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ANTICIPATORY REACTION¹

By Professor RAYMOND DODGE

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ONCE in a while in the classical reaction experiment there occurred a disturbing phenomenon. Instead of trailing along in orthodox sequence the reaction occasionally came before the regular stimulus. What could one do with such a tactless event? As an experimental datum it couldn't be arbitrarily ignored. Yet it just wouldn't fit in with the other data. Like some other relegates to the scrap heap of science it might have suggested a reinterpretation of the stimulus-reaction schema, or at least some correction of its interpretation. Some of us at Yale believe that it does. "Oh, I see," you say, "the conditioned reflex is in the woodpile." But it isn't exactly that. If I may state the conclusions at the beginning I believe that there is abundant evidence that the doctrine of direct bonds between a specific stimulus and a specific reaction, instead of being the general plan of all

behavior, is either an artifact due to imperfect description or a special limiting case of laboratory experiment. In every-day human life, as well as in the laboratory, most specific reactions are selected phases of a complex flux of organic response evoked by a complex flux of stimulation and inhibition, some part of which is arbitrarily called the stimulus. This dual flux reaches into a more or less remote past and a more or less remote future. It shows a highly complicated system of present meanings in individual experience and appears as extensive ramifications or spread and systematization of impulses within neural tissue. In this flux the recurrence of identical set-stimulus-reaction sequences is highly improbable. The usual sequences are between more or less variable systems. They may be called for convenience the stimulus system and the reaction system, but in reality the relation is quite intimate.

In systems of irritable tissue the action of each part of the system often appears in a dual rôle. Central

¹ Presidential address delivered before the New York Branch of the American Psychological Association at New Haven, April 1, 1933.

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