beings worked as a function of machines: the proletariat. Humanity was divided into two classes, that of the machine owners for whose benefit the machines worked, and that of the class of proletarians who worked as a function of the use of machines. Is that true now for the camera? Is the photographer a proletarian, and are there photocapitalists?

All these questions, even though they are 'good questions', do not appear to grasp the basic function of apparatuses. Of course: Apparatuses simulate technical organs. Of course: Human beings function as a function of apparatuses. Of course: There are intentions and interests concealed behind apparatuses. But this is not the decisive thing about them. All these questions lose sight of the basic function of apparatuses because they arise out of the industrial context. Apparatuses, though the result of industry, point beyond the industrial context towards post-industrial society. Therefore a formulation of things based on industry (like that of the Marxists, for example) is no longer competent to deal with apparatuses and misses what they are about. We have to reach out for new categories in order to be able to tackle apparatuses and define what they are.

The basic category of industrial society is work: Tools and machines work by tearing objects from the natural world and informing them, i.e. changing the world. But apparatuses do not work in that sense. Their intention is not to change the world but to change the meaning of the world. Their intention is symbolic. Photographers do not work in the industrial sense, and there is no point in trying to call them workers or proletarians. As most human beings currently work on and in apparatuses, talk of the proletariat is beside the point. The categories of cultural criticism must be rethought.

Photographers, it is true, do not work but they do do something: They create, process and store symbols. 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. They were read, looked at, played, taken into account, used as the basis for decisions. They were not an end but a means. Currently this sort of activity is being taken over by apparatuses. As a result, the objects of information created in this way are becoming more and more efficient and more and more extensive, and they are able to program and control all the work in the old sense. Therefore, most human beings are currently employed on and in work-programming and work-controlling apparatuses. Prior to the invention of apparatus, this kind of activity was seen as being the 'service sector', as 'tertiary', as 'brain work', in short as peripheral. Nowadays it is at the centre of things. Therefore in cultural analysis the category 'work' must be replaced by the category 'information'.

If one considers the camera (and apparatuses in general) in this sense, one sees that the camera produces symbols: symbolic surfaces that have in a certain way been prescribed for it. 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: It is the sum of all those photographs that can be taken by a camera. It is true that one can, in theory, take a photograph over and over again in the same or a very similar way, but this is not important for the process of taking photographs. Such images are 'redundant': They carry no new information and are superfluous. In the following, no account will be taken of redundant photographs since the phrase 'taking photographs' will be limited to the production of informative images. As a result, it is true, the taking of snapshots will largely fall outside the scope of this analysis.

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 their 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. If they look through the camera out into the world, this is not because the world interests them but because they are pursuing new possibilities of producing information and evaluating the photographic program. Their interest is concentrated on the camera; for them, the world is purely a pretext for the realization of camera possibilities.

In short: They are not working, they do not want to change the world, but they are in search of information.

Such activity can be compared to playing chess. Chess-players too pursue new possibilities in the program of chess, new moves. Just as they play with chess-pieces, photographers play with the camera. The camera is not a tool but a plaything, and a photographer is not a worker but a player: not *Homo faber* but *Homo ludens*. Yet photographers do not play with their plaything but against it. They creep into the camera in order to bring to light the tricks concealed within. Unlike manual workers surrounded by their tools and industrial workers standing at their machines, photographers are inside their apparatus and bound up with it. This is a new kind of function in which human beings are neither the constant nor the variable but in which human beings and apparatus merge into a unity. It is therefore appropriate to call photographers functionaries.

The program of the camera has to be rich, otherwise the game would soon be over. The possibilities contained within it have to transcend the ability of the functionary to exhaust them, i.e. the competence of the camera has to be greater than that of its functionaries. No photographer, not even the totality of all photographers, can entirely get to the bottom of what a correctly programmed camera is up to. It is a black box.

It is precisely the obscurity of the box which motivates photographers to take photographs. They lose themselves, it is true, inside the camera in search of possibilities, but they can nevertheless control the box. For they know how to feed the camera (they know the input of the box), and likewise they know how to get it to spit out photographs (they know the output of the box). Therefore the camera

does what the photographer wants it to do, even though the photographer does not know what is going on inside the camera. This is precisely what is characteristic of the functioning of apparatuses: The functionary controls the apparatus thanks to the control of its exterior (the input and output) and is controlled by it thanks to the impenetrability of its interior. To put it another way: Functionaries control a game over which they have no competence. The world of Kafka, in fact.

