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The social psychology of volition

Walter M. Fritschel
State University of Iowa

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THE SOCIAL PSYCHOLOGY OF VOLITION.

A THESIS

presented to the Faculty of the Graduate College of the State University of Iowa in partial fulfillment of the requirements for the degree of Master of Arts.

July 1916.

BY

Walter M. Fritschel.
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INTRODUCTION

The thinking and writing of any age takes its tone and color from the conditions, religious, economic, and political, of that age. The thinking along any one particular line, e.g., psychology, the thinking of any one interest group--providing it remains in touch with current literature--reveals the greater or smaller influence of the general prevailing philosophical and scientific notions.

The older individualistic psychology usually divided mental processes into feeling, thought, and will regarding them as quite distinct from each other; and the feeling, thought, and will of one person quite independent from that of the other, but individualism, "laissez faire," is rapidly waning. The social is coming into its own. Society is no longer defined as "a temporary police supervision," as Spencer defined it,* nor as a "philistine conspiracy on the part of the weak and cowardly to suppress the strong and the fit," as Nietzsche thought of it.* Today cooperation and "team work" is emphasized. We read and speak of the social nature of conscience, language, faith and belief, the social mind, the social will, etc.

But is it not just in willing that there is least room for a social factor? In willing one's own individuality, one's self exerts itself and one takes
the responsibility of his behavior upon him.

The problem may be stated in a few questions:-
Is the self—definition later—the most influential factor in volition? Is the self an individual product or a social resultant? If the self is a social resultant, is there an individual responsibility? Can we speak of the social psychology of volition?

Before answering these questions a brief historical survey of the best thought on volition will be in place.
CHAPTER I.

VOLITION IN INDIVIDUAL PSYCHOLOGY

1. The contribution of William James * will be first considered. The James chapter on volition was written in 1890. It established a number of facts that have stood the test of time, and one is tempted to say the chapter, as such, stands unparalleled today. Whatever the will may be—James favors us with his version later on—the only ends following immediately upon willing are movements of some kind, no matter whether the intended ones are not, of the body. Not that every movement is a voluntary one; on the contrary, all reflex, instinctive, and emotional movements—and these comprise the great majority of those we make each day—are in no sense voluntary. The actions of the child who happened to be standing at a railway station when an express train rumbled through and who became frightened and, screaming, ran away and out of sight of the monster, were assuredly not the result of an act of volition. Nor dare we assume that every single stroke of the razor made by the man taking his daily morning shave, and who perhaps contentedly hums a tune while performing the operation, is the consequence of a command of the will. Or are our movements when dressing and undressing, is each single motion preceded by an order emanating from the brain? Certainly not. As little as each step when we walk, or the

* Principles of Psychology, vol. 4.
closing of our eye when a foreign body comes in contact with it, is. As little as we will to have our hearts beat faster upon receipt of joyful news or our face to blanche upon receipt of distressing news. All things that are done habitually, and therefore unconsciously, render the faculty of will superfluous. There seem to be a collection of ready-made coordinations in existence, which, when the proper stimulus is given, unravel in the most natural, orderly, and admirable fashion.

Voluntary movements, James contends, presupposes memory of involuntary ones. These instinctive, emotional, and reflex ones, which he terms primary movements in distinction from voluntary or secondary movements. We cannot will a movement of which we do not have an image in our minds. Unless the act can be foreseen there can be no thought of willing such an act. But how can we foresee an act which we have not performed in some way before— and the instinctive, reflex, and emotional, are the only possible ways—or through the medium of our sense organs perceived them as performed by others? Each movement, however, that we make involuntarily, as also every passive movement—e.g., the bending of our limbs by another person—gives us a distinctive feeling or resident impression, or still more technically, a minaesthetic impression. The exceptions to this rule are pathological cases. Struempell had a boy who was
completely aseiaesthetic. He could be pinched and would not be aware of it. His arms and limbs could be turned and twisted into the most impossible and uncomfortable positions and so long as his eyes were bandaged he remained unconscious of it, unless the strain upon the joints became too great, when the patient would become conscious of a dull sensation of strain, which, however, he was unable to localize. Or, to quote verbatim with reference to another case:— "Voluntary movements cannot be estimated the moment the patient ceases to take note of them by his eyes. Thus after having made him close his eyes, if we ask him to move one of his limbs either wholly or in part, he does it but cannot tell whether the effected movement is large or small, strong or weak, or even if it has taken place at all. And when he opens his eyes after moving his leg from right to left, for example, he declares that he had a very inexact motion of the extent of the effected movement. If, having the intention of exciting a certain movement, I prevent him, he does not perceive it, and supposes the limb to have taken the position he intended to give it."* Another illustration:— "The patient, when his eyes were closed in the middle of an unpractised movement, remained with the extremity in the position which it had when the eyes closed and did not complete the movement properly. Then after some oscillations the limb gradually sank by reason

* p. 490, quoting Loudry.
of its own weight—the sense of fatigue being absent—of this the patient was not aware, and wondered, when he opened his eyes, at the altered position of his limb.*

A great many other interesting experiments raising perplexing problems are on record. A solution of many is still forthcoming. But besides these resident impressions let us not fail to take cognizance of the so-called remote impressions or remote effects, the movements performed by other individuals, and seen, felt, or heard, by the subject. In this manner the mind accumulates a supply of ideas of these various images due to remote or resident impressions, which supply constitutes the first prerequisite of voluntary life, and whatever else may be in the mind when an act is consciously willed, "a mental conception made up of memory images of these sensations, defining which special act it is, must be there."*

But is there anything else in the mind when we will an act? Proceeding from the simple to the more complicated, James answers No, there need be nothing else in the mind but the image of what the act is to be. In postulating this thesis he conflicts with an old psychological tradition defended by no less profound and eminent scholars than Wundt, Helmholtz, Mach, Bain, and others. This psychological tradition asserts that in addition to the image of an act, necessary to perform it,

* p. 490, quoting Tikocs.
* p. 492.
there is a feeling of innervation, which is defined as a current of energy going from the brain into the appropriate muscles during the act, which has a feeling "sensible" in the brain. The experience one undergoes in performing difficult acts, for example, throwing a ball at a mark, when the possible results of different movements are known and weighed and balanced by the brain in advance of the movement which actually occurs, accounts for the plausibility of the "Innervationsgefühl." For this premonitory weighing feels as much like a succession of tentative sallies forth of power into the outer world, followed by correction just in time to avoid the irrevocable deed, that the motion that outgoing nerve currents rather than were vestiges of former sensibility accompany it, is a most natural one to entertain."* Nevertheless, the discharge into the motor nerves is insentient and the ideas of all our movements, and their strength and direction etc., are images of peripheral sensations, either remote or resident in the moving parts or those parts sympathetically moving with them. Whence, then, the necessity of assuming a feeling of innervation? Can it be due to the old scholastic formula that the effect must be already contained in some way in the cause?* This is not the case in reflex and emotional expressions. Besides the law of parsimony constitutes an a priori reason why the discharge into the motor centers should be entirely insentient and the feeling of innervation therefore

*p.493  * p. 494.
superfluous: consciousness deserts all processes where it ceases to be of use. The skillful marksman concentrates his attention on the target and is innocent of any awareness concerning the position of his body or his fingers or the position of his gun. It is the amateur who must pay attention to all these details. In like manner the accomplished pianist cannot possibly watch the technique of her fingers, to see that every single key is properly struck, that her arms and body have the correct position. It is the beginner who is encumbered by these minutiae. The same holds true in the case of a professional singer, and additional examples might be multiplied. No, the law of parsimony and the theory of innervation cannot keep house together.

Perhaps we have introspective evidence of the feeling of innervation, compelling us in spite of the above a priori argument, to retain our faith in innervation. Just introspect for a minute and attempt to grasp the feeling of innervation—if there is any—which preceded the raising of your arm or the crooking of your finger. Are you certain the result is not a peripheral image of how the raised arm and the crooked finger would feel? Since Hume's time it has been a generally accepted fact in psychology that we are only acquainted with the outward results of our volition
and not with the inner workings of nerve and muscles. But if the supporters of the theory of innervation accept this fact, which they must and actually do, then the inevitable consequence of this admission must ultimately be the unconditional surrender of the "Innervations-theoric." Even Wendt, the ablest champion of this illusion, admits that each separate muscle—keep in mind the raising-the-arm illustration—cannot have its distinct feeling of innervation; he "admits that they—feelings—have no difference of quality, but feel alike in all muscles, and vary only in their degrees of intensity. They are used by the mind as guides, not of which movement but of how strong a movement it is making or shall make." * And right here we have it. There can be no doubt that our knowledge of the degree of strength of our muscular exertions is directly dependent upon our afferent feelings, coming from the muscles, joints, larynx, chest, face, etc., etc. Just try the experiment of willing to write the word Peter and disregard the results incumbent upon such willing. What would remain in your brain? Surely your brain would answer all the laboratory requirements of the Magdeburg Hemispheres when they are so difficult to separate. However, Wendt is not so easily put off, but contends if our motor feelings were of an afferent nature, it ought to be expected that they would increase

* p. 500
and diminish with the amount of outer or inner work actually affected in contraction. This, however, is not the case, but the strength of the motor sensation is purely proportional to the strength of the impulse to movement, which starts from the central organ innervating the motor nerves. This may be proven by observations made by physicians in cases of morbid alteration in the muscular effect. A patient whose arm or leg is half paralyzed so that he can only move the limb with great effort, has a distinct feeling of this effort: the limb seems to him heavier than before, appearing as if weighted with lead. He has therefore, a sense of more work effected than formerly, and yet the effected work is either the same or even less. Only he must, to get this effect, exert a stronger innervation, a stronger motor impulse than formerly." * But, also this apparently formidable contention can be met and disposed of in comparatively simple fashion. It has been observed—incidentally and in experiments expressly made for the purpose—that when a hemiplegic patient is asked to attempt to close his paralyzed fist, he will unknowingly close the healthy one in the attempt. From this it follows that the so-called feeling of innervation is after all but a figment of the imagination, and that the sensations after all are different sensations pure and simple. To yet more fully convince ourselves of the

* p. 503.
following experiment which I quote verbatim:* "If the reader will extend his right arm and hold his forefinger in the position required for pulling the trigger of a pistol, he may without actually moving his finger, but by simply making believe, experience a consciousness of energy put forth. Here, then, is a clear case of consciousness of energy without actual contraction of the muscles either of the one hand or of the other, and without any perceptible bodily strain. If the reader will again perform the experiment, and pay careful attention to the condition of his respiration, he will observe that his consciousness of effort coincides with a fixation of the muscles of his chest, and that in proportion to the amount of energy he feels he is putting forth, he is keeping his glottis closed and actively contraction his respiratory muscles. Let him place his fingers as before, and continue breathing all the time, and he will find that however much he may direct his attention to his finger, he will experience not the slightest trace of consciousness of effort until he has actually moved the finger itself, and then it is referred locally to the muscles in action. It is only when this essential and ever-present respiratory factor is, as it has been, overlooked, that the consciousness of effort can with any degree of plausibility be ascribed to the outgoing current."* Incidentally this establishes the

*p. 504.
truth of the statement postulated earlier in this paper, that the only ends following immediately upon our willing are movements of the body. Where the movements do not follow the would-be will, it is not a will at all, but a wish.

As a final resort the feeling of innervation is relegated to the eye. But also this last stronghold must capitulate. Lack of time will not permit a discussion of this rather intricate problem. Suffice it to say that James' essay on the will delivered the death-stab to the "Innervations-theoric" with singular precision. For modern psychology the nonexistence of innervation is a matter of fact.

But might there not still be an additional factor or besides the idea of the movement, must there not be fiat, a consent, an express command before the movement can ensue? Yes, and No. In most cases No. The mere presence of the idea being sufficient to set the motor apparatus in motion. The class of movements in which a special fiat is absent constitutes what is known as idea-motor activity. An illustration is the flicking of a speck of dust from your sleeve in the course of a conversation without interrupting the same. The idea of the speck of dust upon your sleeve intruded itself into your mind and the mere idea instantly caused the movement of brushing it off without the intervention of a special
fiat or consent or command. Or take the example of the man in conversation at the dinner table after dinner has been consumed. He converses spiritedly, completely engrossed in the topic which is being discussed. The perception of a bowl of raisins standing within easy reach before him, the mere idea of the fruit, moves his arm at regular intervals conveying the raisins to his mouth in no small numbers. Indeed, a special fiat or consent was not the cause of this violation of table etiquette.

Even in more complicated cases no fiat is needed. Let us only bear in mind and mentally underscore that consciousness is in its very nature impulsive and tends to act itself out without the addition of a dynamic moving agent. This it does, provided always, there are no conflicting ideas. The popular belief that mere consciousness is important to start a movement is doubtless due to the more exceptional cases in which an act is thought of for an indefinite length of time without its actually occurring. The interesting and humorous illustrations of such a case is the one of getting up out of bed on a cold winter morning in an unheated room. There is the thought of your days work, the ignominy of remaining long in bed, the appointment you have at such and such an hour, all urging you to rise. But all these considerations are effectively counteracted by the idea
of the warmth of the couch, the cold room etc., causing a state of equilibrium, so to speak, or even a preponderance of inhibitory influences in your brain, and the dreaded ordeal is postponed. But presently your attention becomes fixed upon, e.g., an experiment you have under way, and like a flash it occurs to you that you must no longer be in bed, but be about this experiment. At this opportune moment the ideas that proved so reactionary but a short time ago cannot arise to offset those filling the brain, and the fiat of leaving your couch is performed without any difficulty whatsoever, without that special fiat and that will power, with which one is too apt to credit himself. This fact of the impulsive nature of consciousness seeking to work itself out in action is so important that I do not hesitate to again quote a length: "But even here (so many ideas apparently not resulting in action) and when a movement is inhibited and prevented from completely taking place by contrary ideas, it will incipiently take place. To quote Lotze once more, 'The spectator accompanies the throwing of a billiard ball, or the thrust of the swordsman, with slight movements of his arm; the untaught narrator tells his story with many gesticulations; the reader while absorbed in the perusal of a battle-scene feels a slight tension run thru his muscular system, keeping time, as it were, with the actions about which he is
reading. These results become the more marked, the more we are absorbed in thinking of the movements which suggest them, they grow fainter exactly in proportion as a complex consciousness, under the dominion of a crowd of other representations, withstands the passing over of mental contemplation into outward action. * Inhibitions may also come about in the identical fashion and in no way involve an express effort. In passing, attention might be called to the difference between the reflex action of common parlance and ideo-motor action. While the former is purely instinctive without a vestige of consciousness, one is more or less conscious of the idea in ideo-motor action. The latter is essentially an acquired process, perhaps identical with the artificial reflex action of which some psychologists speak.

