CHAPTER VII

SYSTEMS AS NEED-DETERMINED

All our acts, from a to z,
Find in needs their fountainhead.

152.—EXPERIMENTAL WILLING.

(1) When I will to move my eyes, limbs or body, it is the action most natural to those parts which results. [Repeat and test these experiments.] I note that I am apt to repeat, or recur, to the same movements. (2) Variety of action in experimental willing is with me usually suggested by the rule of contraries, for example, if I have moved my arm to the right, I move it afterwards to the left. To produce an uncommon succession of arbitrary movements is not easy, e.g., it is difficult to pass from movements of the fingers to those of the legs, and from these to sight and then to thought. (3) There are no separate verbal volitions always present as I proceed from movement to movement; where they do occur, they form a link in an organised chain. The persistence and line of the activity is decided by individual inclinations. (4) The following factors exist in arbitrary haphazard willing: (a) we have the notion of, or the need for, acting (represented on the non-bodily plane chiefly by an organised feeling); (b) the cue to what we are to will is given by the first sensation which happens to arrest our attention; and (c) we will what the feeling or sensation suggests, i.e., we carry out the suggestion. The resulting action is along the line of familiar activity. Such experiments as the above possess no elements which are not involved in a train of organised thought—as muttering a formula, or in a complex of muscular action—as when I take off my coat. The use of phrases such as “I will,” merely lengthens the act. (5) In the course of the experiment I am able to desist at any moment; hence, it is reasonable to suppose that an organised stimulus or need persists while I proceed from step to step (ch. 3). (6) I am not aware of separately willing every step and each part of every step. I merely observe a steady succession of movements with no discernible volitions, notions or feelings intervening. This is a fair representation of normal reactions, the process remaining the same even when we are doing
something which is objectionable to us. (7) The end or aim is conceived of organically, that is to say, dimly and intermittently. For example, a slight feeling develops in my arm at the point which will be moved. Normally we do not think of an end when we act, but if the opposite be true, then since all action displays the same characteristics, thought-of ends exist in all action whatsoever—voluntary or involuntary. (8) When the activity, as a whole, is of recent standing, I re-develop more or less completely portions of the end as well as of the steps; and both of these, not being as yet well assimilated, are re-developed slowly and more or less completely, so that I am enabled to act readily and confidently. By parity of reasoning the vivid re-development of an end and of the steps involved in its execution, is superfluous in normal process, since everything is there re-developed easily and at once, while what is redundant is repressed in the struggle for existence and comfort among primary and secondary units. Hence we do not expect ordinarily to meet with any thought-of end or means, since these have been reduced to their lowest terms. (9) I can easily will what is impossible to carry out, for example, I try to annihilate the pen I am writing with by a stern look; I attempt to flatten a wooden pen-holder by pressing it between my fingers; I will to lift a tremendous weight. Belief in the possibility of achievement plays no part in ordinary action. I proceed to will actions which are out of my range as if they could be performed. I will the impossible as easily as the possible. We act as a rule organically, and we do not stop to reflect or to weigh. If our attempt is unreasonable, we desist; but this we do only from practical considerations. We act because of a pressing need, regardless of belief or possibility. In organised activity these latter are thrown out as unnecessary ballast. For the same reason we may will what we regard as the more painful of two courses. I resolve, in this manner, to do whatever is casually suggested, and I proceed accordingly. As regards belief and possibility, thought, imagination and muscular reaction show the very same characteristics.* (10) I let articulate sounds, regardless of sense, freely escape my lips: ear, weir, con, laugh, log, fear, glue, gin, coroner, can, mine, more, fun, candle, dream, doll, toon, wild, where, want, Solomon, Cinderella, tender, till, keer, coll, darling, nantch, villa, careless, friend, folly, state, frieze, full, grand, eyes, love, pick, noor, fire, almonds, truer, through, them, Mile End, varnish, tiddle, Ptolemy. There was* in this experiment, as can be seen, a tendency to run on the same first letter, or on others near it in the alphabet, which I now and then deliberately checked. In pronouncing, I made up in most cases a word suggested by the bare sound. There was no direct association between the words; they did not suggest each other, as is seen at a glance. (11) I build up the words and write them down, without interfering with, or being influenced by, the current of my thought.

*Belief and possibility play a considerable part in current psychology. Bain, Brentano, Stout, and many others, speak at length on the subject; but they do not refer, so far as I can discover, to what actually takes place.
Association was need-determined or topical: I wished to utter syllables. If I so desired, I might shape intelligent terms of one, two, or more syllables; or syllables without meaning; or both classes combined; or words beginning with certain letters. I can also re-develop associated or connected words, such as house, window, room, steps; but even here the topic is “house,” leaving aside the presence of a decision to persevere in a stated course. In the word series given I cannot suggest what ruled the nature and the order of the initial and other sounds.* (12) I will to move my hand to the right; then I will to move it to the left. In each case the act of willing is not willed. Will, then, does not explain itself; it itself develops out of a previous system. (13) Ordinarily I perform many actions. I pick up a chair and carry it across the room; I shut the note book, re-open it, and turn over its leaves till I come to a page I am looking for. Actions thus succeed each other, most of them organised, adapted and intelligent. I act readily because I have so often done the same or a similar thing before. (14) As a matter of information we say “yes” or “no.” Or after weighing an argument, looking at a drawing, deliberating over an action, we say “yes” or “no” in answer to a question. We do not affirm or negative every statement which flits by. It is the same with the will (sec. 164). (15) When I say “I will,” I generally refer to that portion of my thought or to those needs which most commonly rule the field of thought. I can consequently defeat myself, and then one need triumphs over another. The ruling need is identified with the self, and, being but one among many needs, can be put to flight. Evil thoughts may dominate us, and then we fight against virtuous inclinations. In those who are shallow, the “I” is repeatedly identified with opposite needs (sec. 163). (16) The incentives to action lie in our wants (sec. 156), which may be divided into the following classes:

(a) **Perennial Needs**: these are such as are essential to the organism; for example, solid and fluid nutriment, fresh air, rest, sleep, exercise, variety, warmth.

(b) **Periodic Needs**: these are such as distinguish the seven ages of man.

(c) **Personal Needs**: these are peculiar to the individual organism and supply us with our permanent individual character.

(d) **Peculiar Needs**: these result from our special environment.

(e) **Political Needs**: these are such as have reference to our social, national, racial and physical environment.

(f) **Passing Needs**: these are such as are casual and passing.

All systems are thus initiated and sustained by definite stimuli and functional tendencies on which they are dependent.

From the scientific standpoint there can be no justification for a chapter on the will; for if we admit the general fact of connected succession, the notion of an arbitrary will, as ordinarily understood, loses all reality. We are bound to assume, until the contrary is proved, that the facts in

* Parrots thus talk unconnectedly.
which we are interested are as strictly related as are those which form the
subject-matter of physics. The previous portions of this treatise have
uniformly referred to facts, and all that we have learnt has tended to
exclude the notion of a power which is not identical with organic needs.
The above abstract of a series of experiments points to the same con-
cclusion; but we must nevertheless examine the subject of the will ex-
hauatively, if only to attain to a knowledge of human limitations, and to
broad negations of current views.

The question of free-will is one of those ghosts which are easy to raise and difficult to
lay. It is like the strange being whom the knight, in Spenser’s Fairy Queen, vainly
tried to break, to strangle, to crush or to pierce; and who only yielded when held under
water. Since dialectic methods have been unsuccessful in the past, I have applied above
the ordeal by experimental introspection. Whether this attempt be successful or not,
there should exist no doubt that the issue is amenable to such treatment.

The veteran psychologist, Wundt (Grundris, 1896, p. 228), holds that theoretical
interests are sure to falsify inner observation. This supposition of Wundt’s brings out the
lamentable fact that psychologists as a body make their profession subservient to other
interests. Apart from such an explanation it is wholly inexplicable why there should be
the slightest danger from the side of theoretical interests. Surely, eagerness for facts
should outweigh tenfold the desire to verify some theory.

To return to our experiments. They make clear (1) that when we will movements,
the movement to be willed is always suggested; (2) that series of willed movements, as
well as single movements, have their character determined organically; (3) that word
series are brought about by the same factors; (4) that needs initiate and maintain
movement; (5) that ends or insistent volitions act within an organised system; that they
cannot be thought of as acting otherwise; and that therefore the barriers between voluntary
and involuntary activity are artificial; (6) that resolves are like a scaffolding which
becomes useless when an activity is built up; (7) that deliberate volitions are rare;
(8) that the act of will is itself suggested and usually unwilled; and (9) that our total
activity is rigidly connected.

Further inquiries confirm this position. As I watch myself whilst active, I am per-
petually surprised at the independent and intelligent way in which the different muscle
systems perform their duties. I notice, for instance, a long succession of finger move-
ments and tongue movements which seem to be as little connected with my general
intentions as the behaviour of the clouds above me. I am, as it were, a spectator rather
than an actor in what I do. It seems as if each muscle had a brain and a life apart from
mine; as if I were their fellow, and not their master. Repeatedly I admire the readiness
and resourcefulness of those actions. Now the more completely I accustom myself to
observe while indifferently going through routine labours, and the more hours and weeks
I am thus engaged, the more my wonder increases. Aims, referring to every step in an
action, are here much restricted. Only when extra effort is required in re-development,
or when an end has to be reached in an indirect and circuitous manner, can we speak of
Will. As soon as confusion and effort disappear, so soon have we usually done with the
Will. Only when we have to think out a problem, do we image at all what we are
doing.

The place of the Will in the flux of thought can be determined experimentally in other
ways. I can deliberately will to re-develop what is contiguous or resembles, some
particular I am thinking of. The insistence is here the outcome of a need—an insistent
need, in fact,—and the resulting success or failure is determined by factors with which we
are now acquainted. However, more interesting tests are possible. [Test what follows.]
(1) I can shut my eyes, determine on nothing, and watch the result. A noise, a bodily
feeling or a recent event will then capture the field of attention. (2) I determine to think
of nothing. The results resemble those just referred to. (3) I determine to think of
something, never mind what. Still the same results. (4) Lastly, I determine to think of what is unlike something thought of. This is the most curious case. Usually the idea of the unlike becomes complicated with some oft re-developed fact, and this becomes more and more the case as I proceed. If I deliberately ignore these complications, the result is that I seem to hold things back, to inhibit something, and then, sometimes, the unlike system develops. In every instance of this nature verbal images must be discounted, for we have seen that their introduction destroys honest experiment. The liability, in the above experiments, to re-develop mechanically the same person or thing which we have previously re-developed on a similar occasion, is, as pointed out in sec. 89, so great that we exclude these contiguous occurrences in each case.

Or, experimental grounds our conclusion, therefore, is that all human activity is comprised in a rigidly interdependent system, antecedents and consequents belonging to an organised order. Human action is of one piece, and no part differs essentially from any other. It might perhaps be suggested that experiment is not necessarily borne out by non-experimental processes. To this the reply is that on carefully comparing both sets of processes, one finds that they agree in every detail (see chs. 4 and 8).

Against all the above will be brought "the testimony of consciousness." With that, as with any other mere opinion, we have nothing to do. Besides, persons who do not believe in introspection on the ground that it is fallacious, should be the last to fall back on such an argument. The student of psychology, as such, is only interested in the facts of psychology, and must determine these honestly. If after his investigations he feels compelled to take up an attitude for or against free-will, that is a non-psychological point. To go to psychology and to force it to yield him what his philosophy favours, is to wreck and prostitute the science. If psychology demands intellectual sacrifices, some readjustment of one's general views, that is only what every growing science has demanded, and what we should expect and welcome.*

153.—The Effect of Volitions.

Let us assume that the will possesses unrestricted power. In that case, I have only to decide to be wise in order to rank with Socrates, however deficient in intelligence I may previously have been. [Examine these assumptions.] This is absurd on the face of it compared with what volitions ordinarily accomplish. Assume, again, that I determine to become wise without delay. My determination is unavailing, for willing as such is no determinant. Assume once more that I will to be wise; but this time we will suppose a normal case, and also that I am intelligently guided by a knowledge of my capacities. In this instance my determination is the outcome of a deep-seated need, so strong that most other needs are subordinated to it. My decision focuses a tendency which has slowly grown and struggled into supremacy. A firmly rooted need being present, I necessarily devise measures for its satisfaction; and if I boast of but a spark of insight into human nature, I shall not attempt to become wiser than my antecedents warrant. The flowers of wisdom can only be plucked by those who have sought them in youth; the uneducated adult searches for them in vain. The will to be wise has no tangible effect unless a person has limbs supple enough to climb the hills of learning, and we, therefore, assume that in the above case, this indispensable condition is complied with.

* In this connection, see Travis, An Introspective Investigation, 1877. Compare also sec. 186.
Our organised reactions, when we are wanting in intelligence, are dis-jointed, narrow in scope and ineffective; instead of being connected, wide in scope and effective. To grow intellectually, we must remove the former condition, and strive to establish the latter. This is, however, a difficult task, and a life-time of earnest labour is, therefore, scarcely sufficient for its accomplishment. It implies constant study, and the determination to profit by every favourable opportunity; it excludes all relaxation of effort. In this manner, stimulated and sustained by a ruling inclination, we are gradually changed, and our reactions come to be more and more in harmony with our conception of the wise man.

