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THE NON-PROJECTIVE ASPECTS OF THE RORSCHACH EXPERIMENT: IV. THE RORSCHACH BLOTS CONSIDERED AS PICTURES*

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Although the reactions of a person to an inkblot are said to be indicative of an act of *perception*, this usage goes against the commonsense meaning of that term. From a strictly psychophysical and toughminded standpoint, certainly, Rorschach reactions have very little to do with perception. The original experimenters with inkblots thought the responses were tests of *imagination* or *fantasy*. It has recently been suggested that what they induce in the subject is *misperception*. It is also said that they represent the *private world* of the individual, or what for him is *subjective reality*, and that this is *projected* in the process of looking at and reporting on the objects in question. Or it is suggested that we tend to *impose organization* on the "unstructured" stimulation provided by an inkblot.

All these terms, together with the theories they imply, are vague and unsatisfactory in different ways. A formula which seems to me to clarify the process, however, is to suppose that inkblots are responded to as *pictures*. The Rorschach reaction, then, would be a special kind of picture-perception, and this type of perception can be investigated in its own right.

A picture can be defined in objective terms. It is a physical surface so processed that it can reflect to an eye more or less the same sheaf of light-rays as would the original object or situation for which it substitutes (1, 2). This definition implies that a picture is always man-made, that is to say a fabricated source of optical stimulation, and that it is always an intended substitute for something removed in space or time. Whether it is traced, or painted by hand, or produced by photography, or in any other way makes no difference for the definition.

When a physical surface of this kind is responded to as a picture, it tends to evoke a rather special type of perception. The observer gets the experience of something else which is *not* the surface—something "in" the picture or "behind" the picture plane, as he puts it. Hence the percept obtained might be called *mediated* or *indirect*. All of us (in our culture at

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least) have a great appetite for this kind of perception. We spend a great deal of time at it. It provides experience at second hand of objects, places, people, and events which we shall never see at first hand. As children we begin both to make and to look at pictures, and we continue to do so throughout life.

The differences between visual perception and visual picture perception can be studied experimentally. If I take a piece of ordinary cardboard roughly oval in shape on which I have engraved or indented a crude profile, and hand it to a subject with the question, "What is this?" the answer will be sometimes "a man" and sometimes "a piece of cardboard." By systematically making the edges of the cardboard more regularly oval and the engraving less crude, I can reach a stimulus which yields the first response in 100 per cent of the subjects. By systematically making the edges *less* regular and the indentations *more* crude I can reach a stimulus which yields the *second* response in 100 per cent of the subjects. The two modes of experience are quite distinct.

The similarities between perception and picture-perception can also be studied. In very special circumstances of stimulation, the two meet, that is, the picture and the object pictured become indistinguishable. A colored photograph (or transparency) which is viewed with one eye through an aperture may be impossible to tell from the original scene photographed, when this is viewed through a similar aperture. Such a picture can be said to have perfect *fidelity* to the original.

Fidelity of a picture, then, is the degree to which it reflects the same *optic array to a point in space* as would the scene pictured. For the vast majority of the pictures of the world, especially hand made or chirographic pictures as compared with photographic pictures, fidelity is relatively low. The optical stimulation provided by a picture may differ from that of the original scene to any degree, and along many dimensions of variation. Obviously there are many different variables of optical pattern-stimulation in a sheaf of light-rays to an eye.

The variables of pattern or form, the order of the transitions between light and dark in the cross-section of the ray-sheaf, are clearly of major importance in fidelity. One has only to think of what can happen to a television-image to realize this. Some pictures, then, can have very low fidelity. Non-representative paintings, for instance, are low in fidelity. They are nevertheless responded to as pictures with both interest and esthetic enjoyment by many people. Artists believe that they can select, emphasize, or abstract from the optical stimulation of everyday life certain essential

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variables of patterned light and thereby make us see only the important properties of the object.

We are now ready to define an inkblot. It is simply a picture with extremely low fidelity. A Rorschach card contains many of the stimulus-variables which characterize a painting or a photograph, but it lacks others which make a picture a faithful representation. It is a smooth surface with rectangular edges, an ordinary picture. It carries deposits of ink, or dye, or pigment, as a picture does. These produce transitions or margins of brightness and hue in the stimulus, which in turn constitute pattern or contour. Closed contours have qualities of form and other thing-like properties. There are also gradations of luminance, that is, gradual as well as abrupt transitions between relative light and shadow. There is even something of what artists call "composition" in a Rorschach blot. But it lacks the straight lines characteristic of a familiar scene. It has no optical texture or grain within the boundaries of the forms such as pictures of objects do. It has no linear perspective and it has no texture perspective, that is, no regular gradations of texture-density.

Hence a Rorschach inkblot *tends* to induce pictorial impressions of colors, shapes, edges, protuberances, indentations, interspaces, solids, and surfaces. These, not the classical "sensations," are the qualities which compose visual objects, places, and events—the human and animal forms, and the shapes of inanimate things which make up so much of our world. But these stimuli do not correspond geometrically to anything physically in existence, and the corresponding phenomenal qualities do not combine to yield phenomenal objects, places, and events which anybody ever saw. The blots use, as it were, the "language of vision" (3) without "saying anything."

The subject in a Rorschach experiment, therefore, is induced to name objects and even to report events suggested by them, but not to perceive a unique object or a single event. The complex of stimulation does not specify a particular entity of the human environment. The names he gives come from his repertory of perceptual responses and probably serve as an indicator of this repertory. In other words they tend to show the things and events in the world which he can identify, and which presumably he is interested in.

The complex of stimulation reflected from a blot probably includes incongruous variables. There exist conflicting stimuli for spatial perception in the array, analogous to the incompatible variables found in reversible figure-ground patterns, ambiguous perspective drawings, and equivocal relief figures. The kind of factors which are present in puzzle-pictures and hidden

figures may also be present to some degree in inkblots. There are incongruent border conditions in them which constitute incongruent stimuli for edges and yield incongruent impressions of different solid objects. These combinations would then be expected to evoke fluctuating object-perceptions rather than stable ones. There is no "redundancy" in the information supplied by such stimulation. The particular objects which are reported, then, may indicate the qualities of things to which the subject is especially sensitive. If the so-called "determinants" of the responses have any rationale, it might be found here.

This formula permits us to go on assuming that ordinary perceptions are specific to their objects—an assumption which fits both commonsense and the facts of psychophysics—and also to assume that Rorschach reactions are relatively unspecific to objects. Perception, after all, is fundamentally the process by which one is *made aware of something*, and this primitive assumption is as necessary in the long run for the student of personality as it is for the student of psychophysics. Insofar as Rorschach reactions are diagnostic of personality, it is not because perception as such is diagnostic of personality or because the "structure" of perception reveals the "structure" of personality. *It is because the perceptual game played with pictures of low fidelity is diagnostic of personality.*

In order to make progress with the Rorschach experiment, an explicit and testable theory of visual perception is necessary. Within such a general framework, I suggest, a special theory of pictorial perception is what we need. To remain satisfied with a loose application of the Gestalt concept of perceptual organization is not sufficient. The vague notion that all perception consists of the structuring of unstructured stimulation is in danger of becoming a sterile formula, if it is not actually misleading. We must analyze stimulation, including the peculiar optical variables produced by light reflected from paper on which ink has been distributed by the unusual procedure we call blotting. There are surely still many untried variations of this procedure. The opportunities for experimental research are wide open.

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