

SOME CRITICAL REFLECTIONS ON PREVALENT
NOTIONS REGARDING "AFFECT"
AND "EMOTION."*

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THE physicist, in his endeavour to explain natural phenomena, has, in the course of his investigations and observations, discovered certain laws which appear to be constant and applicable to the phenomena in question. On the basis of those laws he has evolved theories which provide him with an intelligible appreciation of the mechanism involved. The law embraces and synthetizes a large number of observations, but it also serves as a point of departure for new observations. Whilst the law may be constant, the theories may undergo modification, as new facts come to light, as has occurred, for example, in the case of the atomic theory. Amongst physicists there is, however, a readiness to consider new discoveries, to put them to the test, and, if they are found to be in harmony with determined laws, to incorporate them in the theoretical scheme.

In the investigation of mental phenomena, psychologists have not been so happy as their physicist brethren. No fixed code of laws regulating mental action has been evolved, and, in consequence, there is no harmony amongst psychologists in the formation and promulgation of psychological theories. The reason is not far to seek. On the one hand, mental phenomena do not lend themselves readily to objective examination under fixed or constant conditions, and, on the other hand, subjective differences in the investigators themselves tend towards disharmony. This is particularly true as regards the different significance attached to the same terms by different writers, and in no field of inquiry is it more remarkable than in that which concerns "affect," "emotion," "sentiment," and "feeling."

In everyday language we say that we *feel* an object to be hard, rough, heavy ; that we *feel* a taste to be sour or sweet ; we *feel* a

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smell to be pleasant, strong, pungent, etc. We *feel* well or ill, tired or full of vigour, hungry, thirsty, weak or strong. We also *feel* ill at ease, happy, comfortable, oppressed, annoyed, irritated, angry, calm, overjoyed, sad, hopeful, confident, distrustful. We *feel* a sense of right or wrong, the force of an argument. We *feel* sympathy or antagonism. We speak, too, of the "higher *feeling*," and the "lower *feelings*," of religious, social or humanitarian *feelings*. In short, as Titchener puts it, "'feel' and 'feeling' seem indeed to be psychological maids of all work. They can do in the sentence practically anything that a verb and a substantive can be called upon to do. There is little hope, one would think, of turning them to psychological account, and of giving them a place in the list of technical terms."

Nevertheless, physiologists and psychologists have made an attempt to define, differentiate and classify these varied experiences, although success has only been partial.

Simple sensations, for example, experienced through the action of the five special senses have been clearly differentiated from the moral sentiments. It is agreed that the difference lies both in qualitative attributes and in complexity. Yet there remains much confusion in thought and terminology. "Emotion" is made by some to include experiences to which others would apply the word "affect," whilst "feeling" is still used to signify conditions to which some would apply only the term "sentiment." Again, it may be remarked that too often, in psychological as well as everyday language, the significance attached to the word "sentiment" bears with it the implication that it is not only something different from, but also essentially opposed to, intellect.

I would like to urge the view that sensation, affect and sentiment are evolutionary stages of one and the same process, and are concomitant with perception, ideation and conception, and further, that "affect" and "idea" are not only concomitant but also specific and inseparable one from the other.

Holding that view, I would maintain that every perception, every idea, has its own peculiar affective component in consciousness, a component which is at once concomitant with and inseparable from it. If this view is sound, then I am compelled to reject that modern doctrine of "transference of affect" by which some psychiatrists would seek to explain certain symptoms occurring in the neuroses and psychoses. Let me quote from *Practical Psycho-Analysis* by H. Somerville.* The author says :

* *Practical Psycho-Analysis*, H. Somerville. Baillière, Tindall & Cox, 1922.

" I now give an example of transference of the affect from a complex to a current occasion. It will be observed that this means the transference of an affect from the unconscious to the conscious. A patient suffering from a severe anxiety-neurosis went to see a cricket match and had to come away. He could not say why. A very superficial analysis soon made the reason plain to him. ' Cricket match ' brought up many associations, the essential ones in this case being contest, fight between two contending parties, armies, war. He had transferred the affect of fear from his war experiences to the cricket match. To be more exact, he had repressed into his unconsciousness a group of ideas connected with the war. This group of ideas (a complex) was invested with the affect of fear, and he had transferred this affect from his war complex (unconscious) to his cricket percept. Of course he was unaware of what he had done, and only knew that he felt fear without being aware of the reason why he felt it. The fear felt by this man is an example of what is called a morbid fear, so that by a morbid fear is meant a fear that has become detached from an unconscious group of ideas (complex) and transferred to a situation in consciousness."

This quotation serves my purpose admirably. It is a simple though crude illustration of what is meant by certain psychologists when they speak of transference of affect or emotion. It is intended not only to describe, but also to explain a certain change in the mental attitude of the patient. It is an excellent example of loose thinking, inaccurate terminology, and superficial plausibility—features that have been all too prevalent in psychological literature of post-war and recent years.

The objection I wish to raise to this theory will be readily appreciated if I make use of a simple illustration drawn from physical science. Consider for a moment that manifestation of physical energy seen in an incandescent electric bulb. When the mechanism is functioning, light is produced. It may suit my convenience to study the various attributes of this light. I may study its intensity, its penetrating capacity, and so on ; but light is only one aspect, one element of this mechanism in function. Concomitant with it there is the element or aspect of heat. I may choose to confine my observations to the study of the various attributes of heat manifested by the mechanism, without reference to the element of light. You will agree, however, that that can be done only in the most abstract manner. You will agree also that it would be absurd to suggest that it is possible to detach the heat from that bulb and transfer it to another. The heat and the light are concomitant and inseparable components of this particular mechanism in function. The heat and the light are, of course, not invariable ; these attributes of the mechanism do vary with repeated functioning. So it is, I maintain, with idea and affect ; they are inseparable concomitants but not necessarily invariable.

It is not my purpose to discuss at length the various problems underlying the genesis of affect and sentiment, but it may be well

to pass in rapid review some of those facts that have an intimate bearing upon the particular question I have set out to discuss.

I have spoken of sensation, perception, ideation and conception as evolutionary stages in consciousness. By that I mean that conception involves ideation, ideation presupposes perception, and perception cannot arise without sensation. We can get a more intelligent appreciation if we proceed from the simple to the complex. Sensation may be defined as the mere noticing or awareness on the part of the organism of modification induced in itself by the action of external agents. Such a simple condition of affairs can hardly be imagined to exist in the adult human being, for in him the awareness of a change induced in the body is immediately complicated by the state of attention and the noticing of the source of the sensory stimulus, *i.e.*, the external object. We may conceive it to exist in the new-born babe and in organisms possessing a very simple nervous system. The ordinary earthworm, for example, performs movements which would seem to indicate that it is sensitive to different degrees of light. If placed in a vessel from part of which the light is excluded, the worm will crawl away from the light and seek the shade. Again, rays of light made to pass through red glass have less effect upon worms than those that have passed through blue glass. The worms become quiet under red glass sooner than under blue glass. Now, while it is clear that different stimuli produce different reactions in the worm, no one suggests that the animals move in one way rather than another in consequence of having perceived that the source of the light is red glass in the one case and blue in the other. The most that is claimed for the worm is that it is aware of a modification in itself, and that that modification is accompanied by changes in its muscles which result in movements, which, again, cease when modification ceases. Something of the same kind no doubt exists in the new-born infant. Its mind is at first a blank on which the forces of nature have to write. No one can pretend to penetrate and gauge the first sensations of the new-born infant, but it is safe to say that they are of a very indistinct and confused nature. The dimness and uncertainty of our own earliest impressions, recollections which only carry us back to a period considerably later than the commencement of life, are sufficient proof of this. The explanation lies in the fact, demonstrated by the anatomist and the physiologist, that at birth the human nervous system is but incompletely formed, and that it is only in proportion as its structure becomes more perfect and more consolidated that its function becomes more expansive,

until it is able to embrace all that is presented to it by the external world in one harmonious whole—the developed mind and consciousness.

Of the myriads of stimuli impinging upon the body there are many which do not give rise to sensation, though they may possibly have considerable effect upon the body. Amongst those may be placed the X-rays, and the rays of light below the red and above the violet rays of the solar spectrum; the aerial vibrations of greater or less frequency than the human ear can detect, though they produce visible effects upon lower animals. The vast majority of stimuli, modes of force, of motion—call them what you will—acting through the special sensory pathways, do give rise to sensation. The first sensations of the infant are probably mere *awarenesses* of modifications induced. In this awareness we may agree to recognize the dawning of consciousness. These modifications are generally followed by certain adaptations or responses on the part of the infant, which becomes directed towards or away from the source of the stimulus. The touch of, and contact with, the mother may be soothing or attractive, while contact with other objects causes movements of retraction or withdrawal. With repetition of the stimuli and further development of the nervous system, sensations become more pronounced, more definite, more distinct one kind from another, and we find the infant not only orientating itself towards or away from the stimulus, but becoming aware of the source of the stimulus or, in other words, becoming aware of the external stimulating object. At this further point in the evolutionary progress we recognize the beginnings of the perceptive processes. Here, without doubt, we have the dawn of consciousness, because here we have not only sensations but rudimentary cognition of the external object. With the dawning of perception and attention, there comes a distinction between the inner and the outer world, between the ego and the non-ego—in other words, the uprising of consciousness. As the evolution of the nervous system proceeds apace, the potentialities of the organism for the reception of stimuli from the cosmos become increased. Sensations become more pronounