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PHOTOGRAPHY AND REALITY

The day Niepce successfully achieved a "view-point" for the first time, it was possible for man to believe that a century-old dream was being fulfilled: the dream of obtaining a reproduction of reality that would be absolutely faithful and could be preserved. The people of the time, surprised to see that in a daguerreotype, the first widely diffused form of photography, they could "count the tiles on a roof," somewhat naively believed that they had succeeded in catching hold of reality. Confronted with this new picture, which was of a still unknown kind and must understandably have been illusive at first glance, they were carried away by a childish enthusiasm and hence did not realize that what they had before their eyes was only a simulacrum.

Indeed, one could recognize in the daguerreotype what had been or what might have been directly perceived by eyesight, or more accurately, what had or might have been discerned in a mirror. Scientists, artists, art-critics were struck at the time by the preciseness of the scene which had been photographed, by the details which appeared in full light, by this extraordinary recording

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of nature at a given moment. In his first communication to the "Academie des Sciences," issued on January 7, 1839, Arago declared: "Mr. Daguerre has discovered some particular screens on which the optical image leaves a perfect print, and on which all that the image contained is reproduced down to the most minute details with incredible accuracy and sharpness." As soon as daguerreotypes started to exhibit still-lives, landscapes, portraits, the judgment of the great scientist was unanimously ratified by public opinion: reality was "caught" exactly as it appeared without any possible change.

"The ambition of the new technique was to restore objects as faithfully as possible."[1] Stress was laid on the fact that the picture was obtained without the intervention of man. Niepce had called his first process "heliography" which meant etymologically sunwriting. Fox Talbot entitled the book in which he developed his views, *The Pencil of Nature*, and he explained that he had discovered "a chemical process through which natural objects can be delineated without the use of a pencil." The first experts who were so proud of their success and of their particular "tour de main," made it a point of honor to achieve the closest reproduction of reality possible, and it would seem that originality had to disappear in this search at all costs for impersonal accuracy.

This view is far from forgotten, a hundred and twenty-five years after the appearance of the new device. The amateur photographer wants his photograph to "resemble." Commercial publicity relies on the fact that the camera automatically gives the best representation of nature. Even a philosopher like Etienne Gilson considers that "a photographic picture is good if after an exact setting and a correct exposure, it is sharp enough to disclose details at first glance."[2] Painters, who deliberately rejected the copy of nature, speak disdainfully of the artists who take an active interest in photographic reproduction.

"The assertion that photography is a 'natural' restitution of reality rests on a deep misapprehension," said Professor Alfred

[1] J. A. Schmoll gen. Eisenwerth, in Otto Steinert, *Subjective Fotografie*, Bonn, 1952.

[2] *Peinture et réalité*, Paris, 1958.

Kurella at the opening of the Bifoto exhibition in 1959.[3] In the first place, nature is apprehended by a camera; and, contrary to a common opinion, this fact is not a guarantee of objectivity, still less of fidelity. Each camera has particular characteristics, which influence the negative, and the latter is also partly determined by its emulsion; the mode of development and printing used, the material chosen for the proof, all combine to modify the final result. There cannot be just one reproduction of reality which all photographers should strive to attain. There is the world, with its complexity and matchlessness, in front of those who wish to reproduce it.

Louis Stettner gives this warning: "You do not record reality; you produce images which should express your personal views on life."[4] Importance is once again given to man. His action which had been underestimated for a time regains consideration. Every photographer brings forth his own image of reality.

It would be wrong, obviously, to say that photography does not have any relationship with reality: it gives a reflection of it. "Image," according to the *Littré dictionary*, is "that which imitates, that which resembles, resemblance" (literal sense of the latin word *imago*—in latin the world also had the meaning of appearance as opposed to reality). All that appears on the photograph originates from nature. "The photographer brings no being into the world; he makes the already existing being visible."[5] Photography reproduces only the image of various elements which coexisted at a certain moment in reality. Theoretically, it should comprehend all that coexisted at that moment, and nothing else. This assertion seems unquestionable; yet, in actual fact, it can happen that the original elements are modified by the photographer, either because he brings a new object into the range of the camera, or groups the people to be photographed in a pose, or because he modifies their behavior by his very presence. But this interference, whether direct or indirect, does not implicate the principle formerly mentioned.