As will be shown later, the programs of apparatuses consist of symbols. Functioning therefore means playing with symbols and combining them. An anachronistic example may serve as an illustration: 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. The example is anachronistic because language is not an apparatus; it was not created as a simulation of a body organ and it is not based, in its creation, on any scientific theories at all. Nevertheless, language can nowadays be 'apparatusized': 'Word processors' can replace writers. In their games with words, writers inform pages – they imprint letters on them – something a word processor can also do and, even though this is 'automatic', i.e. happens by chance, it can, in the long run, create the same information as a writer.

But there are apparatuses that are capable of playing quite different games. While writers and word processors inform statically (the symbols that they imprint on pages signify conventional sounds), there are also apparatuses that inform dynamically: The symbols that they imprint on objects signify specific movements (e.g. work move-

ments) and the objects informed in this way decode these symbols and move according to the program. 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. The work to be carried out, imprinting the image onto the surface, happens automatically: The tool side of the camera is 'done with', the human being is now only engaged with the play side of the camera.

There are therefore two interweaving programs in the camera. One of them motivates the camera into taking pictures; the other one permits the photographer to play. Beyond these are further programs – that of the photographic industry that programmed the camera; that of the industrial complex that programmed the photographic industry; that of the socio-economic system that programmed the industrial complex; and so on. Of course, there can be no 'final' program of a 'final' apparatus since every program requires a metaprogram by which it is programmed. The hierarchy of programs is open at the top.

Every program functions as a function of a metaprogram and the programmers of a program are functionaries of this metaprogram. Consequently, no-one can own apparatuses in the sense that human beings program apparatuses for their own private purposes. Because apparatuses are not machines. The camera functions on behalf of the photographic industry, which functions on behalf of the industrial complex, which functions on behalf of the

socio-economic apparatus, and so on. The question of ownership of the apparatus is therefore irrelevant; the real issue here is who develops its program. The following explanation shows that there is little point in wanting to own an apparatus, as if it were just any other object.

It is true that many apparatuses are hard objects. A camera is constructed out of metal, glass, plastic, etc. But it is not this hardness that makes it capable of being played with, nor is it the wood of the chessboard and the chess-pieces that make the game possible, but the rules of the game, the chess program. What one pays for when buying a camera is not so much the metal or the plastic but the program that makes the camera capable of creating images in the first place– just as generally the hard side of apparatuses, the *hardware*, is getting cheaper all the time, the soft side of them, the *software*, is getting more expensive all the time. One can see from the softest of the apparatus, e.g. political apparatus, what is characteristic of the whole of post-industrial society: It is not those who own the hard object who have something of value at their disposal but those who control its soft program. The soft symbol, not the hard object, is valuable: a revaluation of all values.

Power has moved from the owner of objects to the programmer and the operator. The game of using symbols has become a power game – a hierarchical power game. Photographers have power over those who look at their photographs, they program their actions; and the camera has power over the photographers, it programs their acts. This shift of power from the material to the symbolic is what characterizes what we call the 'information society' and 'post-industrial imperialism'. Look at Japan: It owns neither raw materials nor energy – its power lies in programming, 'data processing', information, symbols.

These reflections make it possible to attempt the following definition of the term 'apparatus': It is a complex plaything, so complex that those playing with it are not able to get to the bottom of it; its game consists of combinations of the symbols contained within its program; at the same time this program was installed by a metaprogram and the game results in further programs; whereas fully automated apparatuses can do without human intervention, many apparatuses require the human being as a player and a functionary.

Apparatuses were invented to simulate specific thought processes. Only now (following the invention of the computer), and as it were with hindsight, is it becoming clear what kind of thought processes we are dealing with in the case of all apparatuses. That is: thinking expressed in numbers. All apparatuses (not just computers) are calculating machines and in this sense 'artificial intelligences', the camera included, even if their inventors were not able to account for this. In all apparatuses (including the camera), thinking in numbers overrides linear, historical thinking. This tendency to subordinate thinking in letters to thinking in numbers has been the norm in scientific discourse since Descartes; it has been a question of bringing thought into line with 'extended matter' constructed out of punctuated elements. Only numbers are suited to a process of 'bringing thinking matter into line with extended matter'. Since Descartes at least (perhaps since Nicholas of Cusa) scientific discourse has tended towards the re-encoding of thought into numbers, but only since the camera has this tendency become materially possible: The camera (like all apparatuses that followed it) is computational thinking flowing into hardware. Hence the quantum (computational) structure of all the movements

and functions of the apparatus.

In short: Apparatuses are black boxes that simulate thinking in the sense of a combinatory game using number-like symbols; at the same time, they mechanize this thinking in such a way that, in future, human beings will become less and less competent to deal with it and have to rely more and more on apparatuses. Apparatuses are scientific black boxes that carry out this type of thinking better than human beings because they are better at playing (more quickly and with fewer errors) with number-like symbols. Even apparatuses that are not fully automated (those that need human beings as players and functionaries) play and function better than the human beings that operate them. This has to be the starting point for any consideration of the act of photography.

