

McDougall revisited

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William McDougall is out of fashion. To be sure, a few of his concepts—notably that of *sentiment*—have been borrowed or adapted by contemporary personality theorists, and textbook writers recognize him as being of historical importance by virtue of his pre-eminence in the early years of personality theorizing. Ritual homage is paid to him for his early insistence on the problems of motivation, but his preoccupation with the general notion of *purpose* in psychology is regarded as out of date. The issue has been reformulated (Hall & Lindzey, 1957, p. 539), and his postulation of eighteen specific instincts as the source of all human motivation is thought of as scientifically naive, a twentieth-century excursion into the more ancient faculty psychologizing McDougall is “important”—as the theory of phlogiston is “important”—but his reputed importance is not of the nature to encourage us to read his works.

Furthermore, now—as in his lifetime—the reader who does venture to sample his works is likely to be put off by the vocabulary he will find there. McDougall had to face many negative reactions to his work, which caused him disappointment and no little bitterness, the first fine careless rapture which greeted his doctrine of instincts, and which drew forth twenty-three editions of his *An Introduction to Social Psychology* before his death, was not destined to last nor to extend to his more speculative works, he never became known as the founder of a school—men spoke of McDougall, but not of McDougallism. His lack of influence was largely due to his defiant habit of choosing the most unpopular words to express even relatively unexceptionable views. In his horomic psychology he relied heavily on the nativist concept of *instinct* (later to be relabeled *propensity*, *tendency*), he defended *animism*, *dualism*, *interactionism*, and *freedom*, he spoke of the

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group mind, *monads*, the *soul*, and he thus helped to raise clouds of dialectical dust which largely obscured the force and originality of his views. Most psychologists were not ready to be told that Mind has an influence on Body, at least not in those words. I do not doubt that many present-day readers will have the same reaction to his "metaphysical" terminology, though—as I hope to show—the content of his message should be much more acceptable to us now than it was to his contemporaries. If we can see through the archaism of his language, we shall see that McDougall is a purveyor of surprisingly new wine in misleadingly old bottles.

McDougall was a remarkably prolific writer and covered a wide range of psychological topics: animal and human, social and abnormal psychology, personality theory and psychic research, eugenics and neurophysiology. But the constant recurrence of certain themes shows that two of his main concerns were to show that the concept of purpose is essential to any adequate psychology, and to demonstrate the causal efficacy of conscious states. Psychology he saw as the study of behavior, but his four² objective criteria of behavior define it as a purposive notion and imply, he said, an inner side or aspect analogous to our immediate experience of our own purposive activities (1960, p. 306).³ Sometimes he emphasized these two themes by writing directly on the philosophical problem of the Body-Mind relationship, attacking not only many ancient accounts of this relationship, but also accounts given by fellow-scientists—such as Wundt's parallelism, Huxley's epiphenomenalism, and Watson's behaviorism. His writings of a more strictly psychological nature also showed the central importance of these convictions in his thinking, and even his attempts to demonstrate Lamarckian inheritance experimentally (e.g., 1927, 1930a, McDougall & Rhine, 1933)—the results of which might now be explained by unintended bias effects of the type described by Rosenthal (1963)—were taken up in the hope of convincing his antagonists of the importance of mental prin-

² The creature does not merely move in a certain direction, but strives persistently towards an end, this striving is not merely a persistent pushing in a given direction, but shows variation of the means employed to attain the end, in behavior the whole organism is involved, there is as a rule some evidence of increased efficiency of action, of better adaptation of the means adopted to the ends sought.

³ Page references are to the 1960 (paperback) edition of *An Introduction to Social Psychology*, first published in 1908, 23rd ed. 1936.

ciples in phylogeny as well as ontogeny for McDougall, even morphology cannot do without the concept of purpose

In this paper I shall claim, first, that in saying that Mind influences Body, McDougall intended primarily to emphasize the two points which I have characterized as being important recurrent concerns. These points, as he often said himself, are—strictly speaking—independent of any specific underlying metaphysic, their importance being rather that they recommend to the psychologist, qua scientist, one type of explanation rather than another. That McDougall often chose to express them in metaphysical terms—and thus endorsed first the soul, and later monads—was no doubt partly responsible for the relative neglect of his views.