[3] *Interpress-Photo, 1960*, Halle, 1960.

[4] *Photography Year Book, 1964*. London, 1963.

[5] Karl Pawek, *Totale Photographie*. Olten u. Freiburg im Breisgau, 1960.

It is true also that it is possible to get in a photograph elements which, at the particular instant when it was taken, did not coexist in nature. This is done by mounting and faking, which enable the recreation of a scene already past, or to compose a completely new assemblage, related in no way whatever to reality, past or present. By various manipulations executed during the "taking" of the picture, either by using prismatic lenses to superimpose images, as Alvin Langdon Coburn, or, as Christian Schad, Man Ray, Lazlo Moholy-Nagy, by abandoning the photographic technique and impressing the sensitized surface with objects placed directly on it and illuminated for an instant, it is possible to obtain pictures never seen before, which are pure creations of the expert.

Two stages at least can be distinguished in the elaboration of a photograph: first the taking of the picture and its development, and secondly the printing of the proof. During the first stage the importance of the camera is paramount: "The camera can 'see' reality with even more sharpness than the eye," said Andreas Feininger.[6] The camera does not take the picture which appears to the eye; the perceptible can never be absolutely rigorously reproduced. Apart from the distortion which focusing automatically causes, the proportions perceptible to the eye are altered, as can be noticed in pictures taken with a telephoto lens: a new image appears; there is always reality at the outset, yet one must beware of the first impression. A downward shot for instance seems completely distorted at first; yet, by simply placing oneself where the camera was set, one can see that the laws of perspective have been observed.

One can go further still. Paradoxically, photography succeeds in reproducing unseen reality with more facility than the visible reality. Thanks to the progress of the "taking" technique and the improved quality of the sensitized surface used, it has now become possible, since the camera can attain a billionth of a second, to retain instants which are too brief for the eye to perceive: images that are too weak to act on the retina, like some galaxies, for instance, which require seventy hours exposure; images obtained thanks to a part of the solar spectrum which is im-

[6] *The World through My Eyes*, London, 1964.

perceptible to the human eye, ultra violet rays for example, used to study paintings and to decipher damaged parchments, infra-red rays, X-rays. Only the camera can go and take pictures where the human eye cannot reach—at the bottom of oceans, inside the human body, or even inside the brain, and in the sky, thanks to the artificial satellites which transmit views of the earth and moon that are entirely new. One can but agree with this statement of the great photographer Edward Weston: "The camera sees more than the eye."[7]

Is it possible to retrace what is original in nature from the photograph? Indeed, when we apprehend the world directly, with our eyes, our other senses always interfere to a certain extent, and sometimes influence in a particular direction the brain's interpretation of the optical image. When we apprehend the world through photography, yet another intermediary interferes between the world and the reality perceived, which makes it even more difficult to retrace the original. Photography requires interpretation; and in order to interpret it, it is essential to know the rules of photographic reproduction.

By photographic measurements, the Bodygraph makes it possible to gather all the elements necessary to make a suit for a specific individual. Through photographic images taken in particular conditions photogrammetry "restores" an object with the utmost accuracy. Identity photographs are used to recognize persons.

To rediscover the world through photography, there are three possible avenues of approach. The scientific approach requires a critical and reasoned examination of the picture by an expert who interprets it with the help of his specialized techniques, always keeping in mind that he is dealing with a photograph. There are numerous examples of this particular use of photography: in geodesy, for instance, in astronomy, or in the study of the new particles discovered by nuclear physics. The informative approach applies to the general public, and the latter is incapable of making a reasoned criticism of the document it is offered; the caption plays an important part, and is responsible for the attitude of

[7] "Day Book," in *The History of Photography*, by Beaumont Newhall, New York, 1949.

the spectator.[8] As for the artistic approach, that belongs to the field of general esthetics: either nature is beautiful and therefore the photograph is beautiful; or else the created work alone is beautiful because it has been realized *ex nihilo*, without however going to the extreme of Kafka who declared that "nothing is more deceptive than a photograph; truth is a question of feeling, which only art can fully apprehend."[9] Thus starts a great controversy to determine whether photography is also an art.