Now we are prepared for a brief consideration of the fiat, which has been put off so long. What is it, and when does it occur? Since it does not occur in a smooth-going action, i.e., when an idea may be transformed into action without a hitch, without an inhibiting factor, it must be after conflicting ideas have warred upon one another in the brain. And so it is. The conscious voluntary fiat can result only after deliberation. By deliberation is meant just this warring of ideas. One idea manages to get itself before con-
sciousness, but before its impulsive qualities can transform it into action, a hostile idea intrudes itself and halts the first-comer. In this manner one idea succeeds another, the foregoing always prevented from acting itself out by the succeeding. This vascillating to and fro constitutes what is known as deliberation, that state of indecision with which everyone is familiar. Decision or the voluntary fiat results when the original idea either succeeds or is definitely defeated, the reinforcing and inhibiting ideas meanwhile constituting the so-called reasons for, or motives of, the act. Of the great many motives which may operate in each particular case, there are some more or less constantly in play in all cases. There is "the impatience of the deliberative state," * namely, the tendency to act, whether wise or otherwise, merely to avoid this state of indecision which may even become painful. Then, there is the "dread of the irrevocable" * which factor would make one hesitate and procrastinate the final decision as long as possible. This factor is the dominating one in that type of character which cannot "make up its mind", the irresolute type. There is further the tendency to persist in a decision once made, which is a characteristic of the resolute character. Yes, even after the inexpediency of one's course is perfectly plain, it is no easy matter, especially for the strong-willed man, to admit his

* p. 529  * p. 530
error and choose another because of this stubborn impulse to persist in a decision when it is made.

Speaking of resolute and irresolute characters suggests different types of decision. There is a worthy one called by James the reasonable type. The man of this type coolly collects all the evidence in favor or contrary to the problem in hand and is not at all hasty about rendering the final fiat. However, when the time comes, a sense of the right way seems to come over him, he realizes that further delay will be of no avail. He accordingly renders his decision, in which effort is practically excluded. Upon closer examination it will be found that men of this type carry with them a set of heads of classifications, each with its motor result. When an emergency presents itself its solution is found when it can be submitted under one of the heads of the different classifications. In a less worthy type the direction one takes is determined more or less accidentally by external circumstances, before all obtainable evidence is in. Persons of this type usually drift indifferently with the stream. Of about the same calibre is the type of decision, also rendered before all the evidence has been procured, which is the result of an internal compelling force, as it were, "a spontaneous discharge of our mind," not infrequent in men of strong emotional temperament. A fourth type is the one in

* p. 532.
which the person suddenly passes from an easy and indifferent to a stern and strenuous mood or vice versa. The former may most readily be induced by fear or grief, efficient sobering agents. The more frivolous and trivial considerations then blanche into insignificance and the earnest ones carry the day. The last type of decision, unquestionably the most difficult, one might say grievous, is distinguished from the others essentially by the presence of a strong conscious and deliberate effort. The evidence may be all in or not. In either case the course chosen involves the consciousness of the loss of the other alternative perhaps equally good, whereas in the preceding four types with the selection of the one alternative the other is lost sight of. But in this case in the very act of throwing in your lot with the one, you are dearly aware of the loss of the other. James characterizes this type by stating that it involves a deliberate driving a thorn into one's flesh.

The effort of which I just spoke does not figure nearly so prominently in volition as is commonly supposed, for most decisions are decisions without effort. What leads us to believe that effort is involved is the thought occurring during the process of deliberation, of how great an effort would be required in making a decision at that moment. After the decision has worked itself out, we are apt to flatter ourselves with having exercised
our will to no small extent. Effort is involved "where a normally less efficacious motive becomes more so and a normally more efficacious one less so." * It is a well known fact that instinctive reaction—those representing objects of passion, appetite, or emotion; also customary ideas, ideas of pleasure and of pain, ideas of near or remote objects—possess the most impulsive power, while all far-off considerations, all highly abstract conceptions, unaccustomed reasons,* etc., have little or no impulsive power. Now, if the non-instinctive reactions gain ascendancy over the instinctive, it is accomplished thru the expenditure of effort. This occurs in ordinary healthiness of will. The idea must call its associated ideas into play and each newly awakened idea must attempt to put its impulse thru. Even in very prompt decisions a speedy preliminary survey must occur. When the right vision then results, action must follow its lead. A form of unhealthiness of will is the precipitate will, in which action follows so speedily upon the idea that all deliberation is ruled out. Another is characterized by the total inability of duly checking abnormal actions. The former must be carefully distinguished from the explosive will, which is commonly regarded as normal, the impulses discharge very promptly. The explosive will is common among

* p. 536.
Latin and Celtic races. "An explosive Italian with good perception and intellect will cut a figure as a perfectly tremendous fellow, on an inward capital that could be tucked away inside of an obstructed Yankee and hardly let you know that it was there. He will be the king of his company, sing all the songs and make all the speeches, lead the parties, carry out the practical jokes, kiss all the girls, fight the men, and, if need be, lead the forlorn hopes and enterprises, so that an onlooker would think he has more life in his little finger than can exist in the whole body of a correct, judicious fellow. It is the absence of scruples of consequences, of considerations, the extraordinary simplification of each moment's mental outlook that gives to the explosive individual such motor energy and ease; it need not be the greater intensity of his passions, motives, or thoughts."* A will of this kind has its advantages if the decision to be carried out is a good one and the man behind it possesses the moral courage to abide by it. But the more reflective person is able to solve much greater problems and, tho' the decisions are longer in the making, the liability to error is correspondingly smaller. This absence of the inhibition of impulses may also be observed in small children, in fatigued and overstrained persons and in a variety of pathological cases, in some imembriates, in people whose

* P. 538
condition is technically designated as "irritable weakness," in which cases the neural tissues have lost their tone. In still other cases the proper inward tone of the neural tissues is preserved but the impulsive idea is of irresistible strength. Dr. Mussey relates the following gruesome incident:- "A few years ago a tippler was put into an almshouse in this State (Penn.). Within a few days he had devised various expedients to procure rum, but failed. At length, however, he hit upon one which was successful. He went into the woodyard of the establishment, placed one hand upon the block, and with an axe in the other, struck it off with a single blow. With the stump raised and streaming he ran into the house and cried, "Get some rum; get some rum; my hand is off." In the confusion and bustle of the occasion a bowl of rum was brought, into which he plunged the bleeding member of his body, then raising the bowl to his mouth, drank freely, and exultingly exclaimed, "Now I am satisfied." * Dr. J. E. Turner tells of a man who, while under treatment for inebriety, during four weeks secretly drank the alcohol from six jars containing morbid specimens. On asking him why he had committed this loathsome act, he replied: - "Sir, it is as impossible for me to control this deceased appetite as it is for me to control the pulsations of my heart." *

* p. 543  * p. 543.
When impulsion is insufficient and inhibition too strong we speak of an obstructed will. The drunkard, sentimentalist, and hopeless failure are well-known illustrations.

In taking account of pleasure and pain as springs of action, we must break a lance with those philosophers—leaders among them, Benthan and Bain,—who have made pleasure and pain the foundation of their philosophy, asserting that one or the other constitutes the motive for all action, and that where they apparently do not share in the production of an action, they actually do, the individual merely failing to realize the fact, because they are far on among the remoter images. But our contention—according to James—is that the mere idea or thought of an object or action is sufficient to produce the latter, while pleasures and pains merely modify it. This does not mean that thoughts of pleasures and pains may acquire and actually do acquire impulsive characteristics, but they are not the only springs of action. Nor does it follow from the preceding statement that the thought of a pleasure must itself be a pleasure. The opposite is often true, just as the thought of a pain experienced in the past may be a positive pleasure. Only stop to think of emotional experiences. Do you smile or frown or blush because of the pleasure of smiling, frowning, or blushing? Think of your reflex and
ideo-motor actions, are they due to pleasure and pain? Think of your fidgetings in embarrassing situations, caused by pain or pleasure, are they? Do you know of a one might say, "anti-societal" man, in whose sight parties are an abomination, but who, upon being tendered an invitation to one, cannot with propriety refuse, and therefore, as gracefully as possible under the grievous circumstances, accepts, tho' inwardly fuming? To argue that pain or pleasure are the cause of his acceptance of the invitation, assuredly is an almost criminal straining of things. But Prof Bain makes certain reservations, and in justice to him these must be stated. Those--actions--furnished by never-dying spontaniety, habits, and fixed ideas, which last "traverse the proper course of volition," * he is pleased to call exceptions to the rule. "Disinterested impulses are wholly distinct from the attainment of pleasure and the avoidance of pain.

The theory of disinterested action, in the only form that I can conceive it, supposes that the actions of the will and the attainment of happiness do not square throughout." * "Sympathy" has this in common with the Fixed Idea, that it clashes with the regular outgoings of the will in favor of our pleasures.* Thus Bain practically agrees with James in the essential facts. The difficulty, seemingly, lies in the terminology and the

* P. 555.
discussion amounts to a verbal quibble.

2. Wiendt * introduces a "volitional process" which consists of an emotion together with its result. Such affective processes that fade out without any special result, constitute the emotions in the strict sense."*

Such changes in the sensational and affective state which are prepared for by an emotion and bring about its sudden end, are called volitional acts. * The way for the development of volitions out of emotions is prepared by those emotions in connection with which external pantomimetic expressive movements occur.* Wiendt also distinguishes between external and internal volitional acts. External volitional acts commence with a sensation and end with an act which removes the present affective state, the emotion being the intermediary. Internal volitional acts close with the effects of ideas and feelings. In this case, the effect which removes the exciting emotion is itself a psychical process. But the feelings accompanying it are identical with those accompanying the external volitional acts, so the sole difference appears to be that its effect cannot be seen. So far as the motives of an act are concerned the feeling elements are far more important than the ideational. The former are the impelling force, the latter, the moving reason, a motive namely, consisting of a combination of idea and feeling. If a single motive is followed by its appro-

* Outlines of Psychology.2 Ed. * p. 201.
appropriate act, we have a case of simple volition or impulsive action; otherwise, that is, when the "decisive motive has risen to predominance from a number of simultaneous and antagonistic emotives." We have a complex volitional process or a voluntary act. The distinction between it and the selective act, which is preceded by a process called choice, is merely one of degree, the conflict of emotives being longer in the latter case. The process immediately preceding in the former is called a resolution; that in the latter, a decision. By retrogradation is meant the process by which voluntary acts gradually become impulsive. That is, when complex volitions are frequently repeated the duration of the conflict of motives gradually diminishes. Therefore, impulsive acts are not only such as arise from sense feelings, but also such as may arise from moral, intellectual or aesthetic feelings. Impulsive acts may become automatic and finally reflex. According to this theory it is highly probable that reflex actions of men and animals were originally impulsive, voluntary acts. Another argument tending to disprove the theory that volitional acts developed from reflex acts are the purposeful character of reflexes and the fact that the movements of animals are evidently simple volitional acts, and not reflex movements. By the transmission of acquired dispositions, *

p. 206.
acts that were voluntary in their ancestors are impulsive or reflex from the very first, in later generations.

3. Muensterberg, *Psychology General and Applied:* In order to postulate a will process two factors must be taken account of. "A change must go on, and an idea of the result of this change must precede the process." * The impulse feeling one experiences when, for example, one rises from his chair to get a book, can be analyzed into a simple kinaesthetic idea of the first movement in the series ending with the grasping of the book, because the other links in the chain of movements follow quite naturally. Of course, upon this theory, one cannot have an impulse feeling of an act unless it has been performed before. However, because the end before the mind is usually not the movement itself, but an indirect result of the movement, this impulse feeling is so subservient to the whole process that an anticipation of the first movement is usually left out. Several ideas of possible ends may be anticipated giving rise to a conflict of ideas, each of which may call up auxiliary associations, and the entire occurrence may go on outside of consciousness. An additional influence on the brain setting preparing the action for a definite goal is called the determining tendency.

Each movement produces a kinaesthetic sensation. So consciousness experiences first a stimulus

* p. 177.
and then the perception of the movement process. Later the stimulus may arouse the kinaesthetic sensation before the movement has been performed, and still later the two fuse into a unit so that the motor process becomes also the effect of the kinaesthetic impression. "Everywhere we start with the automatic movement, develop it into the will movement, organize a number of them into a more complex will movement, and repeat the combination until it becomes itself habitual and thus an automatic movement at the service of more remote will ends." *\[184\] The pleasure and displeasure are perhaps the strongest factors in this process, they are not the only ones, an appreciable portion of our actions in daily routine life being called out solely by the idea of the end. In every full act of attention four processes are to be distinguished. The first of these is that the content becomes more vivid; the second, that the objects not attended to decrease in vividness; the third consists of mental and physical activities, which trains of thought started from attending to the perception or idea; fourthly, the adjustment of the body to the center of attention, resulting in the sending of kinaesthetic sensations to consciousness.