I shall claim, secondly, that in his detailed working out of these themes in his proactive psychology he anticipated many important contemporary views on cognition, social psychology, and personality. In particular, his social psychology and personality theory stress what we might call *proprie striving* (Allport, 1955), while much of what he has to say about purposive activity suggests that the relation of Mind to Body is analogous to that of program to machine (Bruner, 1961). His emphases on the role of cognition in behavior and on the quality of striving bear an interesting resemblance to what present-day authors have had to say about TOTE-units, Images, and Plans (Miller, Galanter, & Pribram, 1960). A participant in a recent conference on the computer simulation of personality referred to “the question of how organized and integrated identity emerges from, and gives organization to, the antecedent processes that generate it” as the greatest of all the problems which have been abandoned by psychologists because of their complexity and philosophical implications, but as one which might yield to inquiry with the aid of computers (Rosenberg, 1963, p. 122). McDougall’s doctrine of monads and his concept of the master sentiment of self-regard are attempts to deal with just this problem, and he also raised—in metaphysical form—some of the more specific questions facing personality simulators today.

THE BODY-MIND RELATIONSHIP

McDougall describes his book *Body and Mind* as a defense of animism, where this term denotes not merely primitive anthropomorphism, but any view which holds that "all, or some, of those manifestations of life and mind which distinguish the living man from the corpse and from inorganic bodies are due to the operation within him of something which is of a nature different from that of the body, an animating principle generally, *but not necessarily or always* [italics mine] conceived as an immaterial and individual being or soul" (1961, p. xx) ⁴ He adds that "Animism does not necessarily imply metaphysical Dualism, or indeed any metaphysical or ontological doctrine . . ." (1961, p. xxiii). He says "We are compelled to choose between Animism and Materialism," claiming that the only serious objection to Animism is based on "the mechanistic dogma," i.e., the claim that mechanical principles of explanation hold sway throughout the universe (1961, p. xxiii). He defines *mechanical explanation* in several of his works, always negatively, e.g., as finding "the explanation of present events in terms only of the causal influence of antecedent events, without reference of any kind to possible future events," and always in contrast to *teleological* explanation, where a prospective, purposive reference is involved (1929, p. 24; 1932, p. 5, 1930b). Thus the kernel of his Animism is a view about what types of *explanation* are needed by psychologists qua scientists, rather than any specific metaphysical view which may be held by the psychologist qua philosopher.

This last point is upheld by his remarks on dualism and interactionism. In claiming that we must be either dualists or psychical monists, he defines dualism as any view which assumes that "mental and physical processes are distinct in kind and that man is a psychophysical organism in the life of which processes of these two kinds interact." He goes on to say that *distinct in kind* may be, but need not be, interpreted "metaphysically," in terms of material and mental substance, or it may be interpreted nonmetaphysically as regarding "physical and psychical processes as distinguishable in terms of the general laws which they seem to obey or manifest . . ." i.e., mechanistic or teleological (1926b, p. 519). In his discussion of *Tendencies* (1937) he says that Newton's laws are better not expressed in terms of tending, but rather as condi-

tional statements of generalization based on observation, e.g., the planet will move in a straight line *unless* Thus he prefers dualism to psychical monism, since he feels that the latter obscures the differences between living and nonliving things, elsewhere (1926a) he makes a similar criticism of the Gestaltists' talk of soap-bubbles as tending to the spherical. Again, while in his early work he tried to develop a neurophysiological theory of interaction, holding the synapse to be the seat of consciousness (1905), he remarks later that "in speaking of psycho-physical interaction, we must recognize that the expression may distort the truth in that it seems to separate the psychical and the physical, whereas these may be but two partial aspects of the concrete reality, two aspects of a system of psycho-physical activity which are distinguishable but inseparable" (1932, p. 7). This Aristotelian viewpoint is echoed in his article *Men or Robots?*, where he says "We speak of a purpose as though it were a thing, and then, when we ask what sort of a thing it can be, we can find no intelligible answer" and he suggests that we use only the adjectival form, *purposive* (1926a, p. 299). This suggestion may reinforce our feeling that he was not what he termed a metaphysical dualist, for it bears a remarkable resemblance to Ryle's (1949) method of denying the Cartesian *Ghost in the Machine* in terms of the doctrine of category-mistakes. In general, McDougall is primarily interested in process rather than in substance, and if we interpret his remarks in this light they seem immediately less far-fetched.