Before any further discussion it is essential to make clear the characteristics of the photographic image and the main aspects in which it differs from the image seen directly with the eye. Everything in the world stands out in relief and a third dimension is perceptible to the eye; whereas the photographic surface is a plane. Indeed, stereoscopy offers a means to escape this problem, but the reconstruction of space by any known process can never be perfect. The illusion may have succeeded for a time, but in the end the old binocular boxes have had to be relegated to museums along with the heavy and cumbersome cameras which the first photographers used to take about in the streets. In any case, almost all the characteristics of ordinary photography apply to the particular picture obtained by placing before each eye a special print. Experiments have been made to acheive "sham" photographs, whose "aim is to offer to the sight an image which could pass for reality."[10] But research done in that direction, however interesting it may be,[11] will only be able to create an illusion, as paintings of the same kind.

The world appears in color, whereas photography, in its present classical form, is in black and white. The consequence is, at the least, a transposition and a reduction of reality. It is an obvious fact that today color photography has become common practice among the general public, even if reproduction has not yet acquired perfection. In fact we can only agree with Edgar

[8] Jean A. Keim in *Communications*, 2, Paris, 1962.

[9] Jean A. Keim in *Critique*, 207-209, Paris, August-September 1958.

[10] Étienne Gilson, *Peinture et réalité*, Paris, 1958.

[11] In this line, André Vigneau has achieved pictures which are wonderfully "true".

Wind's statement: "Since ordinary photography is sensitive to a wider range of lights and shades than color photography, the best reproduction of a painting by Titian, Veronese or Renoir can be compared to the conscientious transcription for piano of an orchestral work. Color reproduction, on the contrary, with very few exceptions, is like a reduced orchestra in which all the instruments would play out of tune."[12]

In nature, man can perceive each moment only as wedged between a past and a future instant; he cannot isolate it. Photography, in fact, fixes this unique moment, which cannot be singled out by the human eye. The poet's dream: "O! Time, arrest thy flight!" has come true; but so far as the human observer is concerned, this "preserved" image has not existed. When a picture represents a still-life or a landscape, it does not puzzle us, because we have seen its original image in nature. This is not so if the "frozen" instant has abruptly stopped a motion; for, in that case, the picture was obtained thanks to a technique that has arrested the flow of time. Etienne Gilson has written: "Bergson has pointed out several times the curious impression of immobility produced by snapshot photographs of men or animals in motion."[13] We can see the horse as it falls, the bull as it leaps, the car as it overturns, the spectator as he jumps for joy in the air—images new to the eye, both by their subject and by the static effect they produce. According to Maurice Merleau-Ponty's view: "Instantaneous photographs, pictures of mobile attitudes petrify movement as can be seen on so many pictures where an athlete's movement is checked for ever... photography maintains open instants which normally the impulse of time closes again immediately; it destroys the transcendency, the imbrication, the 'metamorphosis' of time which painting on the contrary expresses, for in a painting horses, for instance, convey an impression of motion."[14]

Some photographers think that they are capable of reproducing motion; to achieve this they use the technique of blurring or

[12] *Art and Anarchy*, London, 1953.

[13] *Peinture et réalité*, Paris, 1958.

[14] *L'Oœil et l'Esprit*, with a quotation by Henry Michaux, Paris, 1964.

of moving, or repeated exposure. But a special interpretation of the brain is necessary for the spectator to be sensitive to the impression sought for. If the outlines on the print are sharp, except for certain objects or beings, this means that the objects or beings have moved: there has been motion. But this motion is not immediately perceptible; it becomes so only after a moment's reflection, which in the case of some people can be very brief.

One should quote here Auguste Rodin who, as a conscientious artist, has admirably studied the problem: "There exists a sort of accuracy which is base: that of photography and that of casting." And he goes on: "I believe that Géricault is right, and photography wrong; for his horses seem to be running, and this comes from the fact that the spectators, by looking at them from the back, first see the hind legs' effort, which gives the feeling or general impetus, and then the stretching body, and the forelegs rearing above the ground. Seen as a whole the picture is false, but if one looks at the various parts separately, it is perfectly true to life, and after all only that truth matters to us, since it is the one we actually see." Should we agree to his conclusion: "It is the painter who is veracious and photography that lies, for in reality time never comes to a stop, and if the artist succeeds in producing the impression of a movement that lasts several instants, his work is certainly more original than the scientific picture in which time is abruptly arrested"?[15]