The stuff we are made of tells in every direction. If we are cast in a certain mould, our determination will soon be dead and forgotten; if in another, we shall toil and moil, and make but little headway; if in a third, we shall now lose heart, and now wax enthusiastic, with results, naturally, of no great value. [What class of mind is yours?] The singleness, the purity and the earnestness of the desire, are only a few out of many relevant factors.

The normal effect of our volitions is determined organically. Taught by the course of events, we usually know what we can do, and we do not attempt what we know is beyond us. For example, most men would decline to join an expedition to the North Pole, knowing that they are not fitted to undergo the necessary hardships; but they will agree to a proposal which they know falls within their range. If they are mathematicians, they “intend” their minds without ado on some intricate problem, and solve it; if they are altogether unacquainted with mathematics, they wisely refrain from the attempt. Willing in itself, other things being equal, can do nothing; and in what we do, or determine to do, we merely realise the pressing needs of the moment in the manner explained in ch. 4. Were our organism differently constituted, we might, on the one hand, find the field within which our desires at present move greatly restricted, or, on the other, possessing an immensely wider scope.

154.—Will as Absolute.

We saw (sec. 152) that it is possible to call spirits from the vasty deep. There need be no half-heartedness about such willing, and it may proceed exactly as if we were willing what was possible. Possibility and impos-sibility, belief and unbelief, are beside the question. Will the spirits, however, come? The facts answer, “No.”* There are, then, bounds to what we can do. Where are these to be found? The answer is obvious. The possibilities of the organism limit our will. Were there no nerves proceeding from the brain to the fingers, we might helplessly will to the crack of doom that our hands should open and close.

The following is an approximately correct account of actual willing. [Test this.] Some need, as represented by a central nervous stimulus

* See, however, sec. 232.
and a simple feeling, seeks for satisfaction. There results then, for instance, a tune played on the piano, the stimulus provoking topical nervous activity of an acquired kind, which we recognise in the regulated movement of the fingers. All the interactions—the touches, sounds, etc.—play, of course, their part, while the initial willing and the various steps of the total process are, on the whole, organised. Should the task be a difficult one, there is no essential difference, as we saw in sec. 65; we encounter only more steps of the same nature.

Chs. 3 and 4 have shown that, at bottom, all activity is organised. Especially in sec. 96 we saw that the same systems form an important constituent in all action. In normal activity, therefore, the willing, as well as the various steps in execution thereof, will pass almost as mechanically and smoothly as a gently flowing stream. We generally exhibit, therefore, a minimum of marked aim and foresight.

The above considerations are of some importance when we wish to introduce changes in the economy of thought, for they teach us that it is worse than useless to make sweeping demands on any individual. We must, on the contrary, study capacity and educability, and then elaborate educational measures in agreement with conditions existing in each case. The attempt to force men into adopting an unwelcome line of action by telling them that they need only try, has, as a rule, results of less than doubtful value. [What effect has such a method on you?]

We see how the will is circumscribed. On the one hand, the particular organism has its rigid limitations, and, on the other, achievement in new fields necessitates a protracted process, since the central nervous system is irritatingly slow in adapting itself to changed or new needs. At the same time, willing merely expresses the fact of the existence of a need pressing for satisfaction. With hypothetical creatures, who are freed from the trammels of a central nervous system, this may be different. Possibly nothing raises difficulties with them. They perhaps have only to wish to be wise or foolish, and, as with a conjuror, the feat is accomplished. I say “perhaps” and “possibly,” for I have no psychological notion of such creatures. I only urge that it is mischievous, both psychologically and ethically, to assume that human creatures are in possession of a faculty superior to that which we know may be assigned to the brain. The sooner this is admitted, the sooner shall we see an advance in both theoretical and practical psychology. Ignorance, in this instance, is a curse and not a blessing.

The following are some of the opinions held by psychologists on the nature of the Will. Bain (Senses and Intellect, 1894, p. 2) speaks of “Volition, or the Will, embracing the whole of our activity as directed by our feelings;” and in another place (The Emotions and the Will, 1875, p. 354) he writes: “Without some antecedent of pleasurable, or painful, feeling—actual or ideal, primary or derivative—the will cannot be stimulated.” Bain exempts from the sway of the will, neutral excitement, spontaneity when due to recency, fixed or idea-motor ideas; and of emotions he says in this connection: “An emotion persists in the mind and dominates the course of the thoughts, not because it is pleasurable or painful, but because it is strong” (ibid, p. 381). Baldwin (Feeling and
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Will, 1891), with many psychologists, holds that the idea of a movement is itself a nascent movement, spontaneously leading to the movement proper. He says on this point: "Every state of consciousness tends to realize itself in an appropriate muscular movement" (p. 281). He sums up our problem as follows: "In all cases of intended bodily movement there is, first, a reason why we will the reaction? second, the actual decision or act of will; and third, the resulting movement" (p. 316). Bradley, Appearance and Reality, 1897, p. 115: "In volition we have an idea, determining change in the self, and so producing its own realisation." Chmielowski, Entstehung des Willens, 1874: "All human actions may in the last resort be considered as simple muscular movements, which, in their turn, consist of muscular contractions." (p. 5). "Stimuli excite our motor-nerves, and these give rise to muscle-movements" (p. 29). In willing, "the ideas must appear in their objective aspect of pleasurable or painful" (p. 70). "The second special mark of an act of will is the actual possibility of carrying out the necessary movements" (p. 71). Édouard, Sensation et Mouvement, 1887, p. 16: "The idea of a movement is the movement already begun." Hamilton, Metaphysics, ii, 1877, p. 433: "Conation is a longing—a striving, either to maintain the continuance of the present state, or to exchange it for another. Thus, conation is not the feeling of pleasure and pain, but the power of overt activity, which pain and pleasure set in motion." Herbart (Psychologie, 1824, ii, p. 70) says that "Feeling, willing, desiring, are abstractions." Hodgson, Metaphysic of Experience, 1896, iii, p. 165: "Volition... is a process of conscious choice, a process of comparison and deliberation followed by a decision." Hoffling, Psychology, 1891: "Volition proper is characterised psychologically by the ideas of the end of the action and the means to its realisation, and by a vivid feeling of the worth of that end" (p. 313). "Merely the fact that a feeling has once found a vent or discharge in a certain way, may be of decisive import for the manner of its later expression; it may have either an inhibitive, a strengthening, or a transforming effect" (p. 346). James, Psychology, 1890, ii: "When a particular movement, having once occurred in a random, reflex, or involuntary, way, in this James follows Bain has left an image of itself in the memory, then the movement can be desired again, proposed as an end, and deliberately willed" (p. 487). James' criticism of the theory of innervation will be found on pp. 493 ff. "An anticipatory image of the sensorial consequences of a movement, plus (on certain occasions) the fact that these consequences shall become actual, is the only psychic state which introspection lets us discern as the forerunner of our volitional acts" (p. 501). "Every representation of a movement awakens in some degree the actual movement which is its object; and awakens it at a maximum degree whenever it is not kept from so doing by an antagonistic representation present simultaneously to the mind." (p. 526). Jodl, Lehrbuch, 1896, p. 427: "Every voluntary movement is characterised by this that it is guided by an image of that which is to be done." Ladd, Psychology, 1894: "We never know nor feel, that we do not also will. Conation (or volition) enters into all perception, memory, imagination, thought." (p. 212). "Conscious striving enters into all the most primary psychic states" (p. 219). Lipps (Grundziige, 1883, p. 63) holds that will and pleasure-pain are the soul's ornaments, and that they have no power in themselves. James Mill, Analysis, 1869, ii: * We have now established, by an ample induction, that the action of muscles follows, as an effect its cause; first, upon sensations; secondly, upon ideas." (p. 348). Here Mill argues that since he has shown (mistakenly) that every movement is preceded by a sensation, therefore that sensation is the cause of the movement. The father stood evidently in need of his son's Logic (sec. 96). "Our power of willing consists in the power of calling into existence the appropriate idea;... the power of the will is not immediate over the muscle, but over the idea." (p. 348). "There appears no circumstance by which the cases called voluntary are distinguished from the involuntary, except that in the voluntary there exists a desire." (p. 350). "If... the idea of the outward appearance of the action calls up... the idea of the internal feelings of the action,... we are said to will." (p. 354). In other words, when we paint the action in the imagination, no movements follow; but when we become absorbed in the feelings connected with the action,—when the need flows into a muscular
channel,—then the movements do follow. This sentence of Mill's embodies probably the closest analysis we have of the last step in the volitional process. "We cannot will without willing something; and in willing we must have an idea of the thing willed" (p. 358). I give in full the summing-up of his analysis. "In regard, then, to that state of mind which precedes action, we seem to have ascertained the following indisputable facts: That actions are, in some instances, preceded by mere sensations; that, in other instances, they are preceded by ideas; that, in all cases in which the action is said to be willed, it is desired, as a means to an end; or, in more accurate language, is associated as cause, with pleasure as effect; that the idea of the outward appearance of the action, thus excited by association, excites, in the same way, the idea of the internal feelings, which are the immediate antecedent of the action, and then the action takes place: that whatever power we may possess over the actions of our muscles, must be derived from our power over our associations, and that this power over our associations, when fully analysed, means nothing more than the power of certain interesting ideas, originating in interesting sensations, and formed into strength by association" (pp. 378-9). Münsterberg, Die Willenshandlung, 1885: "The will is a complex of sensations" (p. 62). "The essential in volition is the feeling of inner activity" (p. 62). As to the everlasting innervation controversy, see p. 76 of his interesting book. Rieger, Die Willensstätigkeit, 1885, is a restricted experimental study of control over movement. Robertson, Psychology, 1896: "When I say, I will to open that door, I am representing to myself the door as opened, through muscular acts of mine, for some end or purpose in consciousness." (p. 219). Again, "Directly or indirectly, nearly or remotely, you will always find an element of feeling involved in conation, together with intellect and representation" (p. 220). Schneider, Der menschliche Will, 1882, p. 289: "The act of choice produces the subordination of special, proximate, and direct aims, to an aim which is more general, more remote, and more indirect." Spencer, Psychology, 1890, i: "In a voluntary act of the simplest kind, we can find nothing beyond a mental representation of the act, followed by a performance of it" (p. 497). "An involuntary movement . . . occurs without previous consciousness of the movement to be made" (p. 497). Stout, Psychology, 1896, i: "The mental attitude of voluntary decision is distinguished and characterised by the dependence of the act on the belief that we are going to perform it" (p. 132). "Mental activity exists in being felt. It is an immediate experience. The stream of consciousness feels its own current" (p. 160). "The process of conation is, as such, a felt process" (p. 166). Sully, Human Mind, 1892, ii: "It seems best, on the whole, to make the terms conation, volition, comprehensive enough to include all actions which have a conscious accompaniment, and which we will henceforth mark off as psychical actions" (pp. 172-3). "The most obvious general differentiating circumstance in all conative phenomena is the presence of the psychical correlative of muscular action" (p. 173). "A second main differentiating ingredient in the conative process is consciousness of purpose, or forecasting of an end" (p. 175). "The prompting forces in our voluntary action are feelings. We exert ourselves for the sake of some future gratification of feeling, as pride or love" (p. 2). "Thought . . . is characterised by a more or less prolonged state of muscular tension, involving a balancing action of the antagonist muscles" (p. 179). Here is a description of an act of will, which ignores the fact of economisation: "The child has tasted an orange. You offer him another, and he puts out his hand and takes it. The psychical event in this case seems to consist of the following stages. The complex of visual sensations supplied by the orange suggests, according to the law of contiguous association, the representation of the taste and the pleasure accompanying this. This representation of a pleasurable experience closely connected in time with an actual presentation excites the state of desire. That is, the child craves a renewed enjoyment of the orange-sucking. The idea of the succulent pleasure-giving orange, fixed and sustained in the state of desire, suggests in its turn (also by associative reproduction) a particular action or series of movements by means of which the pleasure may be realised" (pp. 195-6). "As soon as a desire prompts us with sufficient intensity or strength and a suitable action is suggested with the requisite distinct-
ness and stability, the actual performance follows, provided that there is nothing to counteract this prompting” (p. 211). Thompson, System of Psychology, 1884, i. p. 96: “Volitions ... never occur independently of feelings but in connection with them, and stimulated by them.” Ward, Psychology, 1886: “We can by what is strangely like a concentration of attention convert the idea of a movement into the fact” (p. 42, col. 2). “Change of sensation is followed by change of movement, the link between the two being a change of feeling” (p. 43, col. 2). “This change of movement through feeling” is “brought about ... by a change of attention” (p. 43, col. 2). Wundt, Grundriss, 1896, p. 221: “When an evident struggle between opposed motives precedes an action, we name the act of will an act of choice, and the process which precedes it, a process of choice.”