The Gesture of Photography

If one observes the movements of a human being in possession of a camera (or of a camera in possession of a human being), the impression given is of someone lying in wait. This is the ancient act of stalking which goes back to the palaeolithic hunter in the tundra. Yet photographers are not pursuing their game in the open savanna but in the jungle of cultural objects, and their tracks can be traced through this artificial forest. The acts of resistance on the part of culture, the cultural conditionality of things, can be seen in the act of photography, and this can, in theory, be read off from photographs themselves.

The photographic jungle consists of cultural objects, i.e. objects that were 'intentionally produced'. Each of these objects obscures photographers' views of their prey. Stalking their way through these objects, avoiding the intention concealed within them, photographers wish to liberate themselves from their cultural condition and to snap their prey unconditionally. For this reason, the photographic tracks through the jungle of Western culture take a different route from those through the jungle of Japan or those through an underdeveloped country. In theory, cultural conditions seem, to a certain extent, to emerge 'in negative' in the photograph, as acts of resistance that have been avoided. Criticism of photography should be able to reconstruct these cultural conditions from the photographs – not just in the case of documentary pictures and photojournalism, where the cultural condition is the prey to be snapped – because the struc-

ture of the cultural condition is captured in the act of photography rather than in the object being photographed.

Such a decoding of the cultural conditions of photography is, however, almost impossible since what appears in the photograph are the categories of the camera which ensnare the cultural conditions like a net with a limited view through its mesh. This is characteristic of all functions: The categories of the apparatus adjust to cultural conditions and filter them. Individual cultural conditions thus disappear from view: The result is a mass culture of cameras adjusted to the norm; in the West, in Japan, in underdeveloped countries – all over the world, everything is photographed through the same categories. Kant and his categories become impossible to avoid.

The categories of the camera are registered on the outside of the camera and can be adjusted there, as long as the camera is not fully automatic. These are the categories of photographic time and space. They are neither Newtonian nor Einsteinian, but they divide time and space into rather clearly separated areas. These areas of time and space are distances from the prey that is to be snapped, views of the 'photographic object' situated at the centre of time and space. For example: one time and space for extreme close-up; one for close-up, another for middle distance, another for long distance; one spatial area for a bird's-eye view, another for a frog's-eye view; another for a toddler's perspective; another for a direct gaze with eyes wide open as in olden days; another for a sidelong glance. Or: one area of time (shutter speed) for a lightning-fast view, another for a quick glance, another for a leisurely gaze, another for a meditative inspection. The act of photography has its movement within this time and space.

On the hunt, photographers change from one form of space and time to another, a process which adjusts the combinations of time-and-space categories. Their stalking is a game of making combinations with the various categories of their camera, and it is the structure of this game – not directly the structure of the cultural condition itself – that we can read off from the photograph.

Photographers select combinations of categories – for example, they may place the camera in such a way that they can shoot their prey with a side-flash from below. It looks here as if photographers could choose freely, as if their cameras were following intention. But the choice is limited to the categories of the camera, and the freedom of the photographer remains a programmed freedom. Whereas the apparatus functions as a function of the photographer's intention, this intention itself functions as a function of the camera's program. It goes without saying that photographers can discover new categories. But then they are straying beyond the act of photography into the metaprogram – of the photographic industry or of their own making – from which cameras are programmed. To put it another way: In the act of photography the camera does the will of the photographer but the photographer has to will what the camera can do.

The same symmetry between the function of the photographer and that of the camera can be perceived in the choice of the 'object' to be photographed. Photographers can photograph everything: a face, a louse, the trace of an atomic particle in a Wilson cloud chamber, a spiral nebula, their own act of photography reflected in the mirror. In reality, however, they can only photograph what can be photographed, i.e. everything located within the program. And the only things that can be photo-

graphed are states of things. Whatever objects photographers wish to photograph, they have to translate them into states of things. Consequently it is true that the choice of the 'object' to be photographed is free, but it also has to be a function of the program of the camera.

In choosing their categories, photographers may think they are bringing their own aesthetic, epistemological or political criteria to bear. They may set out to take artistic, scientific or political images for which the camera is only a means to an end. But what appear to be their criteria for going beyond the camera nevertheless remain subordinate to the camera's program. In order to be able to choose camera-categories, as they are programmed on the camera's exterior, photographers have to 'set' the camera, and that is a technical act, more precisely a conceptual act ('concept', as will be shown later, is a clear and distinct element of linear thought). In order to be able to set the camera for artistic, scientific and political images, photographers have to have some concepts of art, science and politics: How else are they supposed to be able to translate them into an image? There is no such thing as naïve, nonconceptual photography. A photograph is an image of concepts. In this sense, all photographers' criteria are contained within the camera's program.