The photographic image, although isolated in time in an unnatural way, offers the advantage of making an instant—short situation—perceptible, which could not, otherwise, have been discerned. It is undeniable that the picture taken in such circumstances can only reproduce what has taken place at the precise moment when the emulsion has come into contact with light. But the scene itself that was being photographed has not stopped; the scene which preceded it and that which followed have been linked without any interruption. The instant "stamped" out of time by the camera because of the photograph acquires an importance which, in itself, it did not have. The reality printed is not new; the photographic technique simply reveals

[15] *L'Art*, conversations gathered by Paul Gsell, Paris, 1919.

it to the eye, when the latter had been blind to it. This gives photography both great power, because it makes visible what could have remained unseen, and great weakness because it can produce only static images of the world, which cannot create illusion. This "set" image is extremely valuable for the study of reality; it can be looked at for a long time, examined methodically; details appear in it, which normally could not have been perceived, and which can be enlarged in order to become understandable.

The photographic image "cuts out" a moment in the flow of time; and it also isolates in space. The angle of vision of the eye is 140°, whereas the printed picture is restricted to a square or a rectangle of given dimensions. The camera "takes" only part of the scene perceived by the eye; there is a selection, in order to remain within the compass of the sensitized surface. In this case, the possibilities of enlargement compensate the reduction of the field, which limits virtualities to a large extent. Thanks to enlargement, elements become visible which were undiscernible to the eye normally. The world discloses to the sight new riches, until then unknown and difficult to detect. It should, by the way, be underlined that this does not concern only photographs taken with a microscope or a telescope, which, once enlarged, are identical to what can be seen by the naked eye, but also the enlargement of the original print, the possibility of giving any size one wishes to the reduced image of reality, taking of course into account the sort of emulsion and of printing elements used. This section in the plane as well as in time produces an extraordinary ubiquity. In the course of a few moments the spectator is everywhere at once, near, far, above, beside, during the day, during the night, in winter time in summer time, in a storm, in bright sunshine. The series of a hundred and eighteen pictures of the Fuji mountain by Koyo Okada is a striking example thereof.[16]

We have therefore before us an image of reality which is conditioned by its own principal characteristics: each situation lasts only one instant, is limited to one single scene, projected on a flat surface, reduced to black and white or to a limited

[16] *Mount Fuji*, Tokyo, 1959.

number of colors. The image is not identical to that seen by the eye, and this difference is the origin of many mistakes for people who see normally. The photoprapher Willy Ronis has summed up the problem in a salient formula: "Although the eye and the photographic lens take in images which optically are identical, they see differently."

Reality has undergone a transposition. "Photography is not a realistic reproduction, it is a semi-abstract interpretation of an object," writes the photographer Andreas Feininger.[17] The first proposition is obvious; the necessity of an expert's interpretation shows precisely that, because of the transformation, some qualities of the world have disappeared and only those have remained which the characteristics of the photographic image have allowed to retain and which the photographer has emphasized.

The problem that faces the photographer is the same as that which faces any man desirous of expressing the world, whether the writer with words or the painter with colors. The means at his disposal are more limited and consequently his field of action is more restricted.

Monkeys have taken photographs, it is true, successfully in some cases. Quadrumanes have also been known to paint, even if only abstract painting.[18] The slogan of the first Kodak camera, in 1888, was: "You press the button, we do the rest." Thus the picture will be absolutely "without any mistake." The knowledge of spelling and syntax enables us to write correctly; it does not make a man a writer. One must always press the button; there is always at least the choice of the subject and of the moment. Taine's saying, "I want to represent things as they are or would be even if I did not exist" does not hold true. The photographer is there; he cannot be disregarded, whether he presses the button of an old camera or operates the release by radio, from a distance of thousands of kilometers.

Originally, a choice is made or rather several successive choices: among the principal stages one can distinguish, on the one hand, the taking of the photograph, the delusively called

[17] *The World through My Eyes*, London, 1964.

[18] Desmond Morris, *The Biology of Art*, London, 1961.

"object-lens", the lighting, the time of exposure, etc... as well as the subject and the moment chosen; and on the other, the printing. It is a fairly obvious fact that from a single given part of reality, innumerable interpretations can be obtained. The problem is to know whether the result obtained truly represents a part of reality or whether it is a completely new conception.