Reviewing the above, one feels constrained to believe that our present-day psychological achievements in the department of the Will are far from satisfactory. The most prevalent notion seems to be that the idea of a movement fatally brings on the movement, if there is no obstacle in the way; that given the unopposed idea, the action follows. James Mill above seems to have recognised the fact that action only tends to follow ideas of action under special circumstances, namely when the need flows along muscular channels. The illustrations to be found in Bain, Carpenter, and others, are not typical. It must be clear that as far as I am a visual, there is in me no tendency to write the letters I imagine; only as a motile will there be such a tendency. Yet even here the nature of the stimulus or need determines whether and to what extent there shall be mimic or real movements. Finally, an idea of some change may exist in perfection, while no other opposing idea is traceable, and yet no action need ensue. [Text.]

155.—Uniqueness in Willing.

If the will were unique, the volitional problems we are here concerned with would be unique also. On the one side, the will, like a freely moving body, would appear to us dissociated from surrounding objects; on the other, we should encounter its unmistakable effects. This is not so in reality.

There are degrees of willing as there are degrees of feeling. We hint that we intend to do a certain thing, or we dwell repeatedly or continuously on the intended act. We also know that often nothing but strenuous and reiterated willing enables us to carry out a design, while events have taught us that we must often lose ourselves in an aim, if we are to compass it. Thus the more we possess the power of identifying our whole bent for the time being with what we desire to realise, the more likely is it that we shall be successful. If, however, we cannot collect or concentrate our thoughts,—if they disperse as soon as they meet,—we may as well not will, for assuredly we shall be disappointed. A man, for instance, habitually dismisses thoughts of duty until no yearning, however genuine, is competent to raise them for more than a moment. Here there may be keen willing with little effect to correspond. The simple act of willing is not sufficient: we must will continuously, repeatedly and ardently. [Observe and describe such experimental happenings.] On the theory which represents the will to be a unique capacity, this is embarrassing. At what point shall we be said genuinely to will? How long and how often must we dwell on a task which we wish to perform? What is to be the extent of the concentration of our forces? The lessons we have learnt, supply answers to these questions: a host of factors determine the will. Perhaps we
are constitutionally weak or strong; perhaps education has lowered or raised the will-value; or perhaps circumstances have encouraged either ill-directed or well-directed activity. The will or the insistence will be strenuous in agreement with the stage of neural development.

As with strenuousness, so with purity. Theoretically, on the spiritualistic hypothesis, the presence of the will should be obvious; but in practice, the contrary is true. We find there no harmonious assertion of self, no evident feeling to which we can point as representing the will. Owing to the organised nature of human activity such a thing is impossible. The strength and purity vary indefinitely: we can imagine a firmer self-assertion and a deeper conviction, and we can imagine a laxer determination and a shallower devotion.* Unless our analyses are fundamentally erroneous, this could not be otherwise, for both the self-assertion and the feeling are organised. Hasty observers choose indeed pronounced examples; but even these examples yield nothing but vague feelings which are freely misinterpreted.

A distinct appreciation of what constitutes the volitional feelings has not tempted us to regard the will as a special and unique faculty. When we consider clearness of aim, we reach the same conclusion. At best, the clearest aim, like a changing cloud, offers but an imperfect outline [is that so with you? test it], and must be thought of organically. Let my aim be to hit the wicket with the cricket ball. Owing to the organisation of thought, I but re-develop what is essential. My turn comes to bowl. I step a few paces backwards, and moving forwards, I let the ball go in the required direction and in the customary way. To have in view the whole of the actions is impossible, for most of them are not yet disclosed by science, and the remainder which are known to us, are nearly all absent from the memory. The clothing of our aim in words does not help us, unless we assume that language has some magic power. Must I clearly image what is exactly conveyed by the words "hit," "wicket" and "cricket ball"? Is my notion of these words not organised? Or what do I picture when I employ them? It is, therefore, plain that whether we are dealing with organised feelings solely, or whether we think of our object in words, or pictorially, the aim must still be organically conceived. Language assists us in conveying information to others by means of hints rather than in formulating concrete aims. To identify the will, therefore, with the presence of an aim is to leave the issue untouched. Let any one who does not play cricket, aim at "hitting the wicket with the cricket ball." Would his notion of what he was attempting be clearer than that of the cricketer spoken of who can accomplish it? Indeed, if we assume that the non-player draws on no organised reserves, the whole aim becomes meaningless. No fine distinction can be made between activities, and a

* "Those lines that I before have writ do lie,
   Even those that said I could not love you dearer;
   Yet then my judgment knew no reason why
   My most full flame should afterwards burn clearer."

Shakespeare, Sonnet 115.
non-organised notion is, therefore, impossible. The expert visualiser imagines the wicket down; the audile hears the ball whizzing; the wordspinner constructs a neat sentence; but these things are not of the substance. Need-stimulated and organised reaction alone account for the intelligent act.

See an analysis of cricket from the psychological standpoint in Sully, *Human Mind*, 1892, ii, pp. 290-10. Stout (*Psychology*, 1896, i, p. 167) says: "It belongs to the essence of will not merely to be directed towards an end, but ideally to anticipate this end, and consciously aim at it." My contention is that, in the sense that I have defined it above, all action is of such a character, and that vividness of imagination is no guide to the presence of will.

We have noticed in our experiments that volitions are possible only within the limits of organised reaction. Strictly speaking, we identify the willing with the emergence and pushfulness of a need. If the want is easily satisfied, as in playing a well known air, the fingers glide nimbly and intelligently across the keys. When we willed the tune, we did not will every movement connected therewith, for there was no necessity for that. When, however, we were attempting to play the air for the first time, each step had to be willed and re-developed in the fashion already described. In fact, neither general nor special volitions exist for psychology, except in the organised manner indicated.

It used to be held that in moving parts of the body we could feel the energy that we were putting forth. These feelings were spoken of as innervation feelings. Gradually, however, the opinion became prevalent that these so-called innervation feelings, instead of being central feelings, were the feelings which resulted from the muscular movements themselves, that is to say, that they were afferent and not central; they followed the action instead of preceding it. The controversy has now reached the stage of compromise. Observation and experiment with young children and adults have shown that movements never before made cannot be willed, e.g., a little girl of fifteen months, ineffectively tries to imitate a series of sounds or movements which I make. It is, therefore, plausibly contended that the motor feelings which developed on making a certain movement for the first time,—the kinesthetic equivalents,—are re-developed whenever we will some movement, and that these equivalents correspond to the feeling of innervation and precede the muscular sensations due to the act. On this theory, the immediate antecedent of the action would not be and could not be a visual or audile image, but a re-developed muscular feeling. It remains now to be seen whether such feelings are traceable, or whether there are not other factors which have to be considered. It seems to me unlikely that these equivalents should invariably precede muscular activity.

156.—Voluntary, Non-voluntary and Involuntary Activity.

It is customary to divide actions into conscious and sub-conscious, or habitual and reflective. We have seen, however, that this difference cannot be upheld. The subtle thinker, drawing out a fine thread of thought, exemplifies as much organised reaction as the professional who for the hundredth time accompanies a sentimental song. Actions must, therefore, be classed as habitual or, as I prefer to name them, organised; but if this be so, what becomes of the distinction between voluntary and non-voluntary? The answer is that either all actions belong to the one group
or to the other. If the term voluntary is taken absolutely, then either we deliberately will every single motion or idea, or we never deliberately will at all. There is no halting between these two views.

Is, then, every action voluntary? If so, what is meant by voluntary? Absent-mindedly I look into my plate, choose a plump cherry, pick it up, and eat it. [Describe such an instance fully.] Is this a voluntary act? All the while I have been thinking about the peculiarities of the English climate, and not a word has escaped me about the fruit. Having eaten cherries and other fruits many times previously, there is no need to reflect. Suppose I had stopped and said, "my aim is to eat a cherry;" how far would that have altered the situation? We should still, I hold, be facing an organised reaction, only one of a slightly different complexion. It is by virtue of organised thought that such a sentence comes into being at all (sec. 215). For practical purposes we may assert a difference between deliberate and non-deliberate willing; but only for those purposes. Theoretically both classes of willing must be regarded as one. A need initiated and determined both courses of action.

James (Psychology, 1890, ii, pp. 522-3) says: "I sit at table after dinner and find myself from time to time taking nuts or raisins out of the dish and eating them. My dinner properly is over, and in the heat of the conversation I am hardly aware of what I do, but the perception of the fruit and the fleeting notion that I may eat it seem fatally to bring the act about. There is certainly no express fiat here." According to the view in the text there is purely a question of degree between James' "fleeting notion" and his "express fiat."

If we examine the reason why persons will as they do, we detect further proof of the truth of our contention. [Add, if possible to the following list, and expand the text.] (1) The first group of needs we have named Perennial. Let us illustrate this class. I am hungry, and decide to take some food; I deliberately make arrangements accordingly. Perennial needs are thus the spring of much of our activity. A large portion of our time is spent in procuring the means to their satisfaction. Our acts are determined by certain definite functional tendencies. (2) Periodic needs form the second group. The child is bent on playing with the sand; the youth dreams of fair women; the man schemes how to carry through some enterprise; and he who is bowed down with age delights in calling up the past. These various stages of man's life have little sympathy with each other. What should we think of any two of these classes exchanging parts, the youth fond of a toy, and the child of three years of age stirred by the thought of a fair face? The physical cycle which constitutes our existence from birth to ripeness and decay is accompanied, as we should expect, by a psychic cycle, and most of our willing is directed towards doing justice to the changing needs of our nature. It is not by accident that the child loves play, the youth thinks of the future, the man revels in the present, and the aged in the past. Their physical development prescribes or indicates the paths which they so readily find to their taste. The functional tendencies are shadowed by a retinue of feelings, interpreted as
desires, which serve the great purposes of life. (3) Personal needs are such as specially characterise the individual. One person has nerves of steel; another is hyper-sensitive: the former is boisterous, daring, fond of adventure; the latter shrinks from human contact, loves quietude, and breaks down speedily. Again, one man has an excellent ear for music, while another entirely lacks the musical sense; the former revels in things which the other does not appreciate at all. Once more, one man has a powerful intellect and delights in untiring stubborn knots, while the other, feeble intellectually, avoids everything which presents intellectual difficulties. So also differences of sex form a dividing line. Individual peculiarities account in this manner for another portion of what we detest or what we rejoice in. (4) Take, again, Peculiar needs. Civilised society is broken up into layers, and to these layers correspond certain needs. Let us watch for a day a costermonger, an individual belonging to the middle class, and a man of wealth and culture, and striking contrasts will be noticeable which cannot be accounted for by individual aptitudes. As we shall see in ch. 9, the social pressure of any section of society is so great and constant, and men are so elastic in their constitution, that the average individual bears the impress of his class. Accordingly, the three fundamental needs will be interpreted by a class-code and by environmental influences generally, and hence the desires of any person must be considered in that special light. (5) Political needs, or needs of space and time, form the fifth class. The ways of a nation change with the times. An average Englishman of to-day shows, therefore, peculiarities of his own when compared with one who lived eight hundred years ago. In the same manner, race, climate, soil, and other circumstances determine our actions or modify the will.

The above, including Passing needs, are the forces which move us, determine our conduct, and produce the strange panorama of human life.*

Strenuous willing is not necessarily connected with a condition of awareness or deliberation, and hence when we are engrossed in our daily occupation and when we seem furthest removed from a state of deliberation, it is no uncommon event for others to notice how we pause, reflect, stare and knit our brows. There are indeed so many stages in willing that it is impossible to separate strenuous activity from highly organised activity by the intervention of a deliberative act. [*Illustrate this experimentally.] On the contrary, deliberate action is often extremely easy, while some classes of routine work, such as that of the ledger clerk, are exhausting.

When an activity has become more than usually organised, we not seldom observe a curious freak: we do that which we are anxious not to do. We have, we may suppose, come to consider a certain line of thought as fraught with danger. We decide not to pursue it, since it imperils our honour and our peace. Yet, in spite of this, on account of organised reaction, the thoughts present themselves again and again. We will deliberately that which we deliberately willed not to will, and on the ground of

* On needs, see Paulhan, L'Activité Mentale, 1889, pp. 199-209.
organised reaction this is what we expect, contradictory needs producing contradictory thoughts. In this way, many men live to a large extent a double life: they profess devotion to an ideal, and act in opposition to its dictates. With them the better part is organically the weaker. On the other hand, the better part of us may be triumphant in action, while fierce struggles still proceed within. Deliberateness is not necessarily connected with one all-powerful notion; a jungle-full of beasts may dwell in us and each rule in its turn.

This brings us to involuntary activity. We often speak of doing things involuntarily. A child, for instance, has to choose one fine morning between going to school and severe punishment. He agrees to the former, and marches to school "against his will." Had he, however, been left to decide for himself, he would have selected the meadows. It is obvious, nevertheless, that the child has willed to join his schoolfellows, for no one carried him to school, and yet he was not absent. He distinctly decided that he would be at his desk, and went accordingly. Hence, after all, he did not go "against his will." What we mean is that, like a man who "forces" himself to act rightly, he went because of extraneous pressure, and not because he relished the notion of school. He "willed" the action as much as he would have "willed" the game among the sweet-scented hay. Thus, physical force apart, there is no involuntary activity. Only when we are taken along bodily can we be said to have moved without "willing."

