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INSTINCTIVE TENDENCIES IN MAN

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In man instinctive tendencies are much complicated through intermixture with environmental factors, consequently considerable confusion exists both as to characterizations of the various instincts recognized and as to methods of studying them. Thorndike (37) has made a creditable attempt to clear up some of these difficulties. Man's original nature is first stated in neural terms, and secondly, when this leads nowhere practically or experimentally, in terms of tendencies to response. These tendencies must each be defined "as a situation, a response and a degree of probability that apart from training the latter will happen when the former does." He finds our knowledge of instincts on very insecure foundations, especially that gained from the questionnaire method; and offers a tentative inventory and description largely on the basis of personal "observation and judgment."

Moore (20) outlines an experiment to determine dominant instinctive tendencies, based on the association tests. Subjects are to respond to words significantly related to particular instincts.

Myers (21) describes the movements of a developing infant, and finds a slight but questionable preponderance of left-handedness to the 189th day, after which the child almost invariably reached for things with the right hand. Dupuis (12), in conformity with his "psychasthenic theory" of timidity, describes cases of timidity in terms of motor and social anomalies, various degrees of slowness or weakness (*lenteur*) of movement and of "social apraxia" being found in association with mild forms of "hyperesthesias of the self." Folsom (13) recalls memories of his child play-world, showing stages of different interests. Coover (10) finds experimentally no basis for the rather common belief in an instinctive feeling of being stared at. Cannon (4, 5) describes the "effects" on certain viscera of some of the stronger emotions, and shows that by the secretion of adrenalin the individual is prepared for emotional crises. He agrees with Sherrington in finding only slight differences in reaction in the viscera for the different kinds of emotion. He shows a tendency to regard emotion as forces producing these visceral changes; his book and article, however, are loaded with useful facts. Crile (11) shows this same view, but is far less scientific. Angell (1) examines objections by Cannon and others to the James-Lange theory of emotion and finds the latter, when properly understood, untouched by any evidence thus far established. Titchener (39) traces the antecedents of James's theory and concludes that "James's acceptance of the complete novelty of his theory must . . . be left to stand as something of a curiosity in the history of psychology." Of recent important texts Titchener's (40) discusses instincts in connection with emotions and avoids in the consideration of their origin the author's former questionable position of assuming the transmission of somatic changes. Pillsbury (26) devotes considerable space to instincts, and seems to follow Cannon in the view that emotions *cause* visceral reactions and certain secretions. This same position seems to be taken by Jastrow (18) who frequently refers to emotions as causes that "move to action." He gives valuable detailed descriptions of modification of emotions into sentiments, and follows Shand (34) in regarding emotions and sentiments as dominating conduct. McDougall more definitely characterizes and describes the functioning of the sexual instinct (22, 23) than he has heretofore done.

The importance of the instinctive basis of human conduct, for which to the reviewer's mind McDougall (22, 24) more consistently argues than do those who place the motivation in the emotions,

seems to be gaining ground. Wallas (47), who accepts this general position, places the emphasis on the emotional aspects, due to a less accurate psychological basis, and rejects the view that thought is a mere "apparatus" set in action by the instincts; but he makes the tendency to think a separate instinct! Other writers emphasizing the importance of instinctive tendencies on thought and action are Cabot (6), Courtis (8, 9), Hall (14, 15), who urges the extension of Freudian conceptions to other instincts besides sex, Putnam (29), Santayana (33), Trotter (41), and Wright (45). It is regrettable that the limitation of space does not permit more notice of these contributions here. Special instinctive tendencies are discussed, often without careful definition and clear conceptions of instinct, by writers whose work can only be indicated (2, 3, 7, 16, 17, 27, 28, 30, 31, 35, 38, 43, 44). Play gets a large share in this list. Many writers are finding "real life" as well as cure from many evils in instinctive activities like play.

Watson (46) and Parmelee (32) give valuable discussions of the origin of instincts, the former suggesting that a special mechanism for, and hence instinct to, language habits is the chief basis of difference between the behavior of man and that of higher animals. Watson emphasizes Mendelian factors, the non-transmissibility of "continuous variations," and, somewhat inconsistently and on the basis of questionable experimental evidence, the transmission of "acquired characters." He regards instincts as a chain of reflexes.

Stout (36) and McDougall (22, 23) have revived in a measure the innate idea, or rather have developed an innate perception, doctrine. Morgan (25) reacts against this tendency, but accepts it in a measure with misgivings. It seems to the reviewer that more careful attention to the rôle of experience in effecting differentiations in stimuli to instincts would be in order before such speculations are taken seriously.

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VOLUNTARY PHENOMENA

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Abramowski (1) set his subjects the task of inhibiting the emotional response to various stimuli—lights, noises, words for associative reaction, numbers for calculation—using the psychogalvanic reaction as the indicator of emotion. Of the 24 subjects tested, a few certainly reduced the extent of the galvanometric deflections; a few gave larger deflections when they tried to inhibit emotion than at other times; while others gave no consistent result. The results for all the subjects taken together are so irregular that they might be interpreted simply as chance variations; but the author rejects this interpretation in the case of those subjects who gave a consistent result, especially when the result was in harmony with the known strength or weakness of their habitual voluntary control over their emotions. He is able also to exclude the hypothesis that the inhibition, when it occurs, results from the interference of one emotion with another; and believes that the