One cannot deny, obviously, that the origin of the picture is reality. "Some photographers take hold of reality, in the same way that sculptors do, with wood or stone, imposing upon these the domination of their own thought and spirit. Others face reality more tenderly, and, for them, photography is an instrument of love and a revelation," writes the photographer Ansel Adams in the preface to a presentation of his works, thus qualifying the attitude of the expert toward the world.[19]

For the spectator, however, the problem seems to present itself differently and two ways of approach to reality can be distinguished. In the one case, the photographer tries to produce as faithful a picture as possible of the image he is taking, and leaves the interpretation to the spectator. This would be an objective approach apart from the fact that it is impossible to disregard the action of the operator who imposes his own point of view, in spite of himself, even if he wants to free his work from any personal concern. In the other case, the photographer tries to put forward and to impose his own personal views; this could be considered a subjective approach. In actual fact these lines of approach, which have given birth to different "schools," simply express an attitude, a way of thinking. The two tendencies converge, and it is impossible to classify a picture in one category rather than the other if the picture has been normally taken and has not undergone any wilful transformation.

Let us see what a photographer has to say on this point. "The same world seen by different eyes is not exactly the same world any more. It is the world seen through a personality. In a single click, the lens takes the world outside and the photo-

[19] Young Memorial Museum, San Francisco, 1965.

graph inside."[20] Each painter expresses his own view of the world; each photographer worthy of the name does the same thing and, whatever Naum Gabo may think, photographic pictures are not any "nearer to true reality"[21] than those delineated by the brush or the pencil.

Sometimes before even recognizing the subject of a picture, the spectator has distinguished its author: Nadar, Juliet Cameron, Atget, Weston, Bischof, for instance, only to mention names of the past. It is important to note, also, that among the thousands of photographs that an expert takes, the greater part of them is immediately discarded because they do not correspond to the world as their author sees it.

The process is then reversed: the world becomes to the naked eye similar to the world represented by the photographer No new element has been introduced in nature, but an already pre-existing reality has been recreated in a new fashion. The picture shows the reality of the author, which has been, may be, and is liable to become a true reality, particularly thanks to modern means of diffusion which make it possible for it to be present in several places at the same time and therefore give it a sort of ubiquity.

In actual fact it has been necessary "to select among the details and retain only those which set off the main point," according to George Lukacs's definition applying to any production that aims to supply an image of life.[22] The question is not to use tricks and devices in order to obtain an image of reality that would correspond more to the canons of beauty of the time, as in painting. Paradoxically, the attempts at such presentation have led to an exactly contrary result, to a caricature of both painting and the world. The only important element remains the selection, or rather the successive selections. Indeed, due to the technical resources at the photographer's disposal, countless effects can enable him to create a reality sometimes more perfect than the original. The picture of the center of

[20] Germaine Krull in Pierre Mac Orlan *Germaine Krull*, Paris, 1931.

[21] *Of Diverse Arts*, Washington, 1962.

[22] *Die Gegenwartsbedeutung des kritischen Realismus*, 1957.

Bologna taken from the air during a nose-dive by Bragaglia, about the year 1920, is a very interesting and successful example of this particularity. However, devices should not be given so much reign that they become in the end the object of the operation. Although its importance should not be underestimated, technique must remain in the background, particularly in photography.

"Why do you paint this oak, since it is there already?" a peasant once asked Théodore Rousseau,[23] and Etienne Gilson who quotes this question adds: "To double the real world with pictures of the beings which constitute it is, in fact, an operation similar to adding to an object its reflection in a mirror."[24]

The object seen in the photograph, however, is not analogous to the image reflected in a mirror. It has become a "new" and much broader reality than the visible one. When he reproduces the irridescent gleam of oil drops, hoar-frost, blades of grass, walls with a decaying rough-cast, tar-marks, the photographer discloses to view the "infinitely small" and the "infinitely large," and brings within the field of visible reality forms which, although existing in reality, are new to the sight and appear "abstract" in the sense of modern painting. The strange closeness between micro-photographs and some modern painting makes one wonder.[25]

This creation of a "new" reality is more obvious, although the principle is still the same, when, due to the qualities peculiar to the sensitized surface which reacts differently from the human eye, a completely new image is produced. When Andreas Feininger placed two lights on the extremities of a helicopter's propellers and took all the stages on a proof, he obtained an extraordinary striated pattern, never before seen by the human eye.[26] By using a very long time of exposure, Wolf Stracher obtained a photograph in which the stars seem to move across the sky like the head-lights of cars on photographs taken at

[23] Jules Breton, *La Vie d'un Artiste*, Paris, 1890.