4. Angell, Psychology. The elements to be found upon analysis of volition are foresight of some * p. 184.
end; this end desired, at least, consented to; and cer-
tain muscular movements meant to attain the end. Even
in case of internal volitions definite motor attitudes
are assumed, and all thinking has for its purpose some
future action.

Any sensory images -- visual, auditory, kinaesthetic sensations--or ideational images of an ac-
tion may cause that action, all consciousness being
conative. The reason why ideas fail to produce move-
ments lies in the inhibiting effect of some other
sensational or ideational process. In case of habitual
actions a mere general thought of the action may start
the unfurling of the entire act.

As a strictly mental affair volition is simply
attention, that is, an attending to one of a number of
ends, forces led by sensational and ideational presenta-
tions. "Attention is the function in which mental pos-
sibility becomes motor actuality." *

5. Royce, Outlines of Psychology: "To attend
to any action, to any desire, or to any passion, is the
same thing as "to select", or "to choose" or "to prefer"
or "to take serious interest in," just that tendency or
deed. And such attentive preference of one course of
conduct, or of one tendency or desire, as against all
others present to our mind at any time, is called a vol-
* p. 403.
untary act." * "To think of any sort of activity, already implies a tendency to this form of activity. And actually to will a given act is to think attentively of that act to the exclusion or neglect of the representation imagining of any and all other acts." *

6. Bain's theory of volition still has a plan in modern psychology. According to this theory the human being is endowed at birth with spontaneous energy or surplus activity, which makes it as natural for the child to move its movable organs as it is for the bird to sing, even before stimulation of the senses or the feeling has resulted in any way. This primordial element is the basis for voluntary action. In the curse of these many random movements that the child makes some are bound to bring pain or bring on a pleasurable sensation. The child soon learns to associate the pleasure and the movement, and the memory of the pleasure tends to effect a repetition of the movement, so as to prolong the agreeable sensation. Thus the adjustment becomes fixed, and the movement more and more automatic.*

7. Spencer regards the random reflex movements as due to a molecular discharge thru certain inherited paths of the motor mechanism. Every discharge into such a path is accompanied by a general muscular excitement because of leakage from the stimulated channel.

A successful movement is made by chance and accompanied by pleasure causing a generous issue of nervous energy into the organ reporting the sensation. A path is thus formed, and each succeeding discharge ensues with greater facility until finally the movement becomes reflex.*

8. Sully's theory practically coincides with the two preceding ones. He emphasizes the importance of the association of pleasure with the movement which caused it as the necessary antecedent of the conscious pursuit of an end. *

9. That voluntary movements spring from random, reflex, accidental movements and that they are brought about by associating the result and the movement is also held by Kuelpe. But to avoid making of man an automaton, he accepts Wundt's association connections, i.e., the results of given relations between ideas, and apperceptive connections, implying a comparative and selective activity of the will. *

10. Dewey:- The child has original motor impulses which are discharged thru channels of least resistance; these being phylogenetically determined. The tract which has been of greatest use and benefit to the race in the course of its evolution is the one that is most open. The sensation which accompanies each movement becomes a symbol for that movement. The child

* Psychology Review 1901 p. 496.
* " " " 497
* " " " " 
on first learning to do something moves the whole body; only gradually it acquires the ability to move only the part which it wills to move. *

* Psychology Review, 1901, p. 497-98.
CHAPTER II
PHYSICO-CHEMICAL THEORIES OF VOLITION.

We shall now take up a type of volition theories that has practically no points of contact with those already presented, but is representative of a tendency at present gaining in popularity and championed by able thinkers. Biologists, chemists, and medical men will probably compose the majority of the supporters of this trend, at least, so long as it is in its infancy. Some success they have already had and thereby put themselves in possession of territory hitherto monopolized by orthodox psychology. This type of theories is the invention or discovery of those who hold a mechanistic conception of life. Ziehen, Ebbinghaus, Loeb, Jennings, Critie, Cannon, might be listed as representative exponents. Their theory—barring minor individual differences, we may speak of their theory—we may conveniently call the physico-chemical theory of volition.

1. Many of the conclusions reached by these men are based on experiments performed on the lower organisms. So Loeb experimented extensively with them and worked out his "Tropisms", of interest and significance for the work under hand.

To make a distinction between a purely physical and physico-chemical action he cites the example of the sparrow. When a sparrow flies to a seed on the ground,
we speak of an act of will; but when a dead sparrow falls upon a seed on the ground, we speak merely of a physical force which is operative in causing the sparrow's fall. In the former case a chemical reaction is the concomitant of the physical force. It is this case alone that Loeb discusses. Taking potted rose bushes infected with plant lice, he placed them near a window and permitted them to dry out. As they became dry the lice developed wings, flew to the window, and persisted in crawling up the window-pane. Here they were caught and put into a test tube for further experiment. Arranging conditions so that light—i.e., artificial light—reached the test tube only at one place, the aphids, provided they were normal healthy specimens, would invariably crawl or fly to the corner of the test tube at which the light entered, bunch up, and remain there. If the light was removed and made to fall upon the test tube from a different angle, the process would be repeated in the identical manner. But perhaps plant lice 're an exception' Their being heliotropic proves nothing for other organisms? To meet this objection Loeb undertook to produce heliotropism artificially in animals not naturally heliotropic. Small crustaceans were taken from a fresh-water pond at noon and placed in an aquarium illuminated from only one side.
found that they moved and distributed themselves at random and showed no signs of positive heliotropism. If, however, carbon dioxide, or alcohol, or carbonic acid, in fact any acid, was added to the water in correct proportion the hitherto non-heliotropic animals became positively heliotropic and the result was identical with the result obtained in the experiments on aphids.

Galvanotropism is proven by placing a number of these little animals in a trough and then sending a current thru it, whereupon they at once commence to move in the direction of the positive or negative current. The discussion of the similarity of galvanotropism to heliotropism and its significance generally, I reserve for a later page.

The theory and principle upon which heliotropism in the case of plant lice operates follows: Two factors are to be noted as the condition of the progressive movement of the aphids. They are the photo-chemical action of light in the first place and the symmetrical structure of the organisms in the second place. As a great many chemical reactions of organic bodies are accellerated by the action of light, so also in the case of the organisms under discussion, the photosensitive mass being on the skin—(planarians)—or the
or the retina of the eyes. By symmetrical structure Loeb means symmetrical not only anatomically but also in a chemical sense, so that symmetrical portions of the body are chemically identical. When the two chemically identical portions of the animal, call it the retinae, e.g., are not equally illuminated, the chemical reaction in the one will be greater than in the other. "This inequality of the chemical processes passes from the sensory to the motor nerves and eventually to the muscles connected with them."* When the organism commences to move it will be forced around until it faces the light squarely when both retinae will be equally stimulated and it will be compelled to move in a straight line towards the light. Thus it has no choice whatsoever in the matter, but is a "photo-metric" machine operated by the light, the will.

In the second case, of crustaceans artificially made heliotropic, Loeb assumes that they are naturally heliotropic but that the photo-sensitive mass is so small that light can produce no action on the part of the crustaceans. The acid acts as a catalyzer increasing the amount of photo-chemical substance, and then the process is the same as in the case of the aphids. A reduction of temperature often has the same effect as acid, especially in Daphne and certain marine copepods.

* Loeb, Mechanistic Conception of Life. p.39.
Loeb makes use of the phenomenon of animals normally producing acids, especially carbonic and lactic acids, to account for fluctuations in their heliotropic sensitivity. These acids would increase the tendency of animals to react heliotropically. He further assumes the possibility of the production of acids which have the opposite effect. Fluctuations in the production of these acids would be paralleled by fluctuations in the heliotropic sensitivity of the animals.

The number of species which show typical galvanotropism is not so great as those showing heliotropism. Loeb accounts for this by pointing out that while light acts mainly on the free surface of the animal, the galvanic current affects all of its cells alike with a much more complicated result. The discovery that galvanotropism is more frequently a property of a simple structure, a unicellular organism, e.g., would corroborate this explanation. The experiment is emphasized as a direct contradiction of the view quite commonly held that the reaction of animals are determined by their needs or by natural selection.

On the same basis reflex action and instincts are accounted for. Loeb recognizes no sharp line of demarcation between the two. He finds that authors prefix to speak of reflex actions when single parts or organs react to an external stimulus and to speak of ins-
distinct when the entire organism is involved in such a reaction, as is the case in tropism.

The comparison between the spinal cord and a mirror to explain reflex processes has long been abandoned. Today the purposeful character of reflex movements is the feature upon which interest focuses. This purposeful character seems to be entirely too complex to be referred simply to a physico-chemical process. However, it is just this that Loeb holds, and he rejects emphatically the theory that "reflexes are to be considered the mechanical effects of acts of volition of past generations."* "In each of these cases, changes in the sensory nerve endings are produced which bring about a change of condition in the nerves. This change travels to the central nervous system, passes from there to the motor nerves, and terminates in the muscle fibres, producing there a contraction."* That the ganglion cell is not the principal bearer of the structure for the complex coordinated movements in reflex action is clear to Loeb because plants and animals react in the same way to light and the reflexes still obtain--e.g., in Ciona intestinalis--after the nervous system has been destroyed. The value of nerves lies solely in the fact that they are quicker and more sensitive conductors than undifferentiated protoplasm.

* Loeb, Mechanistic Conception of Life. p. 65.
* """""""" 65.
Even spontaneous activity, as, for example, the rhythmic beating of the heart, must be transferred into the field of physical chemistry. The individual peculiarities of different tissues are due in some measure to the presence in them of certain ions* in correct proportion. By adding these ions to a tissue normally devoid of them, or by changing their ratio, one can impart new properties to it. For example, the muscle of the skeleton can be made to contract rhythmically like the heart when the Na ions are increased and the Ca ions are reduced. This fact again seems to favor the mechanistic conception and to detract from the importance of the ganglion cells which were heretofore held responsible for many phenomena that could not otherwise be explained.

Consciousness and psychic processes in such a mechanistic conception are the operation of the associative memory.* By associative memory I mean that mechanism by which a stimulus brings about not only the effects which its nature and the specific structure of the irritable organ call for, but by which it brings about also the effects of other stimuli which formerly acted upon the organism almost or quite simultaneously with the stimulus in question.* Using this as a criterion, Infusoria and worms, e.g., are found to possess no associative memory. The fact that only certain animals possess

* Na., K., Ca., and others.

* Loeb, Mechanistic Conception of Life, p. 73-74.
the necessary mechanical arrangements for associative memory, and therefore for consciousness, is not stranger than the fact that only certain animals possess the mechanical arrangements for uniting the rays from a luminous point in one point upon the retina."

The following quotations are characteristic of the mechanists point of view:

"Our wishes and hopes, disappointments and sufferings have their source in instincts which are comparable to the light instincts of heliotropic animals. The need of and the struggle for food, the sexual instinct with its poetry and its chain of consequences, the material instincts with the felicity and suffering caused by them, the instinct of workmanship, and some other instincts, are the root from which our inner life develops. For some of these instincts the chemical basis is at best sufficiently indicated to arouse the hope that their analysis from the mechanistic point of view is only a question of time." — "If our existence is based on a play of blind forces and only a matter of chance; if we ourselves are only chemical mechanisms, how can there be an ethics for us? The answer is that our instincts are the root of our ethics and that the instincts are just as hereditary as are the forms of our bodies. We eat, drink, and reproduce, not because mankind has reached an agreement that this is desirable, but because, machine-like, we

* Loeb, Mechanistic Conception of Life. p. 74.
* Loeb, " " " " 30.
are compelled to do so. We are active because we are compelled to be so by processes in our central nervous system, "etc. *

"The light is the will of the animal—in this case, an experiment—which determines the direction of its movements just as it is gravity in the case of a falling stone or the movement of a planet." * Since Pavlov has succeeded in causing the secretion of saliva in the dog by means of optic and acoustic signals, it no longer seems strange to us that what the philosopher terms an "idea" is a process which can cause chemical changes in the body." *

2. Jennings agrees heartily with Loeb in depriving the nervous system of much of its dignity. In general he also believes in tropisms but not in the extreme form for which Loeb stands. Bacteria and infusoria according to Jennings do not behave in accordance with the above local action theory of tropism.

In general there is little in the behavior of the unicellular organism that can be interpreted in accordance with the local action theory of tropisms. Jennings experimented considerably on paramecia and concluded that all stimulation to the behaviour of local organisms is not due to stimulation from external sources—chemicals, hot or cold water, mechanical obstacles—but that a

* Loeb, Mechanistic Conception of Life. p. 31.
* " " " " " " 40
* " " " " " " 62
certain momentum is furnished from within. His experiments on paramecia further compel him to take issue with Loeb on the bilateral tropism theory. He found that the reactions are always the same no matter from which angle and with how great intensity the stimulus was felt by the organism, for when a paramecium was dropped into water containing an acid solution the reaction was identical with the customary reaction when it was stimulated, e.g., at the oral end. Reactions—the try-and-fail method—then continued until the animal had become acclimatized to its new environment. Even what Jennings calls positive reactions are in reality an avoiding of the greater of two evils, as when a paramecium seeks the weaker of two chemicals only by avoiding the stronger one, in which weak solution it continues to react, always being repelled by the stronger solution, until acclimatized.