In the Introduction (sec. 10) I offered the following definition of psychology: Psychology treats of the nature and satisfaction of those distinctive needs which are connected with the central nervous system, and this it treats of in systematic conjunction with the systems of sights, sounds, smells, etc., which are developing concurrently, i.e., psychology treats of the needs which arise out of the relations of the various systems in the organism, and out of the relation of that organism to its environment." In other words, psychology is the science of central needs. The question now presents itself as to what is exactly meant by needs and central needs. Here is the most precise explanation I can offer.

Some of the functions of the human organism are delegated to special systems. Thus the heart, the lungs; the stomach, the kidneys, the bowels, the secreting glands, play each an essential and separate part in the life of the body. These systems, by the nature of their structure, have each assigned to them a particular task. This is evident when we compare such systems as the stomach, the heart and the lungs, and observe how widely they differ from one another. Each of them is primarily of an active nature. The stomach digests food, the heart propels the blood, the lungs look to the air supply, and when the functions proper to them are endangered, they cause widespread disorders. These systems are of an unstable character, and freely respond to certain stimuli. When, for instance, the stomach is filled, it readily and in its own manner elaborates the food which is carried to it. For this purpose it possesses a complex mechanism which is itself a product of natural selection, slightly transformed by its environment. From the standpoint of its normal functioning, we speak then of alimentary needs; and these would include the needs of its smallest portions. These needs stimulate the alimentary system; they are functional tendencies. However, as we are aware, the stomach has no independent existence. It supplies other systems, and is supported by them. Its life is a social life, the total organism being the body corporal. The stomach, for example, cannot procure its own food. That is obtained by other systems. Thus absence of food initiates a set of processes, mediated by nerves and muscles, which end in satisfying the stomach. The central nervous mechanism is the great mediating system. It harmonises the various
functions; it elaborates methods of defence and offence as against the environment sur-
rounding the body; and it stimulates various systems, the end of the stimulation being
the intelligent locomotion of the body and its parts. The structure of the central nervous
mechanism, like that of the stomach, is an outcome of the ages, and only secondarily
transformed by environmental influences. It is a part of the body of which it forms an
integral portion. It is influenced by other systems, and influences them in its turn.
When I speak, therefore, of central needs, I mean the functional tendencies inherent
in the central system under the particular conditions of any moment, and I do not
mean that we are necessarily conscious of those tendencies or their
satisfaction. Thus the empty stomach affects the central mechanism, and sets it
going, the active tendency forming the central need, and the effectiveness of its structure
determining the particular lines of action.

We have so far described what we mean by a need and a central need. What, how-
ever, are the precise features of needs of which the psychologist must take account?
Speaking quite strictly, it is probable that no delimitation is possible. However, if we
abandon this extreme position, we reach the following result. A complete psychology
would, for instance, tell us what is the effect of an empty stomach on the nervous system
and proceed to enumerate the physiological changes which supervene until the requisite
food reaches the stomach. Some of these changes would be represented by feelings, sen-
sations and ideas; but the overwhelming majority of them would not be shadowed by
any feelings which were directly observable. Thus one department of psychology would
trace the physiological processes connected with central needs, while another would deal
with the accompanying facts of feeling.

Psychology treats accordingly of intelligent activity, and is not in any way bound to
those non-bodily aspects which mark that kind of activity. Nevertheless, in the present
state of knowledge, it is our duty to examine minutely the constitution of the unexhausted
primary and secondary worlds, in order to obtain hints concerning the more enlightening
neural facts. On the physical side, we can at present only make use of data of a general
nature such as are the common property of physiologists and physicists. The more
intimate neural processes we will not even guess at, since that would be following in the
wake of those who go beyond "the fringe which borders our knowledge." For ultimate
and measurable psychological facts we must look to future developments of the science.

A need might be defined as a condition where there is absence of equilibration, as in a
curled and moistened string, or a descending rivulet faced by a stone, or a tissue which is
breaking up, or a feeling which persists until certain changes have taken place (sec. 250).
In the animal body the nature of this condition and the mode of its removal are chiefly
controlled by hereditary tendencies. A need thus defined implies the presence of a
tendency; it does not necessarily imply our awareness of that tendency.

157.—Depreciating and Appreciating the Will-Value.

All activity is the outcome of organised growth, and the way in which
systems develop is, therefore, determined by the manner of their previous
development. We cannot, accordingly, always react as the fancy of
the moment suggests, and sudden reform, except in minutiae, is, consequently,
out of the question (sec. 60). Let us consider a few of the notions which
favour a low will-value.

Some people hesitate when they ought to act with decision. Is it wrong
to do this or that? they ask, and then they inconclusively debate the pros
and cons. In this manner, whenever a point arises which requires to be
settled, it is left undecided because of their pendulum-like incapacity to
bring an argument to a conclusion. At first, these mute discussions are
merely a plausible pretext for following their own bent. As time goes on,
an irresistible inclination develops, until at last these men find that they have acquired an objectionable habit which it is beyond their power to reform, though their whole individuality is at stake. Others choose the line of least resistance by pretending that they cannot decide between rival claims. "You say so-and-so, some one else says something different; one is as likely to be in the right as the other." They, therefore, cease to judge any case on its merits. "Perhaps after all, this course which looks desperately ugly, may be the right one," reasons another set of persons. "Considering the circumstances, I am bound to do it," argues a fourth class of individuals. When such hesitancy has become the ruling trend, pertinent judgments become rare. When a duty is in question, such men persuade themselves that there is no immediate necessity for consideration. When strenuous thinking is required, they feel convinced that the subject is unmanageable. Resolve occasionally as they may, such persons lose all intelligent control over themselves. Their will becomes a cypher. They are governed by irrational organised inclinations (sec. 146).

Many persons are unimaginative. They are not aware of the drift of what they are doing, and whatever course of action suggests itself, is, therefore, carried out unhesitatingly. Nor do they look before they leap. When anything new is to be attempted, they do not feel equal to it, and whatever they have been accustomed to, they consider to be right. Under such unfavourable circumstances the organism is not trained to sustained and subtle efforts, and is, in consequence, incapable of them.

Unpleasant issues are not attractive to face, and hence we soon acquire the capacity of dismissing every uncongenial topic. In the case of what is vitally objectionable, such a power is of immense advantage and is normally exercised by all men. When, however, every difficulty is thus evaded, the will-value dwindles almost to nothing. Deprived of vigorous exercise, new notions lack every vestige of control over old ones. We gradually come to do only what we are bound to do, and our character deteriorates completely. When this enervating attitude is general and continues for a considerable time, there is no moral hope for the afflicted invalid.

Passion and desire possess to a large extent the power just referred to. They are, when ignoble, the master-forces which mutilate character. When under their influence, men, instead of judging of an action dispassionately, lose the sense of proportion; they magnify trifles, and reduce oceans to pools. Under these conditions unlawful desires wear the white garb of innocence, while what is opposed to them looks black and ugly. Yet the game of life cannot be successfully played in this fashion, for only large aims, fearlessly conceived, can prevent disaster. Impulses, therefore, when unrestrained by, or not representing, general considerations, depreciate the will-currency; and hence desires, when they come to rule the actions of civilised beings independently of a comprehensive aim, are degrading and debasing. What is done once or twice is but a feeble precedent which we need not follow; but the wise or foolish suggestion which is repeatedly acted upon becomes a compelling power which cares for neither Yea nor Nay.
The unproductive treadmill does not inspire the prisoner with love for labour, and, similarly, all unsuccessful efforts damp our ardour. Unless action, therefore, be intelligently guided, we are sure to feel our tasks weigh heavily upon us, even when we are not incapable of performing them. Where a thing, then, is easily accomplished, objections are, as a matter of fact, seldom raised. Other things being equal, let men be trained to readily grasp and solve problems of a practical or a theoretical character, and they will not be likely to ignore them or to misinterpret them. Training is requisite in everything. Only experts in reading riddles enjoy solving them.

In training regard must be paid to the physical organism, for otherwise there will be a lack of completeness in our attempted explanation of the facts of life. To illustrate this, let us suppose that I am trying to discover what moved me to go out motoring yesterday in the rain. I spend an hour over the problem, but about fifty minutes out of the sixty are wasted. Scores of things I determine to think of my subject; but in vain. [Does this ever happen to you?] The plain fact is that my volitions are not always followed by the act to which they refer. Now if we probe this problem deeper, we come to the conclusion that there is no reason, apart from what the brain teaches us, why volitions should ever be connected with satisfactory results, or why they should not be altogether ineffectual. On the same grounds, except for the fact of excitement, it becomes inexplicable that I should recur so often to the subject. Furthermore, each resolve arises, not spontaneously, but as an item in an organised series.

I have so far dwelt on certain types of conduct which deprecate the will-currency. Little need be said in this place as to the methods of appreciating that currency. The question being an organic one, it follows that exhortation, persuasion and reproof must normally act as irritants alone; for particular actions are most generally a sign of particular habits. The only rational course is to begin training early, continue it uninterruptedly and intelligently for many years, and provide it with a broad foundation and with reasonable opportunities. The educator's first object, therefore, must be to raise the normal tone of daily thought and action to a higher level by instilling into men a passion for the right and the true.

The training of the will should, accordingly, have for its object [notice this sentence very carefully] our doing what is right and reasonable, or our searching for the truth, unhesitatingly, intelligently, thoroughly, cheerfully and zealously. When we once come to act from the broadest general principles, most of our difficulties vanish. It is only when we try to combat every ill with a separate remedy that we morally sicken and eventually succumb.*

What is right, what is true and what is beautiful, should each be established independently, and be only compared afterwards. The love of right, truth and beauty, should be uninfluenced by the others if an ethical, a scientific or an aesthetic decision is to be arrived at. Many, if not most, erroneous conclusions are due to the neglect of this rule.

158.—Deliberation.

Deliberation is to action in general what formal reasoning or interconnecting is to need-determined thought in particular. As in the latter

* See Carpenter, Mental Physiology, 1875, ch. 9.
instance we do not indulge in syllogisms whenever some issue is to be cleared up (ch. 4), so in the former we deliberate seldom and as to few things. Organised reaction determines that of itself. The necessity of working out afresh every problem which meets us scores of times within a single day would indicate a serious flaw in the neural economy. Most questions, too, as we have seen throughout ch. 4, are so intimately related to others that the freshest of them are, on the whole, familiar. The consequence is that lengthy deliberation is only casually required. It is, therefore, a matter of course that willing proceeds generally without recourse to deliberation.

Let us, however, analyse a case of deliberateness, since every action is not performed off-hand. [Analyse a similar set of facts.] It promises to be a glorious day. I have to attend a wearisome lecture on anatomy in the afternoon, and for that reason I must read up a portion of the subject. I look out of the window and across the lawn. How nice it would be, I say to myself, to spend the day watching the cricket match at Lord's! Just the day for it! It is not often that I go there either! How would it be if I went? But then what about the lecture and my preparatory work? I am none too forward in my subject. Still, one day won't make much difference. Ah! but one day cut off here, another there, a third somewhere else, make serious inroads on my time. No, I am taking a too gloomy view of my backwardness. Am I, though? How can I pass my examination satisfactorily unless I cease to neglect my work? No, I am too conscientious. A day of rest will lend me the strength of a giant. It is best to break the routine. I shall, therefore, dismiss work for today, and go to Lord's.

A war of words does not always accompany the act of deliberation, and for this reason in a single minute's thought we may be occupied several times with puzzling matters. The yea's and the nay's, as feelings, displace each other so quickly that, as in the case of a vibrating chord, exact observation of the process becomes difficult. On other occasions, fitful feelings, blurred images and disconnected words stand for the act of deliberation. Again, the faintest momentary feeling of hesitation which is followed by a calm, is already typical of the state we are describing. [Observe such instances.] When the timid dog alternately attempts to slip down the high wall and then withdraws; when the fowl is as much attracted by the grain as it is repelled by the horse's hoofs; when an orang-outang wonders whether it was that particular part of the wall against which he struck when 'swinging; or when a pig on a country road is measuring our good or evil intentions; in each of these instances we deal with an attitude similar to the one we are analysing. [Carefully observe the ways of animals.] The presence of long strings of well constructed sentences does not assist, since they equally require an explanation.

In pronounced deliberation we propound a question to which we seek a satisfactory reply, and the topical interest in the reply secures a stream of but's and if's succeeding each other. This class of thought is one agreeing
in every essential with that of doubt, as analysed in sec. 99b. [Is it?]
Thus, if we represent one type of man, we eternally hesitate and deliberate; if another, deliberation is rare. Similarly with the method pursued: it is sincere and straightforward, or a mere pretext for arbitrary action—judge, jury, witnesses and defendant being bribed. Again, an ideal intellect at once sees the path clear before him, while many an ordinary man blunders along heavily.* Caution, fear, desire, each stimulate us to review a situation at greater or less length.