Even though (in the last chapter of *Body and Mind*) he endorses the hypothesis of the soul as an immaterial being, McDougall explicitly refuses to commit himself to regarding it as an immaterial *substance*, but says it is "a being that possesses, or is, the sum of definite capacities for psychical activity and psycho-physical interaction . . ." (1961, p. 365, my italics), which capacities are conceived as teleological, and at least in some degree conscious. He admits that his interest in psychic research was due to the hope of finding evidence for a strong version of Animism asserting the existence of "some factor or principle which is different from the body and capable of existing independently of it" (1961, p. 349), but the evidence is ambiguous, he concludes that "psycho-physical interaction may be, for all we know, a neces-

sary condition of all consciousness. For all the thinking or consciousness of which we have positive knowledge is of embodied minds or souls" (1961, p. 365). The dual nature of memory, as being both dependent upon brain-processes and yet essentially teleological (i.e., selective in terms of our interests and goals), he takes as support of this interactionism (1961, p. 371). The unity of personality is an expression of the unity of the soul and the absence of any analogous unity in the nervous system shows the incoherence of parallelism (1961, p. 356). Further evidence that his dualism is Aristotelian and Leibnizian rather than Platonic or Cartesian, a metaphysic of process rather than of substratum, is his remark that in *Body and Mind* he was "unduly concerned with the question—What are things made of? to the neglect of the more important question—How do events run their course?" (1929, p. vi).

In the final chapters of his *An Outline of Abnormal Psychology* he endorses a more clearly Leibnizian view of the soul, at which he merely hinted in *Body and Mind* (e.g., p. 366), in which the soul is said to be a community of monads, linked together in a more or less hierarchical organization, disruption of which accounts for the dissociations of personality described by Morton Prince and others (e.g., Prince, 1905). The monads are dynamic, conative units, and as they become more closely integrated the soul develops as a system of psychical dispositions (1961, p. 371). The individuality of the soul (and thus the uniqueness of personality) results from the infinite possibilities of organization among the monads, and the unity of the soul results from the subordination of all other monads to the chief-monad. The general purposes of the soul are the purposes of the chief-monad—the details of action are determined by the subordinate monads, whose specific purposes are not necessarily, or usually, represented in the chief-monad (1926b, p. 546). In case this sounds over fanciful, we should remember that, similarly, a master-program may merely name subroutines, the details being independently programmed, failure of a given subroutine may or may not divert the over-all process to a detailed examination of that routine, malintegration of subroutines may lead to loops pursuing goals *other* than the final goal of the master-program. This last would be equivalent, in McDougall's terminology, to a dissociation of

personality, I shall say more about his personality theory later—suffice it to say, now, that the monads correspond roughly to the sentiments and may be seen as dynamic organizing principles (plans, sub-programs) subordinated in various degrees to the chief-monad, which corresponds to the master sentiment of self-regard (master-program, metaplan)

MIND AND COGNITION

McDougall claims that the psychologist needs to talk about both body and mind, where mind cannot be identified with the brain or nervous system, for this would be to tie us down to one type of explanation (1923a, p. 36), nor with a bundle of faculties or a more or less organized mass of ideas regarded as enduring things which pass in and out of consciousness (1923a, p. 35). Despite the ideo-motor theory, he says, "idea-psychology gives us no intelligible theory of action, it cannot relate ideas to the bodily activity in which our mental life expresses itself", he adds that Watson and other behaviorists recognized the uselessness of such theories of mind, but took the mistaken step of trying to disregard mind altogether (1926a, p. 276). The mind is "something which expresses its nature, powers and functions in two ways (1) the modes of individual experience, (2) the modes of bodily activity, the sum of which constitutes the behavior of the individual" (1923a, p. 35), "the *raison d'être* of mental events seems to be the modification and control of events within the body and physical events without it" (1932, p. 3), "Mental process seems to be always a process of striving or conation initiated and guided by a process or act of knowing, of apprehension, . . . an activity of a subject in respect of an object apprehended, an activity which constantly changes or modifies the relation between subject and object. . . . The representation or idea of the end is not truly the cause or determining condition of the purposive activity . . . the anticipatory representation of the end of action merely serves to guide the course of action in detail . . ." (1960, p. 308).

