TO LOOK, TO SEE, TO KNOW [1947] *

LUDWIK FLECK

Many erroneous opinions are removed by the psychology of perception and the sociology of thinking.

I. IN ORDER TO SEE ONE HAS FIRST TO KNOW

Let us look from a short distance at Figure 1. What do we see? From the black background the picture of a gray, wrinkled surface stands out. Some places look like rough folds, others like densely arranged warts, one place

Fig. 1.

* Problemy, 1947.

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reminds us of the waves of a muddy liquid, others of clouds of smoke (perhaps because the picture in this border place is out of focus). We find a place which looks like a frizzly fur, yet this is no fur, for there are no hairs to be seen. Now what is it? Is it the skin of a toad under a magnifying glass or perhaps a part of the culture of the celebrated fungus to which we are indebted for penicillin? Or perhaps a close-up of the neck of an old mountaineer?

No, this is a perfect photograph of a cloud of the type known to meteorologists as cirro-cumulus. Let us now look again at this figure, but from afar. Once we know what it is and in what way one should look at it, we see immediately the enormous depth of the sky, and a large fluffy cloud whose variable structure, while unimportant in the details of limited places, in its entiretyreminds us of a sheep's fur.

In order to see one has to know what is essential and what is inessential; one must be able to distinguish the background from the image; one must know to what category does the object belong. Otherwise we look but do not see, we look intently at too many details without grasping the observed form as a definite entirety.

This happens not only under the artificial conditions of the experiment we have just carried out, but also in any, even the simplest and the most complex, perception. A passer-by who watches an event in the street; a man who looks at a work of art in a museum; a scientist who examines a natural phenomenon; a sociologist who studies, who follows the aspects of social life; a physician who observes a patient; a farmer in the field, a craftsman at the bench — we have, all of us, to learn how to see the more or less complex forms of our world. Very important is the circumstance that, as the readiness of perceiving some forms awakens, we lose the ability to perceive other forms. In the same museum, an artist sees something completely different from what is seen by a detective there on duty. It is impossible to see both these worlds simultaneously since the observations of an artist require a special atmosphere which disappears when we tune up so as to be ready to carry out a policeman's observations; and vice versa. In a crowd, the observations of a physician are completely different from those of a woman of fashion. Thus, within the same set of elements one can perceive different forms.

Psychology teaches us that every perception is, in the first place, a seeing of some wholes, while the elements are only seen later. Sometimes these elements may remain unknown. We recognize at first sight a man of our acquaintance or a known flower, but often we are completely unable to give the distinguishing features accurately. We see all at once that somebody has a sad look, though we do not know which detail of his facial features changed. We see that the general appearance of a room has changed, but we do not know which items of furniture have been moved. Moreover, in spite