Often the debate is prolonged till we feel compelled to adjourn it. There is then no resolve or decision. When the argument in Lecture v. Lord’s comes to a point where, everybody being bribed, Lord’s is left unanswered, I clinch the matter and resolve; that is to say, the last decision stands unopposed, and I make my arrangements accordingly. Usually we let a little time expire for any startling re-opening of the case; but when that period has passed without any fresh doubts arising, we sum up the subject in a final judgment which represents the need that has triumphed for the time being. This summing-up is the resolve or decision. The psychological development of the trial we leave unconsidered, since it points to the symptoms already discussed in the analysis of doubt (sec. 99b). The whole process is only conceivable as being organised. Apart from such a conception the above dialogue is inexplicable.

For some illustrations of the deliberative process, see, among others, Bain, Emotions and the Will, 1875, pp. 410-1; Chmielowsky, Entstehung des Willens, 1874, p. 69, who says that “deliberation and resolve have for their necessary antecedent the possibility of movement and its inhibition, which possibility is derived from the accumulated experience of the child”; James, Psychology, 1890, ii, pp. 528-30; Paulhan, L’Activité Mentale; 1889, pp. 171-3; and Sully, Human Mind, 1892, ii, pp. 253-5.

159.—DESIRE.

To give birth to an act some psychologists require a midwife with many and wondrous instruments, and we are told accordingly that what we will, must have been believed in and desired previously. This elaborate but fictitious machinery was built up in a natural manner; for, bent on a psychological explanation of what is immediately given, men eagerly inquired into origins. In the outer world they had always observed that events were conditioned; so they hunted for psychic conditions. An act without any preliminaries in the way of willing, deliberating, deciding or desiring, seemed to them as monstrous as a physical substance which refused to be classified. Noticing, then, on certain exceptional occasions, that varying acts were preceded by certain classes of acts, they concluded that, known or unknown, these latter were ever present. To account for palpable contradictions, it was assumed that acts tended to become habitual, in which

* Schneider (Der menschliche Wille, 1882, p. 290) well says that “ceaseless choosing and deliberating is not the mark of the man who is thoroughly cultured, but rather a characteristic of him who is ignorant and shifty. He who is sane, . . . always knows his business.”
state they were the result of mechanical processes. *Primitive knowledge thus lays stress on prominent features rather than on general facts.* From the point of view that all action is organically determined, such invariable preliminaries become meaningless. Accordingly we have found that not psychic preambles but primary and secondary complications throw light on human activities, and, for this reason, our analyses dispense with every kind of machinery. Normally an act is just an act and no more. It requires no footmen to usher it in, and no host to utter words of welcome. Being an expression of a need, it is its own explanation and justification. We decide, then, that a desire does not normally precede an act.

It is worth while to distinguish between will and desire.* In formal unopposed willing there appears to be an announcement of action; whereas in formal opposed desire there is a favourable contemplation of a course of action. The former points to action, the latter to an attitude. The one is normally realised, the other remains frequently unrealised. Where there is, however, in connection with desires a co-existing tendency to action, there we find that a volition is accompanying the desire.  [Experimentally study desires.]  

Bain, *Emotions and the Will,* 1875, p. 423: "Desire is that phase of volition where there is a motive, but not ability to act upon it." Hodgson, *Theory of Practice,* 1870, i, p. 382: "Desire is nothing else... than an increase in the vividness of specific pleasures or interests in contrast to the habitual feelings, or to the feelings which are vivid and painful in antagonism to them." James Mill, *Analysis,* 1869, ii, p. 327: "The simple idea of a pleasurable or painful sensation, is a desire or an aversion." Spencer, *Psychology,* 1890, i, p. 126: "Desires are ideal feelings that arise when the real feelings to which they correspond have not been experienced for some time.” Sully, *Human Mind,* 1892, ii, p. 208: "A motive is... a desire viewed in its relation to a particular represented action, to the carrying out of which it urges or prompts.”

I say to myself that I do not want to look at certain figures while about to look at others near by; yet I do so. Here there are two volitions or two needs seeking satisfaction, and not two desires merely. Thus, wherever an objectionable course is very easy it will generally be followed on the principle that easy actions tend to be realised. Hence the very thought of an alternative has a tendency to support that alternative, a desire being readily followed by a volition. Fascination offers another illustration of the above. An express train rushing by us, a precipice, or a danger generally, make us think of the possible absence of our equilibrium, and that very thought, therefore, disturbs the physiological balance.

160.—Neural Disturbances.

Why do we pursue, or abstain from pursuing, a certain course? Because, it is often argued, that course is pleasurable, painful or indifferent. But to pursue a course which is indifferent to us is plainly absurd, the argument proceeds; therefore, either pleasure or pain determines every action. This pleasure-pain theory held its ground in reflective psychology because it offered a uniform and comprehensive explanation. To the

* "If no external action follows upon the internal, how can I be certain that I have really willed?... When this happens, can that resolve be said to be anything more than a wish?” (Höffding, *Psychology,* 1891, pp. 340-1).
question why a person did one thing rather than another, the reply was that the greater pleasure led to the chosen line of conduct. To the question why a man did anything at all, the answer was that pleasure or the dread of pain made man act as he did. In this manner a neat system of uniformly acting forces was provided, a system which was to account for human activities. Pleasure and pain were looked upon as feelings, and feelings were regarded as originators of change. The more pleasure the more motive power, the less pleasure the less motive power. As a plausible theory the pleasure-pain view was complete, and left nothing unaccounted for. Unfortunately, the facts do not support it. In our chapter on the subject (ch. 6), we found (1) that all systems belong to one class, and that hence there is no possibility of distinguishing effective feelings from non-effective ones, while there is no room left for unanalysable subjective states corresponding to the feelings. The power residing in special pleasure-pain feelings thus becomes more than problematical; for where is the line to be drawn between a musical note and a pleasurable feeling, if we except abstract interpretation? (2) We arrived at the conclusion (sec. 138) that pleasure-pain does not reside in feelings at all. We traced it to a peculiar nervous condition, or to certain observed changes. We saw that pleasure, pain and indifference attach themselves easily to one and the same feeling; and that we cannot distinguish pleasure-giving from pain-giving feelings, except by recourse to a test which is not feeling. Hence we cannot admit that pleasure and pain, regarded as feelings, produce changes. (3) We observed that marked feelings do not, as a rule, accompany bodily activity, and that their intensity or aggressiveness, when present, is no trustworthy guide to the existence of pleasure-pain. In the face of such sweeping criticisms the pleasure-pain theory must be abandoned. It lacks even plausibility when confronted with the facts. (4) Lastly, we learnt that the theory of need-stimulated processes makes the pleasure-pain theory superfluous, and that at the same time the former theory assumes no factors beyond those with which we are familiar.

The pleasure-pain theory which we are discussing boasts of no mere metaphysical basis, for it is derived from common observation. Taking the words pleasure and pain in their ordinary acceptation, it must be admitted that we are frequently being disturbed, i.e., violently attracted or repelled. Cold is normally shunned, warmth is normally welcomed; one kind of food we usually like, another we do not; we enjoy laughter, and we flee sorrow. Psychologists accordingly generalised from passing impressions. Seeing that certain feelings of a certain warmth went with semi-opposed disturbances—pleasures, and another set with opposed disturbances—pains, they argued that every action belongs to either one or the other of these two classes.

It was easy to overlook the facts which discredited the conclusion. To illustrate: for weeks together I pass a certain spot at a particular time. A carrier's cart regularly comes along at the same time, so I believe, from the opposite direction. Do I meet that cart every day? When I see it, I
think about it; when I do not see it, my thoughts are far away. Hence we easily conclude that a casually observed object is generally present. This is specially so as regards theoretical conclusions. The very fact of our being interested in a subject, makes it progressively easier for us to re-develop instances which prove our theory, and steadily more difficult to re-develop instances to the contrary. As men are usually unaware of this psychological tendency—a tendency useful in practical life,—the belief that we are on the right track grows apace, the swelling conviction itself aggravating the state of affairs. Unless we are specially able, specially trained, or can defeat the tendency by employing the principles enumerated in sec. 136, it is as difficult under these circumstances to see truly as when we look through glasses which distort objects. [Do you find this to be so?] Once we have fairly launched our theory, we are surprised at the mass of favourable evidence and the paucity of the contradictions. Were respect for direct observation (sec. 136) universal, it would be safe to state that not one out of a score of theories met with by the student would ever have ripened. Unreflective skipping, picking and choosing, are thus responsible for much wasted effort. Had the pleasure-pain theorist tested one day’s or one hour’s normal activity, instead of dwelling on facts strewn broadcast over the field of time, he would never have published his conclusions. Every philosophical system must, therefore, be tested by strict scientific rules. [Do you always apply this test?]

The tendency to misinterpret is contagious. The ordinary reader, following an exposition of any subject, rarely fails to be impressed with its validity. The facts suggested by what he reads are all of one type, and, as he proceeds, related facts present themselves readily while opposing facts elude him. Thus imperfect theories often impress whole generations of clear-headed thinkers. For this reason, too, style is of great importance, because of its power of “suggesting” favourable facts. Not even the fiercest opponents elude its wiles. An adversary’s skilful special pleading staggers us, and leaves us momentarily without a word of defence, though we are sure that the facts are on our side. It requires, in such a case, some little time before what is appropriate is re-developed, and then gradually, as after an eclipse, the obscured facts become visible. The same method gives us what our opponent neglected. It was easy, therefore, for the propounders of the pleasure-pain theory to make their plea appear irresistible.

In philosophical inquiries there has been no greater moulding power than the one commented upon above. To this alone we must trace the incredible fact that though writer after writer is mistakenly convinced that what he says amends what his predecessors have accomplished, yet every fresh writer, the present author included, equally believes in his heart that with him salvation has come appreciably nearer. We are dealing with a psychological trick which, in practice, it is far easier to recognise than to escape. This failing makes all men kin, of whatever clime or age or station they may be.

We must beware of the experimental fallacy. Let us suppose that I believe in the pleasure-pain theory. I want to see whether experiment or
observation confirms or refutes it. I select an apple, eat it, and think that it has a delicious taste. What am I entitled to conclude? That depends on how far I have illicitly introduced my theory. It is not uncommon for a person to enjoy a dish merely because, though he has forgotten it, he enjoyed a similar dish on some previous occasion, or for other reasons equally fallacious (sec. 126). An experiment will, therefore, be worthless when we slip into it a misleading factor; and this is readily done in such an instance as we are considering. In this way persons convince themselves that pleasure is a constant presence with them. The moment they observe themselves, they introduce what is not normally there. Nay more, convinced of the theory, they order their life accordingly, and really make pleasure play a far more important part than it would have done if speculative interests had been absent. Under these circumstances, only lines of conduct are pursued which, on the whole, yield pleasure. Of such adaptations, produced and fostered by self-deception, there are legions. Let it suffice to have drawn attention to an error which is likely to mislead all but the scientific on the one hand and the unimaginative on the other.

Again, it has been shown that willing, as a preliminary to action, is not seldom absent. That in itself settles the controversy as to pleasure-pain moving the will; for where there is no willing, there is no force needful to project us along the course. The theory is only conceivable when an aim, or a resolution, precedes the action. Where the action follows organically, the feeling as a force is out of place, for it has nothing to move.

An experimental disproof has been supplied in the previous chapter. The view which postulates pleasure-pain as a universal factor initiating all reactions must, then, be rejected as contrary to fact.

Bain, Emotions and the Will, 1875: “Either a pleasure or a pain, present or remote, must lurk in every situation that drives us into action” (p. 411). Again, “Place food before a bird in a cage, and at the same time open the cage and the window, and the choice between a repast and liberty represents the greatest pleasure” (p. 401). Boullier, Du Plaisir et de la Douleur, 1865, p. 122: “I see a thing and I desire it; I should not desire it without the pleasure which it causes me, or which I expect from it.” James, Psychology, 1890, ii, p. 553: “All the daily routine of life, our dressing and undressing, the coming and going from our work or carrying through of its various operations, is utterly without mental reference to pleasure and pain, except under rarely realised conditions. It is idio-motor action.” Here James, as is the common practice, overstates the simplicity of routine. Robertson, Psychology, 1896, p. 239: “Feeling in a case of willing, always supplies the motive power.” Sully, Human Mind, 1892, ii, p. 236: “Feeling supplies the spring or impelling force in conation.” Additional references on pleasure and pain are found in the preceding chapter.

161.—CHOICE FROM WEAKER MOTIVE.

We must discuss here a question which is often raised, and which may be illustrated by the following. [Describe similar happenings, experimentally induced.] In a room which I entered yesterday there were many chairs. I looked at them carelessly, and then sank into the most comfortable one and rested. Why did I not choose the most uncomfortable one? I
"chose" as I did, it may be said, because I was actuated by the love of case; I dismissed the thought of the one offering least comfort, because I disliked discomfort. The "pleasure" involved in the thought of the one, attracted me; the "displeasure" implied in the other, repelled me. Could anything, then, have made me choose the one which brought discomfort? Other things being equal, no. Now suppose, it is then argued, that a heavy penalty was attached to sitting in the easy chair, and a great reward for selecting the other. Then, the balance of pleasure and pain being shifted, we should naturally change our opinion.