Thus consciousness has a specific function, far from being an idle epiphenomenon "In the infant, as his powers of representation develop, as he becomes capable of free ideas, the end towards which any instinct impels him becomes more or less clearly represented in his mind as an object of desire [This leads to] greater

continuity of effort, for, when the power of representation of the object has been attained, the attention is not so readily drawn off from it by irrelevant sensory impressions of all sorts" (1960, p 151) This is reminiscent of recent Russian work on the function of linguistic representation in increasing persistence and detailed excellence of effort (Luria, 1959) Mind is seen as determining the goals of action, and then as guiding bodily activity so as to reach those goals. As the Gestaltists, Lashley, and Lewin were also to point out, the detailed movements of "equivalent" behavioral units may vary considerably, and that is one reason why teleological rather than mechanistic explanation is required (McDougall, 1926a), behavior is made up of conative units, only movement can be analyzed into muscle twitches, subunits may only be explicable in terms of the over-all goal—thus McDougall, like Lewin, noted that a child may move away from his goal in order to reach it and will attempt various maneuvers in the process (1960, p 152), the analogy to heuristics as subunits in programs for problem-solving is obvious We are reminded of the contemporary notion of TOTE-units, wherein behavior is continually guided by match-mismatch templates which are presumably cognitive representations, though not necessarily conscious (Miller et al, 1960) We may even view pleasure and pain as match-mismatch signals McDougall denies that pleasure can be an end in itself, but says that pleasurable feeling is a sign of progress towards or achievement of a goal (1960, pp 25, 37) Cognitive representation does not itself cause activity (as held by the ideomotor theory) but it helps in the achievement of the goal insofar as it supplies a clear and detailed representation of the goal itself and of the various subgoals—the more detailed the representation, the more specialized and nicely adjusted the activity (1960, pp 308-9) "Reasoning, like all other forms of intellectual process, is but the servant of the instinctual impulses" (1923a, p 215), and cognitive processes, being the servants of the instinctual impulses, are affected by them thus McDougall (like Bartlett and later workers on social perception) stressed the selective nature of perception and memory, saying that this was to be explained in dynamic terms, i.e., with reference to the goals and interests of the organism concerned (e.g., 1929, p 61, 1961, chap. 24) His remarks on the mnemonic function of imagery in recall are similar

to those of Bartlett (1932, chap. 11, cf. McDougall, 1960, p. 209), and are in line with his view of the function of consciousness as helping to direct and fixate attention—the latter is a teleological concept to be dealt with in dynamic terms, and “effort of attention is the essential form of all volition” (1960, p. 209)

INSTINCTS AND SENTIMENTS

In 1923 McDougall exhorted Watson's students “If then you must be behaviorists, I beg that you will be purposive behaviorists” (1923b, p. 288), and in 1925 he remarked that most psychologists in fact allowed for purpose in their systems, though they used differing terms (drive, determining tendency, prepotent reflex, motor-set, etc.), and some—for instance Tolman—also stressed the role of cognition in goal-directed behavior, allowing that cognitions initiate, guide, and terminate purposive activities (1962a, p. 297). However, as McDougall pointed out at some length in 1930, he nonetheless still disagreed with many of his contemporaries: the disagreement was over which of the two possible types of purposive psychology (the hedonistic and the hormic) was to be preferred (1930b). As I have mentioned, McDougall rejected hedonism, saying that pleasure and pain were merely general feelings acting as signs of success or failure in approaching specific (though not necessarily consciously represented) goals; he distinguished between hedonism of the past, the present, and the future, characterizing all as inadequate, and thus rejecting the theories of Thorndike, reinforcement theorists, and drive reduction theorists (1930b). His preference was for a hormic psychology, the foundations of which he had laid in his *An Introduction to Social Psychology* of 1908.