3. In Crite we have another loyal and zealous member of the mechanistic school. He, no doubt, became interested in this work thru his discovery that there is a large amount of adrenalin in the blood when one is angry, and that an injection of adrenalin into a dog will promptly cause anger. He has another valuable discovery to his credit, namely, the discovery that the shock to a person upon whom an operation is performed
after the administration of a general anaesthetic, is just as great as it would be if the anaesthetic were not given. But if a local anaesthetic be applied before the general, the shock is avoided. The following statement is not ambiguous:

"My thesis is that environment has been the actual creator of man; that the old division between body, soul, and spirit, is non-existent; that man is a unified mechanism responding in every part of the adequate stimuli given it from without by the environment of the present, and from within by the environment of the past, the record of which is stored in part in cells throughout the mechanism, but especially in its central battery—the brain. I postulate further that the human body mechanism is equipped first, for such conflict with environment as will tend to the preservation of the individual; and, second, for the propagation of the species; both of these functions when most efficiently carried out tending to the upbuilding and perfection of the race."*

The fact that man has added to his environment certain factors to which adaption has not yet been made—the x-ray, bullet, etc.—is proof that the environment of the past is the creator of the man of today. Pain is another proof of this thesis, for it is always a stimulus to muscular activity of a protective nature.

* Crile, "The Origin and Nature of the Emotions." p. 128.
This explains why only certain types of infection, for example, are painful; namely, those in which the infection may spread by muscular activity or where continued muscular rigidity is of advantage for purposes of recovery.

The nervous system found, in motor plants, as the Venus fly-trap, in its simplest form, is the mechanism by means of which man makes the necessary adaptation to his highly complex environment. Since the preservation of the individuals of the species were and are the only ends for which bodily energy is expended, the nervous system has been developed especially for securing the necessary motor activities. But these motor activities include the so-called psychic states, for, in the opinion of Crite, love, hate, poetic fancy, moral inhibition, etc., are motor activities that occur automatically as responses to stimuli of the external environment, in their turn incite different members of the body to activity, and result in a depletion of the potential energy of the brain cells, "which is proportionate to the muscular exertion of which it is the representative." *

The nervous system has three kinds of receptors, the nociceptors, the beuceptors, and the distance receptors, whose functions are expressed in the term used

* Crite, Origin and Nature of the Emotions. p.130
to designate them. Theseceptors had to the different brain patterns of which there is one for every adaptation that has been made for the good of the species, each one the mechanism for the performance of a single kind of action. The brain cells when stimulated by a sensation release the energy—just how this process is effected, Crile cannot say—stored in the brain cells, and causes the activity of the brain pattern, which these cells compose, in some miraculous manner. "If the full history of the species and of the individual could be known in every detail, then every detail of that individuals conduct in health and disease could be predicted. Reaction to environment is the basis of conduct, of moral standards, of manners and conventions, of work and play, of love and hate, of protection and murder, of governing and being governed, in fact, of all the reactions between human beings, of the entire web of human life. To quote Sherrington once more: "Environment drives the brain, the brain drives the various organs of the body." *

By way of conclusion: Crile recognizes no attribute in man that, in its ultimate analysis, is not possessed by the lowest animal or even by the vegetable creation, for all action in every nature is but response, a necessary response, to a given stimulus. "If our

* Crite, Origin and Nature of the Emotions. p.136.
premises are sustained then we can recognize in man no will, no ego, no possibility for spontaneous action, for every action must be a response to the stimuli of contact or distance ceptors, or to their recall through a sociative memory." *

4. Cannon is not directly or primarily interested in the will but in the effect of emotional and psychic states upon the body, as his book, "Bodily Changes in "ain, Hunger, Fear, and Rage," indicates. He demonstrates to the satisfaction of the most sceptical that fear, rage, pain, for instance, will prevent the secretion of the gastric juice in spite of the presence of food in the stomach, the presence of food, alone, not being sufficient for the production of the gastric juice. He further proves that there is a "watering of the stomach" --flow of digestive fluids--just as a watering of the mouth" upon smelling or seeing or even thinking of palatable food, in which case the secretions are real psychic secretions. Adrenal secretion is strong in emotions and pain, and some emotions can be produced by injecting a given amount of it into the system. Glycosuria is due to emotion or pain of both. Adrenalin applied or injected in correct proportion lowers the fatigue threshold of muscles, even denervated muscles, in five minutes, while rest would require one hour for the same result.

This might suffice for Cannon, for to go more into detail would lead us astray. The point to note is the mechanicalness of it all. Emotions, and their importance in eliciting and moulding the will must be remembered, may be caused by the injection of certain secretions, for instance. These, then effect the body in a harmful or beneficial manner as the case may be. The condition of the body again may inaugurate movements usually attributed to the will.

5. Ziehen's contribution to our subject we glean from his "Introduction to the Study of Physiological Psychology"—Physiological Psychology, according to the interpretation he puts upon it, deals only with those psychic phenomena to which concomitant physical processes of the brain correspond—The first movements of which we know are the reflex and automatic movements, which are not accompanied by psychic processes. Of these the reflex developed out of the automatic through the agency of natural selection and are divided into two groups, namely, those that have a phylogenetic evolution and those that have an auto-genetic evolution. At a later stage of the evolution development we discover psychic concomitants of many actions. His phenomenon, and especially the genesis of the psychic processes, Ziehen cannot interpret, as he frankly admits. He leaves the
problem to be solved by metaphysics, since it does not come under the jurisdiction of physiological psychology, as limited by the above definition.

There is no faculty of will. What we are in the habit of terming "will" is a nil, a non-existent entity. We cannot, for instance, think as we will but must think according to the prescription of those associations which happen to be present. Voluntary thought is a pure illusion. Action may be deduced very satisfactorily from sensations and from the mental images of former sensations, the ideas, in accordance with the laws of association. You see a mountain in the distance and its perception proves to be a stimulus giving rise to the thought, how interesting it would be to climb that mountain. The battle of thoughts within you goes on and you arrive at the desire, I should like to climb that mountain. Presently you have been brought to the decision, I will climb that mountain. "The motor idea has become extraordinarily intense, the positive tone of feeling has reached its height, and, above all, the assistant ideas predominate over the inhibitory." *

Loss of will power, monomania, moral insanity, all may be explained by referring them to disturbances of the sentient life, especially of the moral tone, and to intellectual disturbances, i.e., disturbances of the ideas or of the association of the ideas, and in no wise

* p. 294.
make necessary the assumption of a will faculty. Slug-gishness of the association of the ideas, abnormal negative tones of feeling are the causes.

There can, of course, be no freedom of the will for Ziehen. He admits that one experiences a feeling of freedom, but attributes it to the absence of external compulsory motives and, therefore, to the fact that not the sensations alone but also the images of memory determine our movements. In addition there should be mentioned the fact that ideas of other movements beside the one that gains ascendancy take part in the play of motives preceding action. But the one that carries off the victory does so thanks only to a stronger emotional tone and greater associative affinity combined with the favorable grouping of the latent mental images.

So far as accountability is concerned, Ziehen's view is well summed up in the following quotation:

"Psychology, let us repeat, does not deny absolute aesthetical or ethical laws in so far as they can be demonstrated from some other standpoint; but psychology itself limited to empirical data, can only establish empirical laws." *

6. Like Ziehen, Ebbinghans can discover no new kind of mental state in the process popularly called willing, but merely sensations, feelings of pleasant-

* p. 298.
ness, unpleasantness, and images. Commencing with the feeling instinct, for example, unpleasant sensations of hunger and thirst, in the infant, we find them followed up by various movements of the arms and legs, of crying, etc. until the unpleasant situation is changed. These movements, at first unconscious, leave kinaesthetic impressions after sufficiently frequent repetition of them images of the various parts of the whole satisfying process, e.g., the mother coming to relieve it of inconveniences, become conscious even before the movements occur. "Willing may be defined as an instinct which foresees its end." * 

Attention and inattention, i.e., the enhancement or impairment of impressions, are not the outcome of a particular activity of the mind, not the result of the will, but simply the effect of a peculiar relation existing between the impressions themselves. Such a relation is the one called interest, or the parallelism between feeling and attention, and the content of our mind at the time of receiving the new impression. "The foreseeing of our attention is the will to give attention, is voluntary attention." * An illustration would be hearing the teacher announce his intention to give an explanation, and imagining the strain of our muscules, that is, the motor adjustments, which begin simultaneously with the beginning of the explanation.

* Ebbinghans Psychology, p. 86. * p. 91.
Concerning free-will: Ebbinghans knows of free actions only in so far as distinguished from instinctive action, which latter are the result of the stimuli of the moment, the formed resulting essentially from factors within the mind. But the actual sensory impressions, as a rule, are quite insignificant merely setting free ideas derived from numerous previous sense impressions.
CHAPTER III

PSYCHOLOGY AS A SOCIAL FACT.

Stout, McDougall, and Mead assign a prominent place in volition to the self factor.

1. In Stout the terms "conative development," "conative tendencies," and "conations" strike our attention. Considered in the abstract conation has a positive side, namely, appetition and a negative side, namely, aversion. In each of these a different intensity, feeling-tone, and persistence may be noticeable. Beyond this we dare not go if we would avoid confusing conation and cognition. Not that conation is to be considered inferior to cognition, Stout treating the two as aspects of the same process; but while the latter "gives the process its determinate character; without conation there could be no process to have a character." Corresponding to the stage of mental development we distinguish different conations. In the perceptual stage, the perceptual impulse which ordinarily finds expression in bodily movements; at a higher stage, the desire; at a third stage, ideals.

A second noteworthy contribution of Stout is the introduction of the "Self" as playing a leading role in the will, being the power behind the throne in deliberation and choice--the two, deliberation and choice.

* Manual of Psychology.
* p. 599.
constitute will in the strict sense of the term—, the sine qua non of all volition. The concept of the "Self" includes "in systematic unity the life-history of the individual, past, present, and future, as it appears to himself and to others, together with all its possible and imaginary developments." *

In impulsive action and in deliberation due to a struggle of incompatible impulsive tendencies the Self does not come into play, but the end is worked out in mechanical fashion, as when a small child suddenly encounters a dog and draws back frightened, then makes a rush towards him, withdraws again, etc. But in voluntary action it is the highest court of appeal, the question not being a mere objective "this?" or "that?", but "shall I do this or that?" The alternative courses are brought before the Ego and the Ego sits in judgment upon them. Take the illustration of a man brought face to face with a tempting opportunity to become intoxicated. His present mood and impulse may be to indulge freely. This mood and impulse is certainly a part of the Self, but only a transient phase of it. He may yield to the allurement of the moment and ever after, because of the incompatibility of this transient phase with the whole of the Self, sincerely regret his folly. He may, however, realize the incompatibility before the fatal step is taken, and thus be prevented from taking it. He

* 601 p.
may even, if the realization of the incompatibility prove impotent as a preventive, conjure up further developments of the conception of Self, e.g., as an elder in his church, as the respectable father of a respectable family, as a good moral Christian, etc., and these considerations would determine the course he must take in case "the mere concept of the Self in its vague totality without detailed development would not be sufficient to produce a decision." *

In deliberation accordingly, when one line of action is contemplated as being performed by the Ego and then another, the Ego is not to be regarded as an innocent bystander indifferently observing the process. By no means, but the desires and aversions, i.e., the motives, are directly traceable to the Ego, arise from the nature of the Self, and would be impossible without it. So, then, the motives or reasons for an act independently considered never make up the entire cause of the act but behind them stands the "Self as a whole" The exact relation between it and the motives is somewhat of a mystery better felt than explained in language.

In voluntary decision, which may mean the state of transition from deliberation to a definite line of action or may designate the state following upon the cessation of deliberation--Stout chooses the latter definition for clearness sake--the "Self has become fixed

* p. 603.
where it was previously indeterminate." * Of the motives, those in favor of the course decided upon persist as motives for action, those contrary to the chosen course may vanish entirely or persist, but only as obstacles, which obstacles nevertheless need not weaken the force of the decision, and may afford the opportunity for exhibiting its strength.

To account for the fixity of voluntary decisions, for the dogged persistence men show in the face of grave obstacles which cannot be due solely to the strength of the motivating desire, the following: "When I judge that in so far as in me lies I shall realize a certain end, the endeavour to realize that end becomes ipso facto an integral part of myself. Failure to realize it becomes my failure, my defeat. Thus volition becomes strengthened in the face of obstacles by all the combative emotions. These are of varying kinds and of varying degrees of strength in different individuals; but all tendencies to hold out and struggle against opposition, are enlisted in the service of the will, inasmuch as the idea of the line of conduct willed is an integral part of the Self." * In pathological cases, however, the Self may identify itself with the opposite course of the one which is actually taken; as when a person does not wish to but cannot resist the temptation to throw

himself from a precipice or the fourth story of a building.

2. McDougall's views * are of prime interest and importance. He lays all emphasis on the self and the self-regarding sentiment in one's volitions and entire moral conduct. The self-regarding sentiment he defines as the "system of emotional and conative dispositions that is organized about the idea of the self and is always brought into play to some extent when the idea of the self rises to the focus of consciousness." *

Now we might first take up the formation and growth of the self-regarding sentiment as created and by the social environment and then the role it plays in volition. But I prefer to reverse the order and to deal with the role the self plays in volition first, and then its growth and development as a social resultant.

In volition, in moral effort, for instance, the weaker impulse apparently overcomes the stronger. How account for this anomaly? James, as we have seen, admits that we here confront a mystery, an insoluble problem, and contents himself with the indeterministic statement that the will exerts itself on the side of the weaker motive and enables it to carry off the victory. Not so Mr. McDougall. He is a determinist and thinks

* Social Psychology.
that volition is no mystery "but that it is to be ac­
counted for by the same principles as other modes of
human activity; that it involves no new principles of
activity and energy, but only a more subtle and com­
plex interplay of those impulses which actuate all
animal behaviour and in which the ultimate mystery of
mind and life resides." *

The essential mark of volition as distingui­
shed from desire, aversion, from all motives, from all
conations, in short,- "is that the personality as a
whole or the central feature or nucleus of the person­
ality, the man himself, or all that which is regarded
by himself and others as the most essential part of him­
self, is thrown upon the side of the weaker motive," * and herein he is in perfect harmony with James. The
essential and immediate effect of volition is the firm
holding of an idea at the focus of consciousness. James
regards this effect as brought about by the inhibition
of all rival ideas that tend to exclude it. The idea
maintained in the focus of attention then works itself
out of its own accord. Wundt virtually holds the same
view. But McDougall considers this inhibiting character­
istic of the will as a secondary or collateral result
of the reinforcing of the one idea, namely, of the end
willed, as inhibition throught the entire nervous sys-

* p. 231.
* p. 240.
tem almost always appears as the negative process of a positive process of innervation and not as a special impulse sent out to the muscles of the voluntary system.