Analysing the illustration, it is readily seen that organised reaction and not abstract motives were at work. Feelings, aims, resolves, desires, were absent, and, for this reason, the explanation given above proves inconclusive. We must nevertheless pursue the subject a little further. No penalty or reward is necessary to change the balance. I simply reverse my customary action, and I do so organically. If we are in an experimental mood, we may thus freely will to sit in any of the chairs without being disturbed, i.e., without pleasure or discomfort arising. This feelingless will-factor, at least to those who are not intimidated by passing will-o'-the-wisps, is an important consideration. Once the will is drilled to be its own "motive," and, to a large extent, the train of pleasures and pains lose their weird power (sec. 148). When rational needs suggest a reversal of policy or habits, we obey unhesitatingly. There is no necessity to weigh the quality and warmth of our feelings.

This last remark leads to another observation. Warmth of feeling, as such, is no guide to the strength of a motive. Suppose that for years we have been making statements guided by interest rather than by truth. In that case, to go on doing what we have practised so long, is as easy as is swimming to a fish. It requires no great effort. Nay, so ready are we to pervert statements that we do it without suspecting the fact. A time then comes when new notions suggest a different course. We passionately strive to overcome the vicious habit; again and again we inwardly protest, and yet do what we have sworn not to do. Here we have a conspicuous feeling in favour of the new course, and hardly any on the side of the old. It is as if we fought an invisible enemy whom we could not wound, but who could injure us. While, on the one side, there is warmth of feeling in the zeal for reform, there is, on the other, a fixed organised inclination (sec. 146). With many persons, accordingly, life presents a constant inner struggle; they never do what they wish, and they do what they do not desire. Warmth of feeling represents one of the antecedents when all other things are equal; but it is very seldom that they are so. Usually it is a case of deeply rooted activity battling with a fresh desire. If the stronger motive be that which is connected with the greater sensory mass, then it is not the stronger which always or generally prevails. And since this is so, the question of the strength of motives must be fought out in the realm of neural inclinations. We are not guided by feeling or by immediate motive, but by organised tendencies. Let the
“motive” be ever so pronounced, it still lacks meaning unless we assume an organised background. Ordinarily, however, as has been repeatedly pointed out, the old-fashioned motives do not exist. The fatal rays of the struggle for existence among systems evaporate them. We conclude, therefore, that (1) formal motives are seldom present; that (2) warmth or intensity of motive is no measure of strength; and that (3) we often freely change the balance between motives without introducing any disturbance or pleasure-pain factor. [Have you tested these assertions?] The real motives are, of course, the needs or functional tendencies which were enumerated in sec. 156.

162.—Action from Special Motives.

I am asked whether I will take an apple or a pear. According to the motive theory what happens is this. An apple promises great pleasure; but a pear promises greater; so I take the pear. Or the contrary holds; then I choose the apple. Whenever we are offered an alternative, we are supposed to go through the above process. This theory, we see, is essentially atomic, the notion of organised thought being foreign to it. No one act, it is implicitly held, bears any but an abstract relation to any other act, while the mind substance is equally fresh to every impression. According to the view we are contending for, such atomism is untenable. Perhaps we simply take the apple or pear on which our eye happens to alight first; perhaps something particular about the fruit catches our fancy; or perhaps we pick up the nearest. Apart from accidental circumstances, custom usually decides the matter. Pleasure-pain, in the ordinary sense, is not always present.

An apple or a pear, as such, is a no-thing, and apart from organised acquisitions we should not even discern it by the sense of sight. For the same reason, its taste is not communicated to us by special revelation. The fruit has only a meaning for us in so far as it is one of a known class, and we can only feel towards it as we have felt towards its similars previously. If, no matter for what reason, I have habitually been attracted by its kind, I shall, other things being equal, be so now; if the contrary, I shall be repelled. In short, I shall take the apple primarily because I have taken apples before, and because of an organised inclination. The taste which now seemingly attracts me would, under other circumstances, appear loathsome or indifferent, while the more I lean towards it organically, the more unfailing shall I be in selecting it from other fruits. An object belongs to an order of objects, and this order is involved in a yet more comprehensive scheme. Anything, therefore, which a mother does or approves of is perhaps desirable to her children. Anything which has to do with the sea fascinates the sailor, though otherwise it would leave him indifferent. Anything to do with business arouses the trader’s interest. Anything to do with science makes the student of nature enthusiastic. In this way men commonly look upon things from one selected point. With
one man comfort, with the other studied interest, with the third ethical considerations, are the leading factors. In all happenings organised reaction is decisive, the apple or the pear by themselves determining nothing. If we are ascetics, the one as the other will leave us unaffected, and if we are lovers of fruit, we eagerly choose among them. The question is how their similars have appealed to us in the past.

Which am I to take, the apple or the pear? I pause. I weigh both classes of fruit in the scales of my predilections. I temporarily incline now towards the one, now towards the other. At last I deliberately choose one particular apple. In choice of a deliberate character, is it the quality of the object which decides, or is it the individual?

These two questions are each, according to circumstances, answered in the affirmative. The colour or size of apples influences our choice; or perhaps greediness is the motive. In the latter case we have a constant inclination which in a vast number of instances determines the variables—a mean passion uttering the last word. Such third parties are the rule, since the present reflects our past conduct. A man who is careful of his health, decides the issue on hygienic grounds; another for economic or ethical reasons. When it is a question of elaborate choice, our general being has most influence. The various needs are put in motion, and their nature sets the stamp upon the final resolution. The keenness, the fineness, and the comprehensiveness of our organised judgment, contribute to the result. (Sec. 96.)

With some persons, rational considerations tell most heavily [do they with you?], because they are jealous of the power of objects. Such men, however, do not introduce a factor of a new kind, for, psychologically, the meanest and the most exalted motive are of equal account, and in each process there is expressed a need and no more. In the same way the rationalist's attitude is the same when he determines that he will select arbitrarily, i.e., when he permits any passing circumstance rather than the usual one to settle the direction of his activity (sec. 152). If he has trained himself to ignore normal impulses, the result in itself forms one of those normal impulses, and the situation has, therefore, remained psychologically unchanged. We have seen in sec. 152 that arbitrary activity is like any other kind of activity. In fact, it is no more capricious to let an accident than to let a rule settle a dispute. It is possible, in some persons at least, so to train the impulses that no average object shall have more than a passing influence. In any case, it is inadmissible to assert that felt or prospective pleasure-pain is the normal and necessary determinant in human activity.

(On the subject of the last three sections, consult especially Bentham, Principles of Morals and Legislation, 1823, i, chs. 1 and 2; Gistock, A Student's Manual of Ethical Philosophy, 1889; Green, Prolegomena to Ethics, 1883, bk. 2, ch. 2, bk. 3, ch. 1, and Green, ch. 4; Hodder, The Adversaries of the Sceptic, 1901, ch. 9; Höfling, Ethik, prev.; Martinet, Types of Ethical Theory, 1889, part 2, bk. 2, chs. 1 and 2; John must bMill, Utilitarianism, 1863, ch. 2; Sidgwick, Methods of Ethics, 1893, who ex- by dealing with the subjects; and Leslie Stephen, Science of Ethics, 1882, chs.
Looking upon the nervous system as part of an organism, one can readily understand that to it is due the initiation of bodily activity. Its original constitution, its power of growth, its impressibility and irritability, and its environment, trace for us the necessary history of every human being. This conception of the process, if correct, must enable us, in the final issue, to explain everything, including those additional factors which newly gathered facts may point to.

How, then, on our assumption, are we to understand such a term as "I"? Evidently, in the same manner as a certain objective complex is spoken of as a ship or a daisy. The objective complex, on the physiological side, is expressed in this instance by what we may roughly call the brain or the central nervous system, and the word "I" must, therefore, be explicable in neural terms. In a ship the relation between the parts is mechanical, and hence they are, to a large extent, independent of one another. Not so with the daisy. There the parts are intimately connected, and what affects any portion of it often affects every other. The daisy is hence much more truly one than the ship; and the brain is, of course, comparable to the former rather than to the latter. A shock of pain or joy, or a blow, may put an end to the vitality of the neural organism, though the shock or blow has no direct physical effect on more than a limited area.

Suppose I am asked "Will you do this?" and I reply "Yes, I will do this." What do I mean here by "I"? If what I am asked to do is nothing out of the common, my answer comes unhesitatingly. There is a stirring and a consent of the organism, the consent being communicated verbally or by other signs. Organised reaction, we know, explains what happens; but what exactly interprets the word we are interested in? What does that stand for? We are aware that ordinarily we repeat without unfolding implications; yet here we ought to assume that we are doing so. To the word "I" we frequently attach hardly any meaning; often it is a name for a person; and, at its best, it embodies many characteristics. It is precisely as with any other object: we re-develop one or other of its aspects when we think of it. The word "I" refers no more to an essence beyond thought and action, than the words daisy or ship. It belongs to the same category. Thus when we use the pronominal "we" or "they," we loosely denote an assemblage of certain objects. Just as we say that the stone is cold, when but a portion of it is, so we constantly speak of ourselves as a whole when only this or that need is implied. Convenience permits apparently no other use of language.

When we say "I will do this," it is not necessarily implied that the

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**"The reason for mental unity . . . is to be found in the simple fact that the mind is the expression of an organism and that every organism implies co-ordination, a harmonious functioning of its various parts" (Paulhan; *L'Activité Mentale*, 1889, p. 413).**
whole of "me" or the total organism speaks; for usually only a small portion is involved. When ordinarily a certain need is aroused, then only what is required for its satisfaction is implicated in the "I," and that because the quantity of attention is limited, and because, therefore, the satisfying of one need often absorbs it. If we were to look from all possible sides at every demand made on us,—an impossible task,—we should never decide on anything. Thus the greater part of our nature lies low and says nothing when an appeal is made to any one fraction. Were we living as solitaries, words such as "I" might be dispensed with, though the organized nature of our being makes a general term reasonable. We could say "This shall be done," "The imagination has been active to-day," "The fact are tired," "The judgment was faulty," "That is satisfactory." We could readily class ourselves with the surrounding objects. Since, however, we live with others, some mark of distinction is desirable, and the use of "I" indicates no more than that. The phrase "I will" is an amplification of a usually limited organic consent or determination, and no more.

We sometimes assert that we perform an action against our will (sec. 156). Such an action is as much ours as any other action. We have no desire for it from one point of view; but desires from other points of view, compel us to act. To say that "I do not choose to act thus," is only a colloquial manner of stating such a fact. In a similar fashion we regard abnormal aspects of the self as if they were unrelated to us, e.g., when we are unable to control our thoughts.

Often, again, the "I" is identified with our ideal. The spirit says one thing; the flesh another. While we wish to think of some worthy aspect, a loathsome thought obtrudes itself. In such instances, it is allowable metaphorically to attach the first personal pronoun to what we consider rationally the higher; but only metaphorically, for otherwise the whole of psychology would be thrown into confusion. Psychologically there is nothing to distinguish the appetitive stimuli from the spiritual ones; or the recently acquired ideal from the deeply rooted objectionable dispositions. The war between desirable and undesirable needs, the constant struggle betwixt the lower and the higher, is a matter of indifference to the psychologist, qua psychologist; for he is only concerned to see whether what happens stands on the same plane as regards fact or not.

Psychologically, all needs are equal. An acquired and obstinate aptitude to act in opposition, for the purpose of asserting one's individuality,—one's independence of matter,—is the expression of a need on a level with others. The imagination may enthrone, and has thus enthroned, innumerable notions.*

Every object whatsoever is continually changed by its necessary interaction with its environment, and this is especially so with animal organisms of a high type. The more important adventures of such an organism modify it considerably, and fix it out with its specific individuality. When, therefore, we think of a fellow human being whom we know,

* The question of the "I" requires to be thoroughly re-examined. (See sec. 176a.)
we consider his physical appearance and the environment in which he is placed, and we take note of the peculiar way his thought flows and the particular things that most attract him. The manner of the development of secondary complications, especially of those which are most far-reaching and recur oftener, thus offers a full explanation of the development of an individuality. If, again, we wish to distinguish the "immaterial" from the "material" self, then we omit the peculiar exhausted complexes of touch, resistance and sight, called body, and think of what we have spoken of in this work as the "feelings," especially those connected with the stream of thought, e.g., combination feelings, emotions, etc. We also include the train of memories and the way in which these are most generally compounded to serve as a basis of new developments. As we shall see, however, in the next chapter, the so-called outer world is strictly one with the inner, and is built up gradually as is the so-called individual ego. Hence circumscribed differentiation alone distinguishes the various complexes of which our world consists.

Such phrases as "I see," "I feel," "I am conscious," should not mislead us. All they involve are complications: certain articulate sounds, certain combination feelings, and a certain history which accounts for the utterance of those words at that particular time. So when I say that I am conscious that I see a book before me, it is merely a case of observation of the book and observation that I observe two systems connectedly.

It has been said that psychology, unlike the physical sciences, is individualistic, and deals with the individual rather than with the universal. There are two answers to that. If by it be meant that psychology does not deal with facts true of all minds, then the statement is scarcely defensible; and if it be urged that it is indispensable in psychology to attach what happens to some some-thing, then the reply is that that is equally true in physics where we have to deal with particular masses as they exist. If it be still contended that physical science deals ultimately with atoms rather than with the fortunes of particular masses, then I claim that psychology ultimately constructs the total universe out of world-atoms, i.e., simplified touch feelings. It is only the backward state of our science which compels a more individualistic treatment than would otherwise be necessary. As the science advances, the whole psychological terminology is sure to be purged of its individualistic character. At worst, however, psychology should be classed among the biological sciences.