He states that the essence of the hormic theory is that “To the question—Why does a certain animal or man seek this or that goal?—it replies. Because it is his nature to do so.” Thus behavior is to be explained in terms of *instincts* (innate propensities), which are the core of his psychological concept of purpose. Instinctive action shows all three aspects of mental process: cognitive, affective, and conative (1960, p. 23), and all these aspects are included in his original definition of an instinct as an inherited or innate psycho-physical disposition which determines its possessor to perceive, and to pay attention to, objects of a certain

class, to experience an emotional excitement of a particular quality upon perceiving such an object, and to act in regard to it in a particular manner, or, at least, to experience an impulse to such action (1960, p. 25). This tripartite definition is mirrored in present-day personality theory, notably in Cattell's definition of the concept *erg* which is crucial in his factor analytic approach (Hall & Lindzey, 1957, p. 401), and—as Bruner (1961) points out—the notion of a predisposition to react to specific perceptual impressions in specific ways is similar to the ethological notion of *releasers*, as described, for example, by Tinbergen (1951) and Lorenz (1952). Behavior, animal or human, is not to be explained in terms of habit, so stressed by William James, only instincts are truly dynamic, habits merely being acquired characteristics of the means of reaching goals, as our linguistic habits determine the manner in which we ask for something, but not what we ask for. In *An Outline of Psychology* he states that “The main thesis of this book is that in every case the motive, when truly assigned, will be found to be some instinctive impulse or some conjunction of two or more such impulses” (p. 218). During the processes of socialization and maturation, no essentially new sources of motivation arise—even the most “idealistic” actions are to be accounted for in terms of the basic instincts. In particular, the *self* has no special dynamic power—it can only appropriate that of the instincts associated with it. In simulation terms, a computer can be programmed so as to learn to represent and follow new goals, but—even if it is to some extent self-programming—it can never reprogram so as to generate new sources of energy. these are specified once and for all in the initial program.

Clearly, any *hormic* psychology which thus denies functional autonomy (Allport, 1961) must attempt to explain those types of behavior which, *prima facie*, do not seem to be motivated by innate impulses; such an explanation should both refer specific actions to specific instinctive bases and illuminate the mechanisms of socialization whereby the child seems to become gradually more free of his instinctive urges as he matures. McDougall attempts such an explanation in terms of the sentiments: “organized system(s) of emotional tendencies centred about some object” (1960, p. 105). Thus, like instincts, sentiments have the tripartite nature of mental being, but, whereas the instincts are

innate, the sentiments are individually acquired tendencies (1923a, p 213) Only they are the true basis of our judgments of value and merit, only they bring order into our volitional life, for they organize our various emotional impulses into a system which includes cognitive representations which serve to guide our action (1960, p 137) Insofar as they are associated with a strong master sentiment of self-regard, about which I shall say more later, we are self-determined rather than impelled by our instincts Socialization, in building up the sentiments, does not add new sources, but new objects of motivation and facilitates cognitive representation of such objects, including the *abstract* objects conceived by the use of linguistic categories Sentiments are conceived in developmental, dynamic terms (I have already mentioned that they are equivalent to the monads, the conative units which together form the system which is the personality), thus "Each sentiment has a life-history, like every other vital organization It is gradually built up, increasing in complexity and strength, and may continue to grow indefinitely, or may enter upon a period of decline, and may decay slowly or rapidly, partially or completely ." (1960, p 140)

THE SENTIMENT OF SELF-REGARD

For McDougall the mental is to be conceived as process, as organization of behavior rather than as an entity or entities underlying behavior, mental terms, as we have seen, are to be construed as adjectives rather than as substantives Nevertheless, we may speak of the structure of the mind. "Mental structure is that enduring growing framework of the mind which we infer from the observed manifestations of mind in experience and in behavior, and, since this develops, grows and, even when the mind is at rest, endures, we may properly describe it and its parts in substantial terms, which terms we shall have to select and define with care . We speak of the structure of a poem or of a musical composition, meaning a whole consisting of parts in orderly functional relations with one another, and, though the structure of the mind is not of the same order as these structures, yet these, rather than the material structure of a machine, should be thought of as offering the closer analogy" (1923a, pp 41, 42). We might add that a part of a program is more analogous to a part of a poem

than it is to a part of the machine which it controls "The structure of the mind seems to be peculiar to each individual" (1923a, p 36)—thus each personality is unique