But the question now arises, how can a mere idea, and the idea of the self, when isolated, have no redeeming features before other ideas, how can the idea of the self compete for ascendancy with the more primitive and coarser desires and passions, let alone overcome them? In this difficulty the self-regarding sentiment comes to the rescue. "The conations, the desires and aversions, arising within this self-regarding sentiment are the motive forces which, adding themselves to the weaker ideal motive in the case of moral effort, enable it to win the mastery over some stronger, coarser desire of our primitive animal nature and to banish from consciousness the idea of the end of this desire." * Without this self-regarding sentiment the idea of the self would play but an insignificant and colorless role in, for instance, moral choice. And now follows the formal definition of volition: - "The supporting or re-enforcing of a desire or conation by the cooperation of an impulse excited within the system of the self-regarding sentiment." * Just where the line between complex conations that are voluntary and those that are not is to be drawn cannot, of course, be definitely

* p. 248.
* p. 249.
determined, since, as we shall see, the evolution of the self-regarding sentiment is a gradual process. McDougall lists seven stages as illustrating the progress from a simple conflict of impulses to volition in the fullest sense of the term. It is in the third stage where he assumes the most primitive type of will.

Might a word be added as to the relation of the will to character? Is character that from which the will flows? One could just as well reverse the order and arrive at a definition of will. The first requirement of character is the orderly arrangement of sentiments in a hierarchy with a master sentiment a ruling passion at the top. But this is not sufficient. This arrangement would produce merely a specialized character and might result in a complete collapse of the owner if the ruling passion could no longer be gratified. The master sentiment must be the self-regarding sentiment, combined with one for an ideal of conduct. It must have risen above the dependence on the regards of the mass of men; and the motives of the master sentiment in the service of the ideal must have attained an habitual predominance. When all these conditions are fulfilled a true moral character in the fullest sense has evolved.

Having satisfied ourselves as to the importance of the self-regarding sentiment in volition, it behoves
to attempt a presentation of its origin and growth, with the chief emphasis on the social factor. The idea of the delf and of the self-regarding sentiment develop in such intimate relation that they are best studied together, as the outcome of complex interactions between the individual and the society of which he is a member.

The first movements of the animal and the infant are either reflex movements or the visible manifestations of instinctive impulses. When a movement, prompted by instinct, attains a pleasurable end a tendency to repetition of that movement is established. If the movement does not result in or is not accompanied by a pleasurable feeling, a new movement and again a new one is made until a pleasurable end is gained, where-with the tendency to repetition is created. Somewhat later the end to which an instinct prompts becomes fore-shadowed in the mind and a greater continuity of effort results. Still later the steps and actions intervening between the impulse and the end become more numerous, the original impulse furnished the motive power for each separate link in the chain. Up to this level, if the child has any delf-consciousness whatsoever, it is the minimum that one can have. It's behaviour is non-normal.

At the other end of the scale is the man with
a fully developed will. His actions, where they are not the direct issue of his will, are the outcome of habits originally built up voluntarily, i.e., they are secondary results of volition. This is the cool, de-liberating, moral man; the man who does not act im-pulsively, instinctively. He is the man who perhaps frequently throws his personality upon the side of the weaker motive and thus, by acting contrary to his dis-position, tendency, inclination, acts in the line of greatest resistance, in the sense in which this phrase is usually interpreted.

The passage of the infant from the lowest spar of the ladder to the highest is rendered possible by the development of self-consciousness, of the senti-ments, and of the character, which development is un-thinkable except in society; for we know that the thought of self as isolated from society is, strictly speaking, impossible, but is always a thought of self as related to society. In this development can be distinguished, roughly speaking, four planes or levels.

The first of these is "the stage of instinctive behaviour modified only by the influence of the pains and pleasures that are incidentally experienced in the course of instinctive activities." * It is in this stage that the child learns to distinguish between himself and

* p. 181.
the objects of his external environment. It is inter­
esting to note that parts of his body are sometimes re­
garded as objects of the physical environment; some­
times, when the seat of painful, pleasurable, or other
sensations, regarded as part of the self. If we can
imagine a normal human being growing up in a strictly
physical environment we should expect a very imperfect
development of the idea of the self. It could be little
more than an idea of a bodily self distinguished from
external objects merely by its being ever present, hav­
ing a special interest because of sensations of pleasures
and pains bound up with it, and of kinaesthetic sensations,
also, because the seat of the primary motions. Beyond
this he could hardly advance, for further development
demands social surroundings and influences.

The second stage is the one "in which the opera­
tion of the instinctive impulses is modified by the in­
fluence of rewards or punishments administered more or
less systematically by the social environment." * Upon
this level the child learns to distinguish between per­
sons and inanimate objects. Persons forcibly attract
his notice by virtue of their movements, the sounds they
produce, and the relief they afford him from bodily dis­
comfort. Very early the child's inherent disposition to
movement and imitation cause him to smile, for instance,

* p. 181.
when his mother smiles, to laugh when he hears and sees other children laugh, and so to experience in some degree their emotions. His own emotions he then learns to attribute to others when the external manifestations are the same. The objects of his inanimate surroundings are at first treated in the same manner, which fact plainly demonstrates that the idea of his self is more than the idea of a bodily self patterned after ideas of inert objects. Somewhat later the child observes more acutely the behaviour of those about him and especially their feelings and emotions, upon which he learns to play. By copying them and assuming them in play—as when a girl treats her doll as a mother would her child—and reality—as when a little girl scolding a younger sister as her mother would—his understanding of the same is increased, and grows with his ideas of other selves. And now the emotions and attitudes of those about him are more freely expressed in response to his behaviour; there is praise and blame, anger and pleasure, etc. The child sees himself in the light of sentiments expressed by his superiours, and the boy continually told and retold that he is a naughty boy or a beautiful child will soon regard himself as a naughty boy or a beautiful child and proceed to do honor to the role imposed upon him. But there are also oppositions and prohibitions encountered upon this plane, with which
the child is powerless to cope. Refusal to comply is followed by coercion in the form of punishment, which generates fear. He is held accountable for a breach of the rules. The child's knowledge of his self and that of others is thus again considerably increased. He realizes his limits and impotence and the might and power of others, and his relation to them assumes a new aspect.

Hereupon follows "the stage in which conduct is controlled in the main by the anticipation of social praise and blame." *

The intense desire for the approval and the intense fear of the disapproval of society by men is not sufficiently accounted for by referring it to the anticipation of the pleasure derived from approval and pain of disapproval, for some men willingly sacrifice all the good things of life for posthumous fame, the soldier cheerfully faces death conscious that he shall not be able to enjoy the approval of society. The finest moral acts are decided upon and performed without any consideration whatsoever of probable praise and blame. According to McDougall the solution of our problem is to be sought in the development of the self-regarding sentiment.

Of this sentiment we distinguish two types. Pride and self-respect. The difference between them, n

* p. 181.
not clear-cut, is that pride lacks the element of negative self-feeling, i.e., the mixture of insignificance, admiration, and wonder one experiences in the presence of men of superior endowment, while self-respect is a wholesome mixture of the positive self-feeling, feeling of superiority in the presence of inferiors, and negative self-feeling. The ratio of these two elements in a person will depend upon the nature of the social influence brought to bear upon him. In the case of a gifted prince who is never reproved, never made to feel his short-comings, the self-regarding sentiment will be pride unadulterated. In the ordinary child subjected to authority and punishment, infusing humility and the imitative attitude, it will not be evolved in such a one-sided fashion. But still McDougall does not regard this as sufficing to explain our undue reverence for social approval and disapproval. He maintains that the self-regarding sentiment must further undergo a process of moralization, in which fear is an important factor. This is explained by tracing the influence of punishment from childhood. In early childhood corporeal punishment instilled fear into us. Later the threat of punishment, or an angry word or frown served the same purpose. For adults this fear element therefore, lurks in public disapproval. Also the gross froms of reward of childhood, as well as active sympathy,
that is, the desire to bring the emotions and feelings of fellowmen into harmony with one's own, or vice versa, may be regarded as tending social approval and disapproval some of its prestige.

But this type of conduct still has shortcomings rendering it vulnerable to the shafts of criticism. Such a shortcoming is the fact that the motives involved are essentially egoistic, though a sparse sprinkling of the altruistic impulse must be admitted in some cases. And then, conduct due to the soliciting and repressing influence of public opinion, is apt to meet the requirements as long as one is in the limelight, but when the danger of discovery is removed the coarser instincts carry the day. A third limitation lies in the fact that the customs and traditions, i.e., the public opinions, of different societies differ radically, and the conduct regarded as perfectly proper in one may be the acme of impropriety in another. How, then, the highest stage of moral conduct?

"The highest stage is the stage in which conduct is regulated by an ideal of conduct that enables a man to act in the way that seems to him right regardless of the praise or blame of his immediate social environment." * The child going out into the world finds that some of the rules that obtained in his home and community are everywhere taken for granted, others are
disregarded by some people or groups of people, or deemed positively wrong. He also observes new rules that did not obtain in his home and community. Now those rules and customs which he finds to be universal he will be inclined to observe even more scrupulously than before. In regard to the others his position will be that of the skeptic, at best their power over him will be appreciably weakened. While this condition of things affords the modern civilized child less stability than the custom and usage-ridden savage child possesses, it, on the other hand, affords him the opportunity of rising to a moral height and independence, to an independent exercise of moral judgment, which the savage, because of the monotonous sameness of his surroundings, can never realize.

And the exercise of moral judgments is a "sine qua non" of true moral behaviour. However, also moral judgments are not a spontaneous creation of the individual, are not produced independently of the influence of society. Whether, now, upon analysis one holds that in them the emotional factor precedes the intellectual as Prof. Westermork does; or whether one believes that the moral judgment antedates the moral emotion, as Prof. Fowler does; or whether one takes the middle ground with McDougall who distinguishes original
moral judgments, in regard to which Dr. Fowler is correct, and imitative moral judgments, concerning which Prof. Westerenarck is correct, our interest centers around the fact that they are imposed upon the child by others, as when, for instance, he passes the moral judgment "You are naughty not put your elbows on the table".

But the example mentioned is one of an imitative moral judgment. The original moral judgments are the ones upon which a man rises to a higher plane of conduct. Are we to fail in sight of the goal? — All judgments are based upon sentiments, and the really moral ones upon the abstract sentiments, as the love of justice, courage, self-sacrifice, etc., and just these abstract sentiments are the ones which the individual develops only in society. In the first place language which he learns from his fellow-men, is an indispensable prerequisite. In the second place it is the moral tradition which in its fullest form is represented by the elite of any given society. "The child then, builds up his abstract sentiments by means of a series of emotional judgments, judgments of approval and disapproval, which are original in the sense that they spring from the emotions and concrete sentiments; but they are not independently formed judgments, but rather
emotional judgments made under the very powerful directing influence of personal suggestion and sympathy." *

3. Prof. Mead has written an article entitled "What Social Objects Must Psychology Presuppose?" * It is his interest to demonstrate in this paper that the consciousness of self presupposes social objects. He takes his start from gestures, which may be regarded as the beginning of acts, as truncated acts that is, or as the overflow of nervous energy. Every such gesture of one form is a stimulus to another form already under social stimulation. This fact is of prime significance, for all gestures, to whatever class they belong, whether they are the beginning of the outgoing act itself or are only indications of the attitude or nervous tension which these attitudes involve, have this value of stimulating forms, socially organized, to reactions appropriate to the attack or flight or woonig or suckling of another form. * Hence, the importance of these gestures, even before they have come to have conscious meaning, not to mention the changes in the circulatory system, the altered breathing, rigidity of muscles, etc., about which innervations the consciousness of self is supposed to gather as a core.

* p. 223.
* p. 177.
But not until consciousness of the meaning of these gestures has arisen, and we have taken note of it, have we fathomed their importance. Consciousness of meaning comes about when we imagine the response, i.e. when we have an image of the response which a gesture will produce. It cannot be secured except by observation of the response produced in the other forms, which response becomes identified with one's own emotion and attitude. Therefore other selves, that is, social objects are the condition of the consciousness of self.

"When in the process revealed by introspection we reach the concept of self, we have attained an attitude which we assume not toward our inner feelings, but toward other individuals, whose reality was implied even in the inhibitions or reorganizations which characterize this inner consciousness." *

* p. 179.
CHAPTER IV.
RESPONSIBILITY.