[24] *Peinture et Réalité*, Paris, 1958.

[25] *Art et Nature*, written by George Schmidt and Robert Schenk, Basle, 1960.

[26] *The World through My Eyes*, London, 1964.

night.[27] And there are infinite variations of these simple examples.

To the various "taking" possibilities can be added other devices which produce an original image: manipulation of the negative for instance, mounting, superimposition, solarization, reticulation. A hundred and twenty-five years ago, when Fox Talbot put a leaf, a feather or a piece of lace directly onto a sensitized plate and illuminated it for a short moment, he obtained a perfectly exact copy of the object. But, in actual fact, this was not genuine photography, and his technique did not make use of the camera. At the beginning of the twentieth century Christian Shad, Man Ray, Lazlo Moholi-Nagy took up this operating process again and produced images which in reality were not visible, shadographs, rayograms, photograms. These were achieved by placing flat, opaque, or semitransparent objects, or three-dimensional ones, directly onto the sensitized surface, and illuminating them, so that the impression was effected without the use of a lens. In order to create this new reality, the photographer entered into the magical box. We can think of Heisenberg's words: "To the sphere of the real, there belongs not only what we see and apprehend but also what we think. One cannot separate the two things as clearly as the mechanistic philosophy wanted to prove."

The new technique has led in fact to the creation of a photographic world, of a reality in the second degree, more varied than that perceived by the senses of man. This proves that the philosopher George Gusdorf's assertions are absolutely correct: "The picture does not refer to a world which is exterior to itself and of which it renders a copy. The world is inside the picture as the meaning and justification of the picture."[28] If it is possible to trace original reality, and if photography gives a new proof of its existence, then there exists in the picture a new reality which is past, limited, and transposed.[29]

[27] *Schöpferische Kamera*, München, 1953.

[28] *Civilisation de l'image*, Paris, 1960.

[29] The "recorded" image cannot be compared to the "recorded" sound, which recreates, when it is heard, the original sound which could be heard at the recording.

In l'*Image*, at the beginning of a chapter,[30] Daniel J. Borstinn recalls this dialogue: a governess says to a friend, "My dear, what a splendid baby you have." And the mother replies, "Oh! that's nothing. You should see his photograph."

Taking over from painting, photography has modified the vision of both artists and photographers, as well as that of the people who look at the photographs. At the entrances to towns Kodak indicates to amateur photographers the monuments worthy of note, and in the United States, in national parks, special posters mark the place where one should stand to take a photograph. The amateur who fifty years ago wanted to imitate Demachy or Major Puyo, today wants to follow in the path of such people as Brassaï or Cartier-Bresson.

Photography has pervaded our whole existence to such an extent that we are no longer aware of its influence. Jean-François Revel[31] has vigorously denounced this danger, particularly in the case of works of art: "This paper wall which prevents us from having any physical contact with the works of art, by substituting for them innumerable duplicates, keeps us in the end from seeing them, and interferes between them and us." In many other fields, although it must be acknowledged that photography has taught us to see, it has too often led us to see the world only through photography.

Among primitive tribes, the natives, who are not used to this new sort of image, cannot make out their subject at first; and when they have recognized familiar landscapes, people or objects, they marvel at this wondrous "splitting" of reality. Then they look at the photograph and turn it over, and discover a blank surface.

By so doing they remind us that the photograph is itself an object, which is part of reality, and which possesses an existence in its own right. The negative gives birth to the proofs which, in turn, enable us to diffuse the pictures; it can be immediately thrown away, or destroyed after examination; it can be printed in one or several copies; it can be improved, or enlarged, or one part of it only may be retained; if wanted,

[30] Paris, 1963.

[31] *L'Express*, Paris, March 19, 1964.

a legend can be added; it can be sold, either completely or only its copyright. It is an object which is much sought after by the newspaper manager, the documentalist, even the amateur collector of old photographs, and now museums.

Photography does not only give us an image of reality; it belongs to the world, and it too can even be photographed.