As I suggested earlier, this mental structure is the organization of the sentiments, which are interrelated and hierarchically integrated by way of a master sentiment, the sentiment of self-regard. This integration develops gradually, and may be more or less complete—the account of the growth and function of the sentiment of self-regard is one of the most interesting features of McDougall's psychology, and it forms the focus of his personality theory. In particular, he holds it (and its metaphysical equivalent, the doctrine of monads) to encompass two "opposing" views of the personality, or soul, neither of which seems to be expendable: the personality acts as a unitary agent and yet is built up by a gradual integrative process (1920). This is just the problem which I mentioned earlier as being raised at the conference on simulation—McDougall's answer sounds like a provision for the development of a self-programming routine which comes to control the subroutines in differing degrees.

The sentiment of self-regard is centered about, and develops in conjunction with, the idea of the self; this development is essentially a social process, for—while the child's first idea of the self is of a bodily self distinguished from external physical objects (cf Piaget, 1954)—he later learns to distinguish animate objects, including other selves, and the constant interaction between him and these other selves suggests to him the limits of his capacities and of his autonomy. The master sentiment draws mainly on two instincts, self-display and self-subjection, and may involve both positive and negative self-feeling. Praise and blame act as effective social sanctions by way of the self-regarding sentiment, and such sanctions may be internalized as moral conscience.

But such internalization is only one mechanism of socialization, another is the establishment of "quasi-altruistic extensions" of the egoistic sentiment, whereby "the child is led to identify himself with his school, his college, his town, his profession as a class or collective unit, and finally to his country or nation as a whole" all by way of extending his self-regarding sentiment to these objects (1960, p 178). This extension may be brought about by such simple means as naming, whereby several objects

are categorized under one and the same concept, one which is already associated with the self-regarding sentiment. Thereafter, behavior with reference to these objects will be different—and, since the sentiments are seen as continually developing, there is no reason why an object should not be included at one time and not at another (e.g., by varying categorization). Similarly, re-labeling of subroutines would make them available at different points in the master program or withdraw them from its control entirely. The analogy to modern concepts of ego-involvement and propiety striving is obvious, since functional autonomy is denied, behavior involving these “quasi-altruistic extensions” arising through socialization must be referred to the instincts of display and submission, yet—when the self-regarding sentiment is in control—we exercise true volition in striving towards self-appointed goals. The more closely involved with the self the goal is, the more absurd it will seem to try to explain behavior in mechanistic or even homeostatic (i.e., “equilibrium” or “drive-reduction”) terms, conscious purposes, often involving risk and difficulty, must be allowed as explanations of the direction and persistence of human behavior, even if the basic motivation is always instinctive. Consciousness is important in that it fixates the goal for the organism, it establishes clear and stable templates for use as standards in problem solving.

PERSONALITY AND DISSOCIATION

McDougall's experiences as a medical officer in World War I helped form the basis of *An Outline of Abnormal Psychology*, which is virtually a text in psychosomatic medicine, a defense of interactionism. Explanations are in mental rather than in physical terms, thus most of the paralyses, anaesthesias, and amnesias of “shell-shock” are really functional disorders, dissociations of the personality system whereby the patient defends himself against trauma, and manic depression is not to be attributed to specific brain lesions, micro-organisms, or chemicals, but to alternate domination of the sentiment of self-regard by the self-assertive and the submissive instincts respectively. The initial upsetting of the normal balance of these two impulses may be due to external circumstances, to hormonal imbalance or to dissociation, but in any case the syndrome is more fruitfully thought

of in functional than in physiological terms (pp. 3, 357) The concept of dissociation plays a crucial part in his theory of personality, as I shall now try to show