In turning to the problem of the freedom of the will, we turn to one of the oldest problems of philosophy and theology and science, an intricate, ancient but ever-present problem. Epicurus proclaimed us free, while the Stoics asserted that necessity governs all. St. Augustine—in his theology he was a predestinarian pure and simple, his "gratia irresistibilis" and his "donum perseverantiae"—and St. Thomas discussed the question of free will. In England, Hobbes, Locke, Hume, devoted time and energy to it. But the mystery was not cleared by any of these thinkers. Prof. H. Sidgwick admirably sums up the arguments for and against determinism and concludes that they substantially balance, and therefore, especially since no practical issue is involved, for people act alike whether libertarians or determinists, deems it wise to abandon the issue. Many modern writers, Dewey and Tufts among them, agree with Prof. Sadgwich because to them the problem is too difficult and too unimportant for discussion. *

This, however, is not our view. The topic is by no means unimportant, for it involves the question of responsibility. That it is difficult we frankly and gladly admit, and, of course, our intention is not to

solve it and put it beyond the pale of future discussion, for in its final analysis the question is one of faith, not of knowledge, as are the questions of the First Cause, the Being of God, the Beyond, etc. It cannot be solved on strictly psychological grounds. "The question of fact—on the other hand—in the free-will controversy is thus extremely simple. It relates solely to the amount of effort of attention or consent which we can at any time put forth." But a difficulty lies in the fact that we have no mathematical formula or laboratory contrivance for determining whether at a given time, in a given crisis, we actually did put forth the maximum effort, or whether it would not have been possible to exert ourselves yet a little more. The repentant murderer in his prison cell cannot easily be convinced that he put forth the maximum effort to prevent his irrevocable deed. No, the final solution of the problem lies outside the sphere of psychology, inside the realm of dogmatics and ethics.

Nevertheless we venture a discussion of the problem in order to understand and appreciate the ideas and contentions of the warring factions and to form an opinion concerning the implications of free-willism and determinism. It is a classical problem, as Palmer

* James Principles of Psychology. p. 572.
is pleased to style it, and by this terminology he means that it is one of those matters which each generation debates. "and there are a few surer signs of the intellectual earnestness of an age than the zeal it shows over such problems. No age settles them, each formulates them anew, but in wrestling with them each gains a power and an insight not to be otherwise obtained." * In our day the terms freedom and free-will are really obsolete. Interest today centers about the problem of responsibility.

Two suppositions should be stated before we embark upon a discussion of our subject by defining determinism and indeterminism. The one is that we make theories about the world in order to arrive at a conception of things that will afford us subjective satisfaction; the other that, if of two conceptions the one makes a stronger appeal to our reason than the other, we are justified in regarding it the truer one of the two. These suppositions are fair. The triumphs of mathematical and physical sciences, the popular beliefs about nature—of Causality, Evolution, etc.—are not spontaneous phenomena that obtruded themselves ready-made upon our notice, they have not arisen from passive receptivity on our part, the order in the world did

* Palmer. p. 4.
not appear until man in order to satisfy practical needs to attain specific ends, deliberately sought for order, and, so to say, created it in his own mind. "All our scientific and philosophic ideals are altars to unknown gods. Uniformity is as much so as is free-will." *

We shall also avoid possible confusion by ostracising the word "freedom" and substituting indeterminism. The reason for this high-handed procedure is that both parties to the contest claim an absolute monopoly of the word freedom. The "soft" determinists who, in contrast with the old-fashioned "hard" determinists, avoid such harsh and grating words as "bondage of the will," "fatality," "necessitation" etc., regard freedom as "necessity understood" and bondage to the highest is identical with true freedom. By so doing we shall avoid so vexing an anomaly is a "free-will determinist".

What, now, is the meaning of determinism? -- In theology it takes the form of predestination. That is, everything, one's acts and thoughts in the religious sphere, one's salvation or condemnation are predetermined, are foreordained by God in all eternity. Without further discussing this phase of determinism, I might remark that no inconsiderable confusion is due to the failure to distinguish between "praedestinatio" and

* James Dilemna. p. 147.
praesentiae" being in no wise causal. As in predestination no person has any control whatsoever over his future or even his present, for that matter, everything being fixed in unbending rigidity; so also in determinism considered in the wider sense. The future is in no way ambiguous but absolutely fixed. If one had insight into and understanding of the laws and order that prevail at the present, he could infallibly and minutely predict the future, for the tomorrow is contained in, is of the same block as, the today. There is no free play, there are no alternatives, there are no possibilities for determinism. Everything happens just as it must. Necessity and impossibility are its two categories.

"With earth's first clay they did the last man knead,
And there of the last harvest sowed the seed.
And the first morning of creation wrote
What that last dawn of reckoning shall read." *

Indeterminism, of course, is the antipode of determinism. There is a certain amount of free play, it holds there are alternatives and ambiguities, laying down one thing does not necessarily, at least not in every case, call for the other, of several alternative

* James Dilemma. P. 150.
possibilities, the others cease to be possibilities only upon the one's becoming actual. Self-guidance, absence of alien interference in myself and in the environment, dual—or more—possibilities are its three factors.

Perhaps our sense of fairness calls for the statement at this time and place that both determinists and indeterminists have an obvious and important duty to perform in the higher scheme of things. The former hold high the honor and significance of law and order, of the fact that in this cosmos all things are influenced by all. The latter defend the work of man, his dignity, and capacity for self-guidance.

To some the seeming irrationality of chance constitutes an argument in favor of determinism. Chance in our scientific age, says the determinist with contempt; chance in the twentieth century with its omnipotent physics, chemistry, and psychology laboratories, with its achievements in astronomy, geology, science of society, etc., etc.; chance in this age of science with its well-established laws and principles, with its exact knowledge of the beautifully harmonious and efficient working of things. Shall we, in possession of the fruits of ages of discovery and experience, honestly assume the existence of ever an inkling of chance? One
Inkling of chance in this world involves the possibility of the sun and moon and stars going out of their course and running in hideous confusion. If chance exists why shouldn't it be possible that gravitation cease to function and utter ruin ensue? No, chance is unthink¬able, is outright impossible.

But until we agree as to the definition of the word chance, arguing its existence or non-existence will be futile indeed. Let it be well understood that chance does not signify the absence of trains of sequence; it does not obliterate causality. Let it further be emphasized that chance is a negative term and does not stand for positive irrationality and preposterousness. To call a thing "chance" does not tell us anything about the thing itself. "It may be a bad thing, it may be a good thing. It may be lucidity, transparency fitness incarnate; matching the whole system of other things when it has once befallen, in an unimaginably perfect way. "All you mean by calling it chance is that this is not guaranteed, that it may also fall out otherwise." * To attribute an occurrence to chance is no more than a convenient method of acknowledging your ignorance of the intricate workings of the forces which fathered the incident. In "taking a chance" at a

"grab bag" you rightly attribute the consequences to chance—or luck or accident—without employing that the law of gravitation or any other law was, for the time being, suspended.

Chance thus defined, namely, as ignorance of the steps leading up to the condition, attributed to it, we may baptize subjective chance to distinguish it from objective chance which we shall now briefly define. It is the field of coexistence in nature, by which is meant that different lines of sequences exist side by side in our universe without apparent relation to each other. Planless concurrence is the field of chance. Science may trace the antecedent courses of one line of sequences, but cannot account for the concurrence of many. In the case of the Spanish Armada, the sequences leading up to the sailing may be traced and the sequences leading to the storm lend themselves to analysis, but the wreck cannot be accounted for. It was the natural outcome of a collision of two distinct, and up to the critical moment, separate lines of sequence. "We were in error in speaking of the world as ruled by law; it is ruled by laws, each pretty regardless of its neighbor. Everywhere it is the business of mind to bring these laws into cooperation. The world's melodies, its ties
of succession, are due to its own mechanism; its harmonies are either ethical or accidental." *

The above definition also contains a reply to popular contention that, if the will is free, a man's murderer may be his dearest friend or bitterest enemy, a mother may strangle or suckle her infant, etc., etc., as if chance implied the moral possibility of everything physically imaginable. Of course, the diplorable truth remains that friend sometimes does kill friend, that mothers do strangle their infants, etc.

The fact that free effort is so closely related to phenomena which are clearly predetermined, the fact that voluntary decisions shade so gradually into decisions without effort, then into ideo-motor and reflex acts, represents a small temptation to sacrifice the freedom of the will entirely. For are not the ideas which make up the matter of deliberation brought about by association which is a reflex process? The feeling of effort, according to Prof. Titchener, is nothing more than the process of one force expending itself, at least to some extent, to neutralize another. If the forces happen to be ideas, one set of them tends to be realized in action, but is inhibited by another set of ideas. The set containing the majority of ideas we call ourselves and the set containing the smaller number the resistance which must be conquered. Both sets, however, belong to us and the above manner of speaking is

* Palmer p. 140
inexact. Just where the flaws of this theory are to be found—let us always bear in mind that this is theory—is difficult to determine—Does introspection confirm it?—Perhaps the major premise is all wrong. At any rate "science—however—must be constantly reminded that her purposes are not the only purposes, and that the order of uniform causation which she has use for, and is therefore right in postulating, be enveloped in a wider order on which she has no claims at all." *

Causality exists in the physical world, as can be proven, to a great extent. In the mind, thanks to the psychological laboratory, the sphere where causality and regularity, the existence of fixed laws cannot be demonstrated, is continually becoming more limited. Kant by making it a category of the understanding needs must detect causality everywhere. The human mind cannot because of this category conceive of anything except in the light of causality. But there is a point of greater interest gleaned from the sphere of society which was once a powerful ally of the determinist, namely, the predictability of human conduct.

Among the older philosophers this doctrine assumed the form of necessariausm, which, of course, is no longer held by responsible thinkers for which reason

* James Psychology. p. 576.
we shall little more than mention it and pass on. Only the fact that human conduct could be predicted, these philosophers claimed, made society possible by making government, church, family, etc. possible. What good would it do to invite your friends to a theatre party if one could not be reasonably certain of their appearance after accepting the invitation. But only note the "reasonably certain." What a poor quality of prediction is this that is only reasonably certain! Such foretelling can be termed prediction only by courtesy and would more accurately be styled guessing. The more one's character becomes firm and settled, the better one's actions can be predicted they further argued, and certainly there is truth in this. But again, is this prediction? Does not such an explanation of the term detract from its dignity? The example of the chess player is cited. An expert looking on as the chess battle is waged would be able to predict the move one of the contestants is about to make, since it is the only profitable one, and the expert knows the calibre of the player. That is well and good. But suppose that three moves, all equally good, are possible; and then let the expert attempt a prediction, and three to one he will fail.
And if he does not fail he did not predict but guessed the move. Libertarianism nowhere asserts that free-will implies acting irrationally, acting contrary to given causes without reason. In that case the imbecile and idiot would be the only free persons. If one knew all the facts and conditions and laws etc, the determinist of this class continues, predictability would be absolutely infallible—N.B. we cannot predict even our own conduct, the disciples at the last supper furnishing evidence of this truth—which virtually amounts to saying if one knew just what his neighbor is going to do one could predict his doing, which is nonsense par excellence.

Thanks to J. S. Mill under the prompting of Hume and J. Edwards this old form with its fatalism and predestination is no longer the fashion. The modern viewpoint is more comprehensive taking into account not only the environment, but also the character of the man environed, since the same environment will act differently upon the character of the one than upon the other. Besides modern determinists do not claim that their predictions are exact in details, because all the influences operation in the production of an act cannot be known.
And now perhaps it has become clear that the difference between determinism and indeterminism is not so great at all. The indeterminist does not deny a certain predictability of action, he assumes causality in the physical world, and the presence of laws in the mind and in society, the word chance does not stand for the absurdities which some extremists charge to its credit. Free-will, however, goes a little beyond determinism, as I hope presently to prove.

Can anyone conceive of any rationality that might attach to regret, the judgments of regret, in a determinist's world. Take as an example the most flagrant crime that human mind can fancy and why should the perpetrator and everyone but the moral imbecile, feel any regret over the incident--let alone punish the guilty wretch--since it is a part of the whole beyond the individual's control, the natural and necessary outcome of antecedent conditions? Is not the emotion of regret indefensible on this basis? Yet regret is an ever-present and potent factor. The wise man, the strong man, may feel less regret over "spilled milk" than the unsophisticated and the weak; but no one in a condition even approximating a normal condition can entirely rid himself of this tenacious emotion.
"I might, unhappy word! O me, I might!
Yet to myself myself did give the blow! " *
To this the determinist may reply that your regret is misplaced. If regret there must be—and the human animal seems to be so constituted—then do not squander it on one little incident, a very small link in an endless chain, but regret the miserable whole, in which the numerous regrettable incidents are included.

"Ah! Love, could you and I with fate conspire
To mend this sorry scheme of things entire,
Would we not shatter it to bits, and then
Remould it nearer to the heart's desire?" *

But this advice is nothing less than advocacy of the blackest pessimism, the brand that lashed Shopenhauer into the might of despair and suicide. This avenue of escape from the quandary is quite unsatisfactory to the modern student of science, who feels quite competent to cope with nature and feels no inclination to stand peacefully and patiently by while she performs her baneful work. An alternative, on the other hand, would be a kind of optimism, and optimism that would label the very evil principle, a good, because the condition of good. What would be good, they inquire, if a certain amount of will did not exist? How could we speak of

* Palmer p. 64.
an act as good, if it could not be contrasted with an evil act?

But, then, there is something provokingly absurd about all this. Determinism insists an act, let us call it a foul murder, was ordained, and therefore perpetrated. The regret following also was foreordained and resulted by force of necessity. Regret implies that that which happened ought not to have happened. So, in the definition of determinism, this universe is a place where what should be, cannot be. Pray, is that rational?