The problem of this section is fully discussed in ch. 8. The question of the self is dealt with, among others, by Bradley, _Appearance and Reality_, 1877; Dumont, _De la Sensibilité_, 1875, pp. 89-92; James, _Psychology_, 1890, ch. 10; Lipps, _Grundtatsachen_, 1883, ch. 19; Paulhan, _L'Activité Mentale_, 1889, p. 165; Sully, _Human Mind_, 1892, i, pp. 235, 264, 475-83, and ii, pp. 223-4; and Wundt, _Grundris_, 1896, p. 261.

164.—WILL AS ASSERTION.

Our interest in dramatic action is great. The impressive scenes of life engrave themselves sharply on our character—so much so that everything else is either ignored or interpreted by their light. The activity implied in imagination and that involved in common habits, are looked upon by us as if they lacked reality. Even the portions which make up a complicated act are only considered as results of one effort of will, because interest fastens on what is most striking. When the nature of action is thought of, a telling incident is re-developed and that stands for activity in general. For a like reason, the will has allotted to it a prominent position in primary and secondary processes. An imposing will, a capacity surpassing that of the average man, challenges our dramatic faculty. It appeals to the eye and to the stronger emotions. Yet, psychologically, there is no justification for placing the will on a pedestal and doing homage to it.
Not what is soul-stirring, but what is general, interests the man of science: and as, from a broad standpoint, willing is a casual event, it must be ranged with other events of a like nature.

Volition is a particular instance of assertion. Some one makes a statement in my presence, and appeals to me for support. I say, “Yes; it is true.” Such assertions as to reality must in the nature of things be rare, and, in truth, no one pretends that we endorse separately every proposition that we hear made. We might as well claim that when listening to an ordinary discourse, we study, from the point of view of historical grammar, every word and phrase. There is a time for saying Yea and a time for saying Nay; we are not constantly saying Yea and Nay, affirming and denying. What is true of assertions when truth is in question, holds good generally. “It is good,” “it is beautiful,” “it is clever,” “it is humorous,” “it is practical,” “it is real,” “it pleases me,” these belong to the same category. Ideally speaking, we might be asserting continuously; but as a matter of fact, verbal assertion is incidental and accidental. [Test this.] Every moment of our waking lives we are modified in some way; but we generally stop short of commenting upon the fact. Were it not so, every pebble, every tree, every blade of grass I see, would be followed by a little speech, as “I see a pebble” or “I see a blade of grass.” Now in “willing” there is present a need which is waiting for an opportunity to realise itself. Willing is hence a kind of self-assertion. Just as a dog is determined to obtain a certain bone, and keep it when once procured, so a human being shows determination and expresses it verbally by such phrases as “I will.” In such instances there is present a need which will realise itself when occasion offers, and our “I will” merely expresses that fact prophetically. Perhaps a time is approaching when strong wills shall be common; and then “willing,” like anything which abounds, is certain to be considered as of little importance, while keen insight may perhaps occupy its place. Science, therefore, must not be swayed by practical and temporal considerations; for it belongs to eternity rather than to particular ages and aptitudes. The incidental “I will act,” must be classed with the incidental “I will see” or “I will appreciate”; or with “I shall act,” “I shall see,” “I shall appreciate.”

The fictitious machinery which is brought forward to initiate a “willed” act may be introduced to explain all forms of assertion. Thus, how comes it that I see a tree? It is, it may be argued, because it gives me pleasure; because the strongest motive has prevailed; because I wished to see it. Why do I consider the inkstand before me real? Because pleasure bids me to; because I am moved to it by such and such considerations. Deliberation, hesitancy, weighing, doubting, believing, resolving, deciding, acting, each find their fit place in every kind of human event, and all are on an equality. If the need is of one class, the peculiar question is, What shall I think? or, What shall the verdict be? rather than, What shall I do? We cannot, therefore, be too much on our guard against the
abuse of scientific progress by practical interests. A popular psychology, elaborated in accordance with the notions which prevail in common life, is apt to classify facts according to their importance among those who have built it up. A theoretical psychology has to satisfy theoretical requirements, and these are often outside the pale of the startling phases which mark the social advance of the race.

In probing the nature of "willing," we have seen that whether distinct or not, it is equally organised. Naturally this is true of assertion in general. Instead of saying "I see," I can say "Hm!" or observe in varying degrees the feeling of awareness or connection, or there is present in me a feeling of recognition not understood as such; or there is nothing to mark off the event—by far the most common case. The proper place for the discussion of "willing" should be in the chapter on Systems as Need-satisfying, where the general modes of satisfying needs are dwelt upon. There it would be grouped with occasional states such as doubt, belief or assertion.

165.—The Absolute Value of Felt Effort.

The greatness of an effort, as felt, is not directly related to the greatness of its effect. [Lift a heavy object, experiment with it, and observe the consequences.] By itself the former is an illusive measure of results, and nothing can be deduced when we only know its warmth or intensity. In practice this works out in various ways. As a child of five I make a prodigious effort to lift a heavy object and fail; grown to maturity I raise the weight without feeling any strain. It is not the more strenuous attempt, but the state of the organism which accounts here for the divergent results. As the physical structure grows in capacity, so the felt effort is followed by more striking effects. A powerfully built man performs tasks without any appreciable strain which weaker mortals can only accomplish by exhausting efforts.

What is true of motor action generally, holds good of every department of activity. Though I try to keep my eyelids open in order to remove a speck from the eye, they remain tightly closed. [Test this.] My deliberate aim is frustrated by rooted organised aptitudes; but what effort cannot do, training accomplishes. If I return again and again to the attack, the organised effect will be such that I shall probably be able to place an object between my eyelids without any opposing tendency asserting itself. [Acquire this trend, recording your progress.] Not effort, as such, but organisation is usually decisive; the former only supplies us with a notion of the limits of the organism at any time.

Having finished their day's work, many persons are only fit for light recreation. It is out of the question for them to pursue private studies: they can neither grasp what they read nor re-develop the contents. They try repeatedly, but in vain; and at last they become resigned to their limitations. Others, again, are never tired; they can always add to the work which they have in
The same holds good with regard to the guidance of thought. An acute reasoner can start upon the solution of a problem when and at what point he likes. He proceeds with it at his leisure, dismissing it when he thinks fit. Irrelevant issues do not arise; accidental suggestions do not annoy him.  

[Is that so with you?] Just as a bat goes at full speed and yet without apparently a moment's delay changes its direction, so the competent thinker is free to leave his subject or pursue it to its conclusion. Likewise prejudices, likings and irrelevant considerations do not detract from the quality of his work. With a thoroughly trained intellect of this character clockwork regularity and accuracy is normal. With those who are untrained it is otherwise, for they appear to have no control over their thoughts. Problems come uninvited and vanish in the same fashion, and any side issue throws them off the track. They can neither start nor finish when they like. Wishing to think of one thing, they are bound to think of some other instead. Desirous of solving a problem, they make no progress. Impertinent issues, prejudices and foregone conclusions deprive their attempts of all value. Highly trained or untrained individuals do not differ from each other in the quantity of effort put forth, but in their native or acquired capacity. That I will at all, is determined organically, and that my will shall realise itself is in each instance decided neurally.

Exertion itself is an organised quality. One man with a highly unstable nervous system breaks down under the least trial, while another with a robust constitution continues to make strenuous efforts without overtaxing himself. Strictly speaking, we must regard the capacity for strenuousness as varying indefinitely from zero upwards. The lives of two persons, on a certain occasion, depend on their presence of mind, and life is dear to both of them. Yet one shows self-control, and the other does not. Varying experimentally—in imagination—the exertion capacity of an organism, we now see it go down to naught, and now reach unprecedented heights. Thus the man of great will-power is an organised product. If we were at liberty to experiment with his physical constitution, we should find that the will-power is no extraneous factor, and that organisms analogous to his would exhibit the same characteristics that he does. Besides, a strong will is often only an effective will, one that is readily and without effort followed by the desired actions: being practised, for instance, in dismissing undesirable reflections, we are in that direction all-powerful.  

[Practise dismissing one particular class of thought.] In fact, before a thought has fully emerged, it is without the slightest difficulty thrust into the background. By a similar exercise of will we freely turn away from anything we are dwelling on. On the other hand, we may be in such a condition that we desire, but are unable to make an effort or produce the effect we are bent on (sec. 23). In analysing a difficult problem, our will is frequently defeated. Hence effort and willing are meaningless unless we think of them in connection with an organism.

It has been argued that we are responsible for our habits, since we might have prevented them from arising. There is no occasion to refute
at length such a contention, for organised reaction begins neither with manhood nor with adolescence, but with infancy. No one who has closely followed the growth of any child from birth onwards can seriously urge that the habits of the one age do not form the foundation of the next. Organised reaction has no beginning, nor is it initiated from without (sec. 62). Our capacities develop; they are not made. The quantity of exertion put forth, as well as its direction and effectiveness, are measured by the stage of development which the organism has reached. So also the character of men is the outcome of the conditions under which they live. We are, therefore, never far removed from our past in thought and action.

166.—The Sense of Effort.

[Let the student repeat the following and related experiments and record results fully.] I hold a penholder between my fingers and thumb. Now that I attend to the act, I note certain feeble feelings of touch, but hardly any which suggest pressure. Ordinarily these results would not be noticed, and furthermore, since the task is one which the organism is more than prepared to bear, the general current of attention is scarcely affected. I now press harder, as hard as I can. I observe that I cease breathing, that I press my lips and teeth together, and that the field of attention is very nearly annihilated. There is a sense of effort* present, and the feelings connected with the increased exertion constitute the sense. Just to grasp the penholder is not exhausting; I hold it thus for a considerable time before I am fatigued, or before it requires an appreciable effort to continue. From the second chapter we know that only a small portion of extra energy can be expended at once, and that only for an insignificant period. The feelings speedily become more pronounced, while the capacity for persisting declines. An effort, on the physiological side, is a quickly-exhausting act [*test this*], and the peculiar feelings and strains are synonymous with the sense of effort, and derive their name from the connected exertion. Let the power of the organism be increased through appropriate exercise, but without the knowledge of the individual. Let that individual then hold in his hand a weight slightly heavier than he is accustomed to, and he will feel no strain, allowing for mistaken judgment. When, therefore, the expenditure of labour in any direction exceeds the normal expenditure, certain systems develop which are named the feeling of effort. Eliminate these, and the sense of effort is gone.

The sense of effort is synonymous with the feelings observable in heightened activity. These feelings, however, are not to be regarded as productive of changes; they do nothing; they but accompany the changes in body or in notions. At best, they are a coarse instrument of measurement. They are not antecedent, but consequent or accompaniment, and

* Dewey (Psychology of Effort, 1897, p. 51) holds that "Effort is nothing more, and also nothing less, than tension between means and ends in action, and that the sense of effort is the awareness of this conflict."
are not distinguishable from other sense systems. It is the occasion which
gives them an apparent purpose; otherwise these feelings will, and do,
bear diverse interpretations. The ordinary movements of the head, eyes,
body, etc., are mostly executed without suggesting the notion of effort;
but when, as in trying hard to re-develop something, the head droops, the
forehead resembles a ploughed strip of land, and the eyes lose their
expression, then we connect with our search these abnormal movements
and the feelings which accompany them.

I observed in the last paragraph but one, that in pressing the penholder
between the fingers I ceased breathing. [Repeat the experiment.] I try now
whether this act of suspension, otherwise so common, is essential. I press,
and successfully exhale at the same time. I then breathe normally. In
further attempts I note that the field of attention need scarcely be affected,
that, indeed, with the attention much deflected, I may press and yet not feel
(sec. 19). In this manner the feelings and movements common to effort
can be largely varied. One person, when thinking, has the brow smooth,
another has one perpendicular fold nearly between the eyes, a third has
the forehead lined horizontally. [Catalogue persons from this point of view.]
There is, in strenuous acting, a great variety of sensory systems, most of
which do not seem indispensable, however regularly they develop. Suppose,
however, that each of them separately may be absent, yet the sense
of effort, nevertheless stands and falls with them. Let there be no extra
feelings, and the sense of effort lapses, as when the attention is turned
away. As the feelings which we call a headache, do not lower the quality
of thought, but are themselves expressions of the total effects of the dis-
order; so the sense of effort is a bald illustration of some neural fact.
[Experiment with elastic bands.]

Clearly marked strain is only noticeable in weariyng action. To suspect
it everywhere, therefore, is to reason crudely. Water boils at 100° C.,
does it similarly boil when it is freezing? Boiling water bubbles; does
water at an average winter temperature bubble? A hot poker applied to
my finger-tips produces a blister; does a poker ordinarily blister finger-
tips? The key of a piano forcibly pressed down yields a note; does a key
slowly pressed down give the same result?* In an analogous way we must
reason that the existence of an appreciable sense of effort or of any system,
under certain circumstances, is no guarantee, unless special evidence be
forthcoming, that it is always present. In the absence of such evidence
we are justified in assuming that the sense of effort is only an accidental
occurrence which results, and receives its name, from abnormal exertion.