The mind is "a hierarchy of minor integrations which, under favorable circumstances, becomes the single integrated system that we call the normal personality," and the Freudian division of the mind into two entities, one functioning consciously and one unconsciously, is not adequate to the facts (1926b, p. 523) Even under normal conditions different purposes may be pursued simultaneously and relatively independently, for example, I may be wholly occupied with other thoughts while walking to work, or I may carry on a conversation while continuing to play the piano If we wish to think of the mind as the program of the body, we shall hardly be surprised at such parallel processing—though we should explain it in terms of sub-programs, or branching routines, instead of in terms of subordinate personalities, which was McDougall's explanation As Reitman pointed out in the conference I have referred to, computer models which are both realized and conceptualized serially (e.g., Newell, Simon & Shaw's *General Problem Solver*, 1960) conflict with the organizational assumptions inherent in most theories of personality, these models are of systems with a total unity of purpose—though there may be goals and sub-goals, and alternative subroutines possible, yet the control is entirely in terms of one goal, and the subroutines are passively selected as means towards this end, having no intrinsic power to initiate activity (Reitman, 1963, pp. 79-80) McDougall spoke of subordinate personalities to allow for the possibility of several independently originated activities being simultaneously under way, and of the chief monad or master sentiment as being in some sense in over-all control, though the closeness of the dynamic relations between it and other monads, other sentiments, varies Workers in the field of computer simulation are now very much concerned with the representation of such systems of interacting, affective, dynamic structures within a given personality, and one of the problems they must face is that of representing differing degrees of malintegration, of mutual independence of subroutines, together with differing consequences in terms of the system as a whole In McDougall's terms, they have to simulate the psychological features of differing degrees of dissociation

Every case of purposive activity which is not consciously willed by the self and centrally related to the sentiment of self-regard is due to a subordinate personality and is evidence of a certain degree of dissociation. The dissociation is least in such cases as those mentioned above (conversing while playing the piano), where the self would immediately acknowledge the actions as intentional and would be capable of consciously directing them (though the detailed movements could usually not be consciously willed). It is greater in dreaming, which seems to be independent of our will, and greater still in simple anaesthesias, functional paralyses, and hypnosis, automatisms and post-hypnotic suggestions, which may be carried out in spite of strong conscious opposition, are to be attributed not to mere strings of ideas implanted by the hypnotist, but to the (sometimes conscious) workings of a dissociated personality (1926b, p. 544). Still greater dissociation is evidenced by the phenomena of multiple personality, with alternating—and sometimes even co-conscious—personalities. In discussing such cases, McDougall attributes them to faulty integration whereby the sentiments have been organized not in one hierarchy, as is usual, but in two or more interlocking groups, with two or more master sentiments. The deeper the split (i.e., the nearer to the instinctive level itself) the more powerful the dissociation and the more distinct the personalities, he suggests that in the case of *Spanish Maria*, the developing sentiment of self-regard split into two with the separation of the basic instincts of self-assertion and submission (1926b, p. 538). Each personality is an organization of sentiments (a colony of monads), an apparently unitary personality may be malintegrated in the sense that the master sentiment is associated with conflicting purposes—this conflict is likely to show in dreams and may result in more serious dissociation unless one purpose can be clearly subordinated to the other by way of a higher-level master sentiment (1926b, p. 526). The “cure” of cases of multiple personality lies in the effecting of such subordination, and the physician may have some difficulty in deciding which purposes (personalities) to encourage at the expense of others.

McDougall explains co-consciousness in terms of direct telepathic communication between the monads—even the monads within an integrated personality are said to communicate tele-

pathically, this is perhaps the most obscure part of his account—even dreaming is said to be an example of such communication (1926b, pp 548-9). However, as Reitman remarks, the problem of intrapsychic communication is one of the thornier problems facing the would-be simulator today, he must specify “the manner and form in which information, commands and requests at one level in the system are transmitted elsewhere,” and his difficulties are increased if he has to consider “a system in which subsystems are able to do such things as induce concealment or refuse access to information which other systems require to achieve their aims” (Reitman, 1963, pp 73, 85). In computer simulation we cannot assume that the right hand knows what the left hand is doing: the right hand must be told.⁵ When we specify an intrapsychic transfer, retrieving a unit of information from one subsystem and passing it on as a datum to another subsystem, what psychological process are we representing? Is this unconscious memory? Or do we, perhaps, have no clear concepts available within personality theory distinguishing between the various types of intrapsychic process⁶ that we may need to represent in a computer program? Small wonder, surely, that McDougall fell back on the vague concept of *telepathy* as a unitary explanation of intrapsychic communication.