After pessimism fails subjectivism lends itself as a medium to loose the Gordion knot. To loose? Is it not rather a matter of avoiding Seylla and plunging into Charybdis? For what does subjectivism contend? Far-fetched and artificial as it seems, it stoically maintains that all acts are good. If we regret some of them, the regret also is good. The harmony of this apparent contradiction lies in the fact that a real outward good or evil is not the object of this world, but its supreme function is to instill into us the knowledge of what good or evil is. "Not the doing for good or evil is what nature cares for, but the knowing of them." * Crime is justified by the knowledge of

* James Dilemma  p. 165.
crimmality it affords; remorse, by quickening our
sense of what the "irretrievable lost" is. But does
anyone honestly suppose that this pseudo-solution will
prove satisfactory to the individual who adopts it, or
that it has proven successful objectively considered?
In Renan and Zola we see a fair sample of the fatalism
it breeds as one consequence. "One--Renan--ruggedly
ignores the distinction of good and evil, the other
plays the coquette between the craven unmanliness of
his Philosophic Dialogues and the butterfly optimism
of his "mouvenirs de Jennesse. But the pages of both
there sounds incessantly the hoarse bass of "vanitas
vanitatum, omnia vanitas," which the reader may hear,
wherever he will, between the lines." * In practical
life it ends in sentimentality or sensualism, in theo­
logy in antimonisen in litterature in romanticism.
What is the remedy? James, quoting Carlyle, suggests
one: "Hang your sensibilities! Stop your snivelling
complaints, and your equally snivelling raptures!
Leave off your general emotional tomfoolery, and get
to work like men." * This, of course, is the platform
of objectivism.

In passing, attention might be called to the
role that praise and blame play in society and with the

* " " 174.
individual. Cancel praise and blame, as the determinist to be logically consistent must do, and you deprive the world of morals. Laws, our system of punishment with its classification of criminals according to their culpability into juvenile, misdemeanants, reformatory, habitual, insane, must go. In brief, all the dire results following in the wake of the abolition of regret would also result if praise and blame were deprived of their roles on the world stage.

I would just touch upon another argument supporting the doctrine of indeterminism, since the discussion already is longer than was intended and seems desirable. This argument is one’s consciousness of the freedom of choice. Just think of two little words in the English language, "ought" and "rather". I ought to have done this instead of that, and in saying it you are conscious of at least two possibilities that were open to you. I would rather do this than that, and again you imply that you are not bound to one course of action. To this dual possibility you tenaciously cling for in sacrificing it you would ipso facto sacrifice your dignity, sacrifice that which distinguishes you from the objects about you. True they also move—animate and inanimate objects have this point of contact—but their motion is imparted, they are entirely passive.
But man is the imparted of motion, a creative subject. His mind may be a passive object as the receiver of perceptions and impressions—to which modern psychology objects—but, when active, it stands outside of the flux of causation, so becoming free.

An objection may be urged, however. One can be conscious only of facts says the opponent, of two possibilities the one becomes a fact when it is sent forth as action. So the faith that two possibilities existed must be an illusion shared by everyone, comparable to the sense illusion of the movement of the sun. Still, there is a difference. There are other sense data by which we can correct the illusion of a moving sun. This does not hold true in the case of indeterminism, which cannot be proven illusory and leads to no conceivable error. How then does this illusion differ from truth?

Our conclusion is that indeterminism is more inclusive than determinism. It has seen and practically admits all that "soft" determinism affirms. But is has seen a little more besides, it has seen beyond the conceivable limits of determinism. Certainly from an ethical viewpoint determinism is hardly defensible unless distorted to mean something different than what is
contained in the definition as stated in this paper. "If it be so—that all things are foredoomed—may you and I then have been foredoomed to the error of continuing to believe in liberty." *

* James, Dilemma. p. 183.
CHAPTER V.

CONCLUSIONS.

In the adult willing is always for the purpose of action. Movements of some kind or other are the immediate consequences of all volitions. One wills to take a book from the shelf, to take a walk, to rest, in every instance movement follows. When one wills to busy oneself intellectually, tenseness of certain muscles is unavoidable. Even the willing of an act to be performed in the future is accompanied by a characteristic tension of the body and followed immediately by a changing of stresses, while the act willed follows in the future.

But in the infant movements, instinctive movements come first. Because of his innate, inherited disposition to movement, because of his surplus of nervous energy demanding an outlet, he spontaneously moves arms and legs and the entire body. We need not inquire into the origin of these movements. What would be a transgression upon the domain of the biologist. The psychologist finds the child an acting child and reckons with the facts. The statement that the child has a disposition to move does not exclude the fact that many of his movements are inspired by discomfort and pain, as when he cries for hunger, nor that these movements
usually go on until a sensation for comfort and satisfaction is realized, until the adjustment to the environment is made. Nor does it exclude the fact that a movement accompanied by a pleasurable sensation tends to be repeated. But the affective tone of pleasure and displeasure are the only causes of movement neither in the adult nor in the infant. The supreme function of pleasurable and displeasurable sensations is the function of guidance of the movements after they have been otherwise inaugurated.

We have progressed beyond the stage in which a philosopher made one disposition the basis for an explanation of all social phenomena. The philosophers of this stage have rendered science a valuable service by calling attention to the importance of the disposition they have over-emphasized, of Hobbes and Fear, Bentham and Pleasure-Pain, Comte and Love, Tarde and Imitation, but, of course, not one of them, not even all of them, suffice to explain every social phenomenon.

Most of these spontaneous movements which the infant makes soon acquire a meaning by the repeated response they elicit from others. If, upon crying, the child experiences again and again that its nurse will appear, it will soon cry when it desires the presence of the nurse. If, upon extending its arms in the
presence of an adult, it is always taken up by that adult, extending the arms will soon have the meaning of being taken up by others. But the child cannot, as yet, be said to will.

We speak of will or volition only in those cases in which a weighing of evidence, a conflict of motives precedes the action or movement. So long as an idea—and an idea is more than an image. It is the meaning that arises in a difficult situation, in which the customary way of acting is inadequate—is transformed into action as soon as it arises in the mind, we cannot properly speak of a voluntary act, but, perhaps of ideo-motor action. This may once have been a voluntary act and become an impulsive or reflex act by frequent repetition. But when a habit, a smooth-going coordination of any kind is hindered in its unravelling process, then images and ideas are precipitated, then the weighing of evidence and the conflict of motives takes place, then the action ensuing is a willed action.

Before entering upon a discussion of the method by which an idea comes to dominate over others, a word in regard to the origin of ideas. There is no art of thought in the sense in which logic was once considered an art of thought, that is, as an art that could
produce ideas. James writes: "From the guessing for newspaper anigmas to the plotting of the policy of an empire there is no other process than this essential process of thought emotions. We trust to the laws of cerebral nature to present us spontaneously with the appropriate idea." * Prof. Pillsbury: Neither the material nor medium of reasoning, nor the laws of connection, are distinctive of reasoning as opposed to recall or imagination." * But tho we cannot control the movement of thought, still we are not completely at the mercy of chance associations. We can control the material circumstances necessary to thought, as, withdrawing to a quiet room, not permitting ourselves to suffer from hunger or from cold, keeping free, in short, from being uncomfortable and miserable. We can further, at least to some extent, control the mental attitudes favorable or unfavorable to thought as, for instance "The sense of mental vigor and fertility which indicates that thought will go easily," * working against distractions of many kinds until one has gained his "second wind", by a change of attitudes which feels like the transference of work from tired to an untired brain tract. We can also control our relation to the subject matter of thought. This consists of memory,

* " " " " 178-179.
* " " " " 190.
the range and accuracy of which can be improved by conscious attention, abstraction, inhibition, and record, on the one hand; and the rules of logic, which concern the form and order in which a succession of questions is put when the attitudes of Attention and Problem”* are combined, on the other hand. A smooth-going act or habit has been checked and a flood of ideas precipitated. These ideas all tend towards materialization in action. Now we often find that the idea which ordinarily has the greater conative force does not gain ascendancy over the others that ordinarily possess less driving force. To account for the motive gaining ascendancy over the other and stronger motives the idea of the self lends itself as an adequate solution.

Though mentioned in a "matter-of-fact way", the self is the cardinal, the central, the vital factor in volition. It comes to the rescue by throwing itself upon the side of the ideal and weaker motive. Many interpretations of the same are at hand. "In his --- analysis of the different meanings of self, objects are considered to have selfhood under the following conditions, arranged in a progressive series:

1. When there is some kind of unity or identity.

* Wallas. p. 213.
though given it by an apperceiving mind, as when we speak of a river that empties itself into the sea. A house, book, work of art, has this kind of selfhood.

2. Where there is not only this kind of apperceived unity, but where the object must be so regarded to be understood, as in the case of a vegetable organism.

3. Where the object has some degree of self-consciousness mediated, however vaguely, through sensations of pleasure and pain, as in the case of an animal. Such a being is in a unity for itself, though not conscious of itself as a unity.

4. Where the object is conscious of itself as a unity, reflecting on its own life, and recognizing itself as one throughout all its changes; and finally

5. Where the object is conscious of itself as a unity and part of a unitary world as in the case of a man, at least potentially. "He is aware of his individual life not as a microcosm in a chaos, but as a microcosm in a macrocosm, to the objective unity of which his individual life as well as everything else is referred." * Of these definitions the last is best suited to our purpose.

* Bristol, Social Adaptation, p. 130.
But just what is meant by the statement that the self throws itself upon the side of the weaker and more ideal motive? I can do no better than to quote McDougall. "The personality as a whole or the central feature or nucleus of the personality, the man himself or all that which is regarded by himself and others as the most essential part of himself, is thrown upon the side of the weaker motive." * Or we might define the self and certainly without conflicting with McDougall's definition, as the sum of one's attitudes. It is a fact of everyday experience that one has a different attitude for different situations. You are a different man towards your father than you are towards your friend; you have a different attitude in the presence of your children than of your superiors; you have a different attitude towards your employees than you have at your club; etc. This statement leaves out of the reckoning that there are types of selves, as the philosopher, the soldier, the merchant, etc., types, but within the given limits the philosopher, the soldier, the merchant, etc. find room for the exercise of different attitudes.

The question as to the time when a child first becomes conscious of itself is of minor importance. Certainly no one presumes to be able to determine the

exact date, for the evolution of the consciousness of self is a process, as the term evolution implies. Besides this process varies in different children according to the mentality and early training of the individual child. A child usually has a clear notion of the pronouns of the first and second person when used possessively before it has arrived at any appreciable capacity of abstract reasoning, and uses them ordinarily when in an aggressive, self-assertive mood. The manner of learning them by a child who has an older brother or sister is somewhat as follows: He sees appropriate actions performed by his older brother or sister who use the pronouns of the first person in connection with them. The child then uses the pronouns it has heard as an accompaniment to aggressive acts that he naturally performs. In short, he learns the meaning of "I" and "me" as the meaning of words expressing emotion or sentiment are learned, namely, by experiencing the emotion, ascribing it to others in connection with some kind of expression, and hearing the word along with it. Perhaps many children begin to show consciousness of self at the age of six months. At fifteen months they have been observed to try various methods of playing upon the emotions of others in order to
satisfy certain desires. At the age of two years they might be quite concerned over their reflection upon one person and very much unconcerned over their reflection upon another. These facts are indications of a dawning consciousness of self.

When we state that a person has acquired consciousness of self, we mean merely that he has reached a stage at which it lies in his power to become conscious of his self, but not that he is so continually. The self-conscious individual may be so, much more than the normal individual, to his own and others discomfort, but not even he is always conscious of his self. A goodly portion of the routine days work is performed without it. However, when a new situation confronts you, when a problem claims for solution, when you, for example, are insulted or invited to take part in an enterprise, then the self is, so to speak, presented to the self, the "me" to the "I", then consciousness of self is unmistakable.

Now, the self is a social resultant—and the term resultant is preferable to the term product because the former expresses the fact that the self is the outcome of an interaction, of the reaction of the native, inherited impulses of the individual upon the
environment. We begin with the members of a group with objects that belong together, as the mother and child. The development of the child's self depends upon stimulation by the mother or vice versa and response by the child or vice versa, which response again serves as a stimulus, etc.

To substantiate our theory that the individual is a social resultant: Are we not often in a position to say from which community a person hails (if we know the conditions and ideas that obtain in that particular community) by his habits, ideas, behavior in general? Might we not tell a Catholic by the dictates of his conscience, when that conscience forbids his eating meat on Friday? Why? Because we know that in a Catholic household and community the stimulations and responses are such as to evolve a Catholic conscience.

But the matter is not quite so simple, though it must remain a fact that the self is a social resultant, because we find people born and raised in a Catholic environment, who never acquire the Catholic conscience. Though they are the exceptions yet we must reckon with them. How explain this anomaly? The development of the self is a process that goes on so long as the individual lives. In fact, in nearly any new
position, when confronted by a new and novel problem, the self is redefined as when an unexpected distinction is conferred upon one, or one receives a social setback, because the social reaction is different. True the more established and settled one's character becomes, the less development is possible, but the process normally never ceases, so long a new situation may confront one and must be reacted to, while in regard to old problems and accustomed situations your attitudes may become fixed and never change.

Stimulus and response, action and reaction, in the development of the self and the character are fundamental. The boy coming to college with fixed notions concerning problems, say, the liquor problem, woman suffrage, amusements, religion, is confronted by hitherto unthought of views concerning these same questions. These new views, situations, etc. constitute a stimulus to which he must respond. His self at once looms up, his attitudes would manifest themselves. But he discovers that his hands are tied for the situations are new, they are not the same he was wont to consider. His old attitudes are not equal to the situation. The thought of praise and blame of parents and former teachers, the thought of the opinion of relatives and
dear friends loom up in his mind. These thoughts may influence him to keep his old attitudes and so pass up the new problem without solving it. He may, on the other hand, capitulate and adopt the new views; or he may take a middle course. In any case he is not the same self but a new one upon emerging out of the difficulty, and a self that is a social resultant, a self that is the outcome of stimulation and response, for did our hero—or victim—not respond with attitudes that were themselves a social resultant to a stimulation that was social?

At a later stage in the development of his character he will be governed less by the influence of admired persons, social praise and blame, and public opinion; but by ideals and principles and convictions, all of which, however, he acquires in the process of social stimulation and response.