The systems implied in strain are, however, pretty general in the realm
of neural activity. Whenever, in normal thinking [test this carefully],
a slight obstacle is encountered, it is at once organically met by a
slight effort or felt activity. We do not notice these occasions; they are
too insignificant and too numerous. It is even hard to observe them, so

*Many psychologists, from Leibnitz to the present day, reason in this manner.
here theory of minimal sensations and images is thus based on rash inferences.
frequent are they. Indeed, there can be no relevant thinking, imagining or developing without perceptible strain (sec. 134). When, for instance, we are accustomed forcibly to dismiss a thought, it requires counter-training to control that tendency.

In interest, especially when it is “breathless,” the feelings we are discussing in this section are common. [Test this.] The interest is aroused imperceptibly, and a great deal of extra energy is employed—with the results detailed—without our having any knowledge of the fact or any connected or conscious aim to produce the effect. In these cases we are usually unaware that there is a special draught on our strength. We pass, for instance, through a portion of a picture gallery, and afterwards we notice that our head aches. We have been observing too closely; we have drawn too much on our fund of energy. Any one who has watched us could probably trace all the signs of the sense of effort; but the exertion is so continuous that we do not observe the fact.

In the various forms of surprise, the same features are repeated. [Is that so?] The breath frequently fails us; the muscles stiffen; the world is nearly a blank. We are in these cases in the same condition as when about to embark on a difficult task. Properly, surprise should be classed with the sense of effort. Our being unaware of our condition is no barrier to such classification, for the sense of effort is sometimes keen and yet its presence is unsuspected, as in breathless interest, or, as sometimes happens, when we are tired and still continue to work. With surprise must be grouped such sets of systems as terror, admiration and awe. In each of these the same tendencies are observable.

Surprise, interest and fatigue are not the only quasi-passive expressions of the sense of effort. Wherever there is a tendency to direct the attention into one channel exclusively, there we discover them. Different classes of work make varying demands upon us: now we meet an obstacle which is easily overcome; and now we become entangled, our onward march is blocked, and we extricate ourselves with difficulty. Thus attention frequently reaches a high degree without our being aware of the fact, and when it is developed most completely, we become engrossed, absorbed, lost. The bells ring, the carts rattle along furiously, people hurry past us to right and left, some one shouts our name close by; but to us these things are as if non-existent. We are bent on some pressing business, and are unapproachable except from that direction.

Listening should be considered as a special case of effort. [Test.] Enraptured with the songs of birds, or nervous at night, we pay prompt attention to the slightest stir among the branches or the faintest crack of the rafters.

Disturbances, or pleasure-pains, in one of their aspects, exhibit the same features. When we enjoy our strawberries and cream, we unknowingly but none the less deliberately prolong the pleasing torture. We dwell on the taste, stopping short only of satiety. We turn our attention to it, and become engrossed. We try to retain the aroma as long as possible.
Effort is thus often connected with semi-opposed disturbances or pleasure. In opposed disturbances or pain, attempts are usually made in the opposite direction. We bite our lips; we scream; we seek for distraction; we make violent movements; and the like. [Observe a number of experimental instances.] As in interested attention, the various movements in pleasure-pain are not determined by choice. They are such as are native to the organism; and such as we detect in other species of animals. "Aimless" effort is, of course, more common in minor disturbances. When, with us civilised beings, the disturbances are great, we take special measures to retain or dismiss them.*

It is not easy to account for the frequent inhibition of breathing when something is to be done. One reason is undoubtedly that the noise we make in breathing often interferes with attention to sounds, and even perhaps to other sensations. The matter should form a subject for experiments.

Prof. James is the champion of a supernormal will, a will that quite arbitrarily turns the balance of motives. I have only space for two quotations from his Psychology, 1890, ii: "The immense majority of human decisions are decisions without effort" (p. 534). This is wholly incorrect, unless he means by effort great and prolonged effort. Again: "Effort complicates volition... whenever a rarer and more ideal impulse is called upon to neutralise others of a more instinctive and habitual kind: it does so whenever strongly explosive tendencies are checked, or strongly obstructive conditions are overcome" (p. 548). Sully (Human Mind, 1892, ii, p. 291) says on the subject: "The intervention of effort as an altering, reversing factor, analogous to the addition of a scale-turning weight, probably means in physiological language the co-operation of certain highest or latest developed nerve structures, the action or discharge of which makes good the biological deficiency, or efficaciously inhibits the biologically excessive action of certain lower nervous planes."

I once observed a good illustration of the sensory nature of excitement and emotion. Something surprised me very much. I noticed how warm I felt all over the body, almost to the verge of discomfort; and how my heart beat so violently, that it seemed almost painful. I then effectually compelled myself to think of an unrelated subject, and the excitement disappeared from thought. If we, therefore, abstract the warmth, the violent heart-beat, etc., it becomes absurd to speak of being moved or excited. Of course, we often say "I am so sorry," when we are entirely unmoved; but in those cases we ought to say "I could be so sorry." If we had never had the physical sensations which express sorrow, the words would possess no more meaning for us than the phrase "this is a pretty colour" possesses for a blind man. An ideal being, however, would have one supreme neural inclination easily controlling the others, and he would display no strong emotions except those of joy and sorrow.† However, in the common order of things, alas, "the mind is an orchestra, where the musicians are not always in agreement; where the conductor, when there is one, is not always obeyed" (Paulhan, L'Activité Mentale, 1889, p. 413).

167.—The Tripartite Division in Psychology.

Speculative sciences are the mirrors of their times. They owe their origin to the restricted interests of a period, and they interpret the more or less common wants, and clothe them in a literary garb. As fast as the aspirations of men assume new forms, so these studies are remodelled. Thus in the history of speculation there is change, but not progress. If it be

said that the physical sciences are not, like time past, unchangeable; that many a physical theory is found to be incomplete; and that many supposed facts turn out to be fictions, the answer is that, broadly speaking, physical science, as compared with speculation, is coherent and progressive. Time perfects the former, but merely changes the latter. Physics, like a child full of vigour, joyously runs ahead; not so philosophy.

The threefold division of psychology into Intellect, Feeling, Will, should thus be connected with notions floating in the air of the eighteenth century. It was no exhaustive examination of the facts which yielded that classification. It had no better warrant than, say, the bipartite division into Intellectual and Active Powers, which was changed by the fickle popular imagination. In the dry light of the earlier part of the eighteenth century, everything was examined with the microscope of reason. Feeling, therefore, was not thought of, and hence its absence from the early treatises on psychology. Philosophers were then too prudent to allow themselves to be swayed by passion, and self-interest, mostly unenlightened, was the spirit which guided them. As morality was interpreted as a prudential arrangement, passions, good, bad and indifferent, were despised and neglected. With the influences which found for their chief spokesman Rousseau, the tide in favour of feeling and enthusiasm rose. The comfortless beacon of the intellect was cast into the shadow by the fierce flame of the emotions. Henceforward the feelings could no more be neglected. The Intellectualists, with their prudential calculations, had now to adopt a classification which included feeling. The new enthusiasm came to be recognised in the then current psychology.

After a time, morality took another direction. It had tired of prudence; it revolted from the sensuousness of the pleasure-pain view. Hence arose the will-theory which, elaborated and glorified by Kant, took its place in the tripartite division. Apart, however, from the erratic trend of popular opinion, the division was unjustifiable, and psychology has thus been an apology for unstable beliefs. If John Locke had been independent and had, for example, insisted on sensation and self-interest as the subject-matter of psychology, he would easily have found followers. Were it not that intellect enters so largely into philosophical treatises, it might have been imaginable that it could be omitted from a classification which purported to be comprehensive.

Science proper must take no account of the moods of the ages. It must arise, not from the study of opinion, but from the examination of facts. Hence the rejection of the prevailing tripartite division, and the criticism of the position allotted to the will. Except as regards complexity, I recognise no fundamental distinction between feelings, emotions and sensations; they belong to one class as regards the sensory content. And as to the intellect, it must take its place as a secondary principle. Psychology only knows of needs and the process by which these needs satisfy themselves.

The will-theory is closely connected with existing metaphysical views. For that reason I have felt bound to criticise it in detail. Otherwise the
chapter might have been filled in part, and to greater advantage, with a more detailed exposition of the needs which uniformly initiate and sustain action.

It was not individual whim which suggested the old psychology. It was always some social departure. Had the changes proceeded along other lines, or had they been owing to individual idiosyncrasies, the classifications might have varied a good deal more. Thus desire, which is much more prevalent than will, might have occupied the latter’s place. Especially would that have been so, if social transformations had favoured such a doctrine. As the result of a possible turn in events, for instance, men might have been tormented with aching desires. Psychology would then have been christened The Philosophy of Desire. Further, the judicial attitude of calm deliberation is very rare. Imagine it universal or widely disseminated, and judgment would take the leading place in psychology. A keen intellect judges rather than reasons; observes rather than works in syllogisms. Such a change in public opinion would quickly react on intellectual studies. In the same way belief in some quarters and emotion in others, have gained a high distinction. Thus habit, attention and other incidental aspects might have taken the place of will. If they have not done so, it is because of the caprices of the social trend. Science proper has never yet sanctioned a dressing-up of public opinion, and hence I feel no compunction in dealing in what may seem an uncharitable way with an almost universally accepted classification.

It may be useful to subject once more the Tripartite Classification to criticism. We are told that the subject-matter of psychology has three fundamental aspects, namely, Feeling, Intellection and Volition; these three factors being invariably present. Furthermore, Feeling is most generally defined as pleasure-pain; Intellection or Cognition as reasoning, and Volition or Conation as willing. It is as though it were said that the subject-matter of the physical sciences has three fundamental aspects, namely, Violence, Interaction and Force; and this classification would be as irrational as is the former. If we define Feeling as being the sensations we name throbbing pain, piercing pain, etc., we learn, as we have seen, that these sensations are valueless as guides to the interpretation of pleasure-pain; and if we define Feeling as something not to be expressed in terms of sense or change in sense, then we have something about which no one can either affirm or deny anything. Pleasure-pain, however, indicates a casual process of a violent nature, a process which is not an invariable aspect of every set of systems. Pleasure-pain is merely violent action as distinguished from action generally. Coming to Intellection, we have a case similar to the one of Feelings. If Intellection means reasoning, as ordinarily understood, then it is not a constant aspect, for we are not always reasoning; and besides, it would exclude all the work of elaboration which goes on in bodily action and in the forming of sensations. If Intellection, again, means Interconnection or Interaction (or the satisfaction of a need), then it covers the whole ground; but this is not the accepted meaning. Lastly, as to Volition, If Volition means resolve, determination, self-directed activity, etc., then Volition is a very casual process; if it means striving or conation, as water flowing downward strives, then it is only true to an extent, and is otherwise a petty, superficial aspect of action, as if we said that everything in nature strives to change its state; and if by Volition be meant impulse or action, we have still a very vague generalisation. Yet these positive facts of the Tripartite Classification are overshadowed by faults of omission. That classification leaves entirely out of account the existence and nature of the sense material; it says nothing of the evidently organic nature of psychic-
processes; and it tells us nothing of the great and uniformly acting functional tendencies which explain the trend of thought and action. In fact, the Tripartite Classification is hopelessly unscientific. For a further criticism of the Tripartite scheme, see Lipps, Grundtatsachen, 1883, pp. 15-27.

Sully (Human Mind, 1892, i, pp. 59-70, and Appendix A) gives an account of the Tripartite division. See also Bain, Senses and Intellect, 1892, pp. 2-8. By Intuition, or Intercorrelation, might be understood the need-determined elaboration of primary and secondary systems; and by Systems, or Developments, the whole material of thought and action—systems pre-developed and re-developed. The first class would deal with primary and secondary systems dynamically, while the second would treat of them statically.

168.—A Bird's Eye View.

The bodily structure which we inherit tends to maintain itself and to develop itself. We speak accordingly of functional tendencies, and these functional tendencies or needs we look upon as the stimuli which set us and keep us going. Psychology is properly the science of needs.

Additional References.—Bain, Notes on Volition, 1891; Bastian, On the Neural Processes underlying Attention and Volition, 1892; Bradley, On Pleasure, Pain, Desire, and Volition, 1888; Bradley, Some Remarks on Conation, 1901; Davie, The Growth of Voluntary Control, 1899; Fouillé, Existence et Développement de la Volonté, 1892; Kirkpatrick, The Development of Voluntary Movement, 1899; Lindley, Motor Phenomena of Mental Effort, 1899; Loveday, Theories of Mental Activity, 1901; Maullier, Les Phénomènes Moteurs et la Volonté, 1899; Pfänder, Das Bewusstsein des Wollens, 1898; Schubert-Soldan, Reproduction, Gefühl und Wille, 1887; Shand, Attention and Will, A Study in Involuntary Action, 1895; Stout, Voluntary Action, 1896; and Woodworth, The Theory of Voluntary Movement, 1899.