## INFORMATION, KNOWLEDGE AND UNDERSTANDING IN PHOTOGRAPHY

A photograph true of everything contains no information but that which is read into it. To acknowledge a photograph to *be* a photograph is to begin to read information into it. Essential to the art of identifying a photograph is imagining that the photographic process provides a plausible explanation for the existence of the object in question. (It must be taken for granted that only a person with a knowledge of the photographic process can be able to do this). Once this judgment is made, certain implications are immediately evident: 1. there was a subject – i.e. something was photographed, 2. there was a camera, lens and film poised in front of the subject at least for the duration of the exposure, 3. something caused this machinery to be activated at least a fraction of a second before the event recorded transpired.

These implications together comprise, part the code for interpreting the information latent in a photograph. There are other factors that influence the direction or character of a photograph's further interpretation, but these effect the knowledge or understanding a photograph may impart. It must be remembered that information itself is only the stuff of which knowledge is comprised, and requires interpretation in order to become knowledge.

If the subject matter (the referent) is identified and the camera's relation (in terms of distance and angle) to the subject and the cause of the shutter's release are determined to a degree of reasonable plausibility, then the photograph can make a claim to impart knowledge of some particular aspect of the workings of the world. If these three aspects of the photographic process remain indeterminate, knowledge may still be imparted by the photograph, but only in so far as it may lead one to remark upon how it may be possible for a photograph to resist our interpretive abilities so stubbornly. The knowledge gained in this case would be of the limits of one's knowledge-gaining abilities, and also possibly of the peculiar aesthetic effects a photograph of such a radically indeterminate nature may have upon one's mind. (For instance, ones associative faculties may be particularly stimulated.) This knowledge would be of aspects of our own psyches, and *not* of the workings of the world, as may be provided by a photograph of determinate origin.

In both of these cases the photograph will impart knowledge only if its elements are of adequate significance. The photograph, if recognized as such, is recognized to contain information, but if this information is thought by the viewer to be of no import, no knowledge

will be gained at the time of viewing. It will simply be classed with all other photographs of latent significance, by conscious decision discarded, but by memory retained until perhaps by hindsight its meaning is acknowledged. However, if the viewer finds in the photograph something he *decides* is worth remembering, then it can be said to have imparted knowledge. <sup>1</sup> It is only required of information to be somehow *significant* for it to be absorbed as knowledge.

In turn, when a piece of knowledge is seen to fit as an element of an explanation, it becomes understood. At this point knowledge derived from a photograph operates as knowledge would from any other source. One must, however, remember that its utility is limited by the metaphysical shortcomings of photography itself, and qualify ones explanations accordingly.

communication

information

data

fact

knowledge

information/understanding

"you can tell" ambiguous

similarity between the eye-seeing and the photographic proces<sup>2</sup>

Knowledge (Edgerton)<sup>3</sup>

The question in photography is perhaps most pertinent with stroboscopic photographs (exposed for as brief a time as one-hundred-millionth of the second) as demonstrated by Dr. Harold Edgerton in his famous recordings of various objects in motion. The result of his experiments achieved through the use of stroboscopic light to freeze on film movement otherwise invisible to the naked eye possess fascinating optical beauty (the elegant coronet of a splashing drop of milk), while others uncover information that was previously unknown, and would remain unknown without Edgerton's technique of photographing. For example, his stroboscopic stills

<sup>&</sup>lt;sup>1</sup> Beleška na margini: "?", prim. S.D.

<sup>&</sup>lt;sup>2</sup> Teze su navedene u vidu beleške, prim S.D.

<sup>&</sup>lt;sup>3</sup> Stranica je spojena sa prethodnim tekstom, prim. S.D.

reveal that a cat laps milk with the underside of its tongue, or that bats can catch their prey with their tail membranes. One can legitimately ask if we learn anything from these photographs. First, in both cases, the new understanding (of a cat's drinking technique and the bat's technique of catching prey) is contingent upon not a single photograph but a number of stills that document the activity through a sequence of action, thus, as Susan Sontag correctly claims, explaining in time how the particular process evolves. Second, one must already have extra-photographic knowledge about the subject in order to compare the newly obtained information with the common knowledge of the respective process. Similarly, Edgerton's photograph of recording on a single plate the various phases of an object in motion does not provide any knowledge per se. Therefore, the photograph of a complete golf swing, recorded by one-hundred stroboscopic flashes per second, may at first look like the numerous feet of a strange caterpillar or an exotic flower forming with its petals and pistils a seashell-like spiral. But though this photograph is perceived as a visual unit, it actually represents a composite of many exposures on one plate – corresponding to Muybridge's serial photographs by which he proved (nearly one hundred years before Edgerton) the specificities of human and animal motion. Only with the necessary scientific/technical knowledge can one gain a particular understanding about the peculiarities of the golf club's variable velocity; it is even possible to calculate its exact speed according to the lapsed time between each flash. The scientific applications of stroboscopic photography aside, Edgerton's photograph, from an aesthetic point of view, offers a beautiful graphic display equivalent to the intricate patterns found in natural forms.