And finally a brief consideration of the problem of responsibility. Is there an individual responsibility? Let us first consider the question, whether there is such a thing as an individual social act in the sense that it is performed solely by one person, or whether at least two are necessary for the performance of such an act. Let us take the example of
a soliloquy and investigate it to see if we can after consideration of some of the facts and factors style is an individual, social act. Just how much of a soliloquy belongs to the individual uttering it? Is not the "I" speaking to the "me"? Ideally, one or more persons are present listening to the speaker's words. His thoughts are spoken with reference to them; his stream of thought is guided by their views and opinions and possible comments. But if this is true, the soliloquy is not his alone, but the ideal listeners have contributed no small proportion to it. And so it is with any other social act. It is performed with reference to others, a reaction to a stimulation, is guided by their anticipated reaction, performed with a view to possible praise or blame, all of which helps to mould it and make it just that act that it is.

So much conceded, can there be individual responsibility? Is there not, at least, a difference in degree of responsibility? Is the slum boy who is repeatedly and systematically stimulated to thievery as free to become a respectable citizen as the more fortunate youngster born and reared in a well-to-do, respectable family? Evidently not, for his heredity and environment determine his reaction to the stimuli, his
self has been evolved in such a way as to make this improbable. Must we then assume that there is absolutely no individual responsibility, no social act being entirely our own but society cooperating in its production? I would say, no, that is not the inevitable conclusion, for we do find sons of respectable citizens "going wrong" and we do find slum boys reacting favorably to the slightest influence toward good, though their heredity and environment apparently do not warrant it. And if, in the case of the respectable citizen's son, his failure to adapt himself to society may be due to adenoids, defective sight or hearing, etc., such physiological defects are not always the cause.

But let us pause and investigate. There appears to be a good deal said and little proven. With what justification can the statement, "though their heredity and environment do not warrant it," be made? How much do we know about the influences that have been brought to bear upon the individuals and about the stimuli which call for reactions?

Yes, one might reply, there is bound to be a difference in the details of the stimuli and the environment, but the general trend and tendency is in the same
general direction. The differences are indeed a negligent factor. But are the differences so insignificant as to be left out of account? Even if we suppose that two boys are members of the same family, there is the difference in age, there are different playmates, different teachers, different games, different work. Indeed, there is an infinite number of different stimulations in the case of these brothers. Let us make a further concession and assume that they are twins. Even then there will be a difference in the stimulation. They are not always together, they do not always look from the same street car window, they do not always sit on the same seat in the automobile, the one simply cannot look with the same eyes, with which his brother sees.

Nor are these little differences such a negligent factor. So prosaic an incident as hearing a sermon by a visiting minister may determine the life work of the one, may influence him to take up a profession in which he can deal with people in a narrower and more intimate way than would be the case if he devoted his life to business pursuits. The one of our twins heard this sermon, the other did not. Certainly this slight variation in the stimuli which they experienced was momentous in its effect.
The statement that two individuals are influenced by practically the same environment will not hold water. To say that two have practically the same heredity is equally unwarranted, for in the case of heredity still less can be asserted with certainty than in the case of the stimulating environment. We may observe similar qualities and characteristics in the twins, which they inherited from their father or mother, and claim that in this respect their heredity is practically the same. But we know also that the one may possess character traits that were observed in his great-grandfather, and the other character traits that cannot be accounted for. Biologists explain this, but their explanation does not concern us in this connection. Our point is that the assertion that two persons have practically the same heredity is too sweeping and is unjustifiable in view of the obscurity and complications of heredity. Only note the dissimilarity in babies, the variations in size, appearance, ability to walk or talk or imitate earlier than others, etc., ad infinitum.

Now, does all this prove anything? And if it does, what does it prove? Does it prove that the individual is not free to act in any other manner but the one in which he is compelled to act by the influence
of his environment and heredity? To some it might. But, after all, it was admitted that heredity is obscure and complicated and that environment contains a tremendous number of manifold stimulations. This implies inability on our part to trace, in most cases, any specific reaction of an individual to specific environmental stimuli or to specific inherited characteristics. There is no way of checking up, and this in a sense invalidates, the theory stated above. Here we have a theory and here we have results. But the latter do not substantiate the former. The results may be due to some supernatural factor, distasteful, yes, impossible, as such an assumption appears to the modern scientist. If we could only experiment! If we could only isolate, vary, and repeat the experiment! But the nature of the case precludes such a possibility.

Does the relation of habit to freedom and responsibility merit consideration? It might be held by some that what was said above concerning the influence of association already includes habit, because when one speaks of the influence of association, the habits of associates and the habits one adopts from them are an important factor. Nevertheless, the question merits a few lines. Much has been said and written of
the reactionary effect of habit, how it impedes progress and makes for stagnation. We know by experience how difficult it is to break away from a habit, to leave the beaten path and to make a new one, and this does not only pertain to such baneful habits as drink, morphine, etc. Why is it such a task to overcome the laissez faire methods of dealing with problems and actively and consciously to take hold of things and conditions and mold them as reason dictates. Why, if not because of habit? Why do old people usually become conservative, if not because it's so hard to break a habit? Surely the person who has consistently voted for a Republican candidate for many years and has formed the habit is not as free to vote for a Democratic candidate as one who has not that habit. The person who for many years has believed in the old forms of punishment and has formed the habit is not as free to adopt the new ones as another person? Yes, habits after they have become ingrained in one's system limit one's freedom and, correspondingly ine's responsibility. More blame may attach to the formation of the habit as the individual act which is prompted by it.

Is there individual freedom and therefore responsibility? Certainly, replies the practical man.
In the desire to be scientific and exact, to probe the matter to the bottom, the common-sense facts, as they lie on the surface, are overlooked. The error so common to scholars is repeated. Now let us forget heredity and environment and habit and make this a purely intellectual matter. Let us take a concrete example: Here is a man brought face to face with the temptation to steal a sum of money. He reflects knowing that if he is discovered society will brand him a thief and visit indignation and contempt upon him. He knows that the act of stealing is wrong in the opinion of the public and still he steals the money. Could he not have left it? Why, the thief himself will admit that he could have left it without stealing it, if he had so chosen.

Perhaps, but his saying so proves nothing. We have again reached a point beyond which we may not go. Further discussion would be futile. Belief, faith, must rule the day. Arguments by the one faction are very convincing to that faction but not to the opponents.

Suppose, then, that a person has made up his mind to follow out a certain line of action. He has deliberately—(?)—chosen it and scrupulously adheres to it. Is he not free, since he wants to do what he is doing, wills to do it and wishes to do nothing else, though this line of action be the only one open to him?
You may call that freedom if you like, but anyone having a different conception of freedom will disagree with you.

But so much must stand. The individual "gone wrong" is less responsible than the society of which he is a member; that our penal system must abolish the idea of retribution; that reformation and prevention above all, education, i.e., providing the misfits with such attitudes, ideas, views, and habits as to make them fit into society, to become potent factors in the furtherance of its welfare, that is charity as interpreted today; that is justice as interpreted today; the two are one.

If, theoretically, we should be able to prove that there is no individual responsibility, which we cannot, in practice this doctrine would work the ruin of society. So? Why should this new state of affairs work the ruin of society? It would merely tend to make society more modest and humane, to induce it to take the unfortunate one, extend their sympathy, blame themselves for not surrounding the innocent sufferer with a more wholesome environment, for not furnishing better stimuli, and then proceed to atone for the shortcoming by methods sketched above. The victim's reformation and readjustment to society may be brought about in time;
his heredity and habits may place him in the incorrigible class, where he would be carefully and kindly guarded and restrained for the remainder of his days.

The law assumes individual responsibility, and as a working basis it must be retained. If people, and especially the criminally inclined, knew that they would not be held responsible by society but merely pitied and treated as unfortunates in case they failed in their obligations and duties, crime would rise to unthinkable heights. Question: Would this knowledge affect your behavior any, would it be harder for you to resist temptation than it is now? Of course, if we are convinced that there is no freedom, dissemination of this knowledge can have no effect whatsoever upon the extent of crime. But if we do believe in individual freedom and responsibility, then it may alter the case with some individuals.

Again, there is no solution of the difficulty. But if each is to be his brothers keeper, all the responsibility cannot be laid at the brother's door.
CHAPTER VI.
SUMMARY.

I. Volition in Individual Psychology.

James: Reflex, instinctive, and emotional movements precede voluntary ones, because the latter presuppose a memory—of kinaesthetic and remote impressions—of the former.

As to the feeling of innervation, the law of parsimony forbids it. Introspective evidence of it is an illusion, being an image of how the act will feel when it is performed. Though there might be a "fiat" the mere presence in the mind of the idea of an action is in many cases sufficient to produce that action. The "fiat" results when the original idea—after deliberation—either succeeds or is definitely defeated, the reinforcing and inhibiting ideas meanwhile constituting the so-called reasons for or motives of an act.

In the reasonable type of decision one's direction is determined more or less accidentally by external circumstances. Another type may be regarded as a spontaneous discharge of our nerves. In a third type one passes from an easy and indifferent to a stern or strenuous mood or vice versa. The fourth type involves a strong conscious deliberate effort and consciousness of the loss of the other alternative.
The precipitate and the explosive will, the inability of duly checking abnormal actions, and the obstructed will are forms of unhealthiness of will.

Pleasures and pains are not the only causes of action, but have, mainly, a guiding influence.

Wundt: "Such changes in the sensational and affective state which are prepared for by an emotion and bring about its sudden end are called volitional acts." * The volitional process begins with a sensation, ends with an act, and has an emotion as intermediary.

Internal, volitional acts close with the effects of ideas and feelings, which are identical with those accompanying external acts.

If a single motive—in the motive the feeling elements are more important than the ideational—is followed by an act we have a case of impulsive action; if choice precedes, then voluntary action.

By retrogradation Wundt means the process by which a voluntary act becomes impulsive, then automatic, and finally reflex. This fact and the purposeful character of reflexes leads Wundt to believe that voluntary acts do not develop from reflexes.

Muensterberg: "Everywhere we start with the automatic movement, develop it into the will movement, organize a number of them into a more complex will

* Outlines of Psychology. 2 ed. p.201.
movement, and repeat the combination until it becomes itself habitual and thus an automatic movement at the service of more remote will ends." *

II. Physico-Chemical Theories of Emotion.

Numerous experiments—Loeb, Jennings and others—were performed on the lower organisms establishing the tropisens, heliotropism, galvano-tropism, stereotropism, etc. Loeb's theory of heliotropism is that the photo-sensitive mass on the skin or in the retinal of plant lice, for example, is put into motion by the action of light upon it. These little organisms are "photometric" machines operating by the light, the will.

Reflex action is to be explained in similar fashion: "In each of these cases, changes in the sensory nerve endings are produced which bring about a change of conditions in the nerves. This change travels to the central nervous system, passes from there to the motor nerves, and terminates in the muscle fibers producing there a contraction. * Even spontaneous activity, as the beating of the heart, must be transferred into the field of physical chemistry being brought about by the proper distribution of ions.

Consciousness and psychic processes are the operation of the associative memory, a mechanical process. Our wishes and hopes, disappointments and suffer-

* Loeb, Mechanistic Conception of Life. p. 65.
Page number 111

was omitted in the original.
ings have their source in instincts comparable to the light instincts of heliotropic animals.

III. Volition a Social Fact.

In Stout's opinion the self plays the leading role in deliberation and choice, which two constitute the will in the strict sense of the term. "The concept of self includes in systematic unity the life history of the individual, past, present, and future, as it appears to himself and to others, together with all its possible and imaginary developments." *

McDougall adds the self-regarding sentiment, defining it as the system of emotional and conative dispositions that is organized about the idea of the self and is always brought into play to some extent when the idea of the self rises to the focus of consciousness." * He distinguishes four stages in its development: In the instinctive stage behaviour is modified only by pains and pleasure. In the second stage the operation of the instinctive impulses is modified by rewards and punishments. In the third conduct is controlled mainly by the anticipation of social praise or blame. In the highest stage conduct is regulated by an ideal of conduct. All this is possible only in society.

IV. Responsibility: The difference between determinism

and indeterminism is really very small. The determinist does not deny a certain predictability, he assumes causality in the physical world, and the presence of laws in the mind and in society. The free-willist, however, goes beyond the determinist. He sees all the determinist sees and a little more besides.

V. Conclusions:

We conclude that the self is the determining factor in volition, that the self is a social resultant, that society's responsibility is greater than that of the individual, that there is a social psychology of volition.
BIBLIOGRAPHY

James, *Principles of Psychology*.


Royce, *Outlines of Psychology*.

Angell, *Outlines of Psychology*.

Angell, *Lectures on Modern Psychology*.

Wemdt, *Outlines of Psychology*.

Calkins, *First Book in Psychology*.


Kuelpe, *Outlines of Psychology*.

Hoeffding, *Outlines of Psychology*.

James, *Great Men and Their Environment*.

James, *The Dilemma of Determinism*.


Horne, *Free Will and Human Responsibility*.

McDougall, *Social Psychology*. 


Mead, The Social Self. Journal of Philosophy, etc. 1913, 10.


Wallas, The Great Society.

Ziehen, Introduction to the Study of Physiological Psychology.

Cannon, Bodily Changes in Pain, Hunger, Fear, and Rage.

Loeb, Comparative Physiology of the Brain and Comparative Psychology.

Loeb, Mechanistic Conception of Life.

Loeb, Dynamics of Living Matter.

Jennings, Behavior of the Lower Organisms.

Crite, A Mechanistic View of Psychology.
Warren, _A Study of Purpose._

Bair, Development of _Voluntary Control._ Psychological Review. 1901.

Titchener, _A Textbook of Psychology._

Baldwin, _Dictionary, on Conation._

Thorndike, _Ideomotor Action._ Psychological Review. 1913, 20.

NOTE:

Of the first eleven references the complete texts were not read, but all that pertains to volition. Of the other books in the list, at least the greater portion of each was read.