The possibilities contained within the camera's program are practically inexhaustible. One cannot actually photograph everything that can be photographed. The imagination of the camera is greater than that of every single photographer and that of all photographers put together: This is precisely the challenge to the photographer. Likewise, there are parts of the camera's program that are already well explored. It is true that one can still take new images, but they would be redundant, non-

informative images, similar to those one has seen before. As stated elsewhere, redundant photographs are not of interest in this study; photographers in the sense intended here are in pursuit of possibilities that are still unexplored in the camera's program, in pursuit of informative, improbable images that have not been seen before.

Basically, therefore, photographers wish to produce states of things that have never existed before; they pursue these states, not out there in the world, since for them the world is only a pretext for the states of things that are to be produced, but amongst the possibilities contained within the camera's program. To this extent, the traditional distinction between realism and idealism is overturned in the case of photography: It is not the world out there that is real, nor is the concept within the camera's program – only the photograph is real. The program of the world and the camera are only preconditions for the image, possibilities to be realized. We are dealing here with a reversal of the vector of significance: It is not the significance that is real but the signifier, the information, the symbol, and this reversal of the vector of significance is characteristic of everything to do with apparatus and characteristic of the post-industrial world in general.

The act of photography is divided into a sequence of leaps in which photographers overcome the invisible hurdles of individual time-and-space categories. If they are confronted by one of these hurdles (e.g. on the borderline between close-up and long shot), they hesitate and are faced with the decision about how to set the camera. (In the case of fully automatic cameras this leap, this quantum nature of photography, has become totally invisible – the leaps take place within the micro-electronic 'nervous system' of the camera.) This type of jump-start pursuit is

called 'doubt'. Photographers have doubts, but these are not of a scientific, religious or existential sort; rather, they are doubts in the sense of a new sort of doubt in which stopping short and taking a decision are reduced to grains – a quantum, atomized doubt. Each time photographers are confronted by a hurdle, they discover that the viewpoint they have adopted is concentrated on the 'object' and that the camera offers any number of different viewpoints. They discover the multiplicity and the equality of viewpoints in relation to their 'object'. They discover that it is not a matter of adopting a perfect viewpoint but of realizing as many viewpoints as possible. Their choice is therefore not of a qualitative, but of a quantitive kind. 'Vivre le plus, non pas le mieux.'

The act of photography is that of 'phenomenological doubt', to the extent that it attempts to approach phenomena from any number of viewpoints. But the 'mathesis' of this doubt (its deep structure) is prescribed by the camera's program. Two aspects are decisive for this doubt. First: Photographers' practice is hostile to ideology. Ideology is the insistence on a single viewpoint thought to be perfect. Photographers act in a post-ideological way even when they think they are serving an ideology. Second: Photographers' practice is fixed to a program. 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: They are 'phenomenological' in the sense of being hostile to ideology, and they are programmed acts. Thus it is a mistake to talk of a drift towards ideology on the part of mass culture (e.g. on the part of mass photography). Programming is post-ideological manipulation.

Ultimately, there is a final decision taken in the act of

photography: pressing the shutter release – just like the American President ultimately pressing the red button. In reality, however, these final decisions are only the last of a series of part-decisions resembling grains of sand: in the case of the American President, the final straw that breaks the camel's back: a quantum-decision. As consequently, no decision is really 'decisive', but part of a series of clear and distinct quantum-decisions, likewise only a series of photographs can testify to the photographer's intention. For no single photograph is actually decisive; even the 'final decision' finds itself reduced to a grain in the photograph.

Photographers attempt to escape this granulation by selecting some of their images in the same way as a film director cuts strips of film. But even then their choice is quantum, since they cannot help highlighting elements of a series of clear and distinct surfaces. Even in this seemingly post-camera situation of choosing the photograph, one can see the quantum, atomized structure of everything to do with photography (and everything to with apparatus pure and simple).

To summarize: The act of photography is like going on a hunt in which photographer and camera merge into one indivisible function. This is a hunt for new states of things, situations never seen before, for the improbable, for information. The structure of the act of photography is a quantum one: a doubt made up of points of hesitation and points of decision-making. We are dealing here with a typically post-industrial act: It is post-ideological and programmed, an act for which reality is information, not the significance of this information. And the same is true not only of the photographer but of all functionaries, from a bank cashier to the American President.

The act of photography results in photographs such as we nowadays are being flooded with on all sides. Hence a consideration of this act can serve as an introduction to these surfaces whose presence is ubiquitous.