CONCLUSION

If we are suspicious of talk of souls and monads, if we cannot accept McDougall's list of the eighteen specific instincts, if we

⁴ Page references are to the 1961 Beacon Press edition of *Body and Mind*, first published in 1911.

⁵ Recent work on “split-brains” (Sperry, 1964) suggests that the telling is by way of the great cerebral commissure, the cutting of which in effect provides the organism with two independent brains, which can learn different responses to equivalent stimuli, and which can compete for control of the organism. “The split-brain monkey learns, remembers and performs as if it were two different individuals, its identity depending on which hemisphere it happens to be using at the moment.”

When the brain is bisected, we see two separate ‘selves’—essentially a divided organism with two mental units, each with its own memories and its own will—competing for control over the organism. One is tempted to speculate on whether or not the normally intact brain is sometimes subject to conflicts that are attributable to the brain's double structure.” Cf McDougall on personality dissociation.

⁶ E.g., the request for, the search for, the retrieval, transfer, and association of stored units, in subsystems which are more or less closely linked with or subordinated to one another, and more or less crucial for or obstructive to the attainment of the over-all goal.

feel uncomfortable with the very notion of instinct due to the difficulty of identifying precisely the contributions of learning to behavior, if we favor functional autonomy and if we feel that the dynamics of purpose are somewhat mysterious, we may be tempted to categorize McDougall's writings as interesting antiquities involving, no doubt, some shrewd observation of fact, and to leave it at that

I have tried to show that this would be a mistake. The structure, if not the language, of McDougall's argument against mechanism should remind us of contemporary skepticism as to the possibility of using stochastic models and Markov processes to explain the sequential organization of behavior. Chomsky (1956) has shown that no Markovian machine could be adequate for simulating human behavior, since it would require infinitely many parameters, most complex simulations rely heavily on teleological notions of the hierarchical organization of goals and subgoals. Programs, distinguishable conceptually from hardware, can only act if "embodied" in machines. Instincts may be fruitfully thought of as innate Plans, purposive striving may be thought of in terms of TOTE-units, ordered behavior may be related to an over-all Image, a self-ideal largely responsible for initiating and ordering the specific Plans (cf. Miller et al., 1960).

But if one does not like this talk of *Images* and *Plans*, this translation of a classic into the modern vernacular, one may nevertheless profit from a study of the original, for McDougall's system affords us an interesting attempt to illuminate human behavior and the structure of personality. His emphasis on the directive functions of the self is echoed in many contemporary personality theories, notably those of the *Third Force* psychologists: ego-psychology, the Adlerian creative self, and Allport's proprium are all ways of emphasizing the importance of those conscious purposes which we subjectively feel to be closely involved with the self. Accounts, such as Allport's, which represent the self as a number of unifying functions, and the structure of the self as the interrelationships between these functions, echo McDougall's views on the integration of the personality and also imply that the self is not a simple indivisible entity present from birth, but something which develops throughout life. Organismic theories, such as Goldstein's, place even more weight on the claim that a

simple Cartesian dualism is inadequate, stating that mind and body are not clearly separable, even in thought. And Jung's view that the self is a central focus of personality, a unifying principle, for which we all come to strive but which few attain, reminds us of McDougall's remark that "What is called a self is always an ideal rather than an accomplished fact, an ideal that is in various degrees approximated but never attained" (1923a, p 529). Jung, it is true, puts more emphasis on the central motivation towards wholeness, which he explains in terms of the mandala archetype.

These parallels to present-day theorists should encourage us to blow the dust off McDougall's works, and may persuade us that it is worth the trouble of coping with his "old-fashioned" terminology. In particular, we should not allow ourselves to be put off by his frequent use of metaphysical language and argument. Thus, if we remember in what sense he was a "dualist" and an "interactionist," if we relate his basic convictions as to the efficacy of purposes and consciousness to his philosophical concepts of "soul" and "monad," and to his psychological concepts of "instinct," "sentiment," "dissociation," and "personality," we shall be better able to appreciate the systematic nature of his psychology and its relevance to present-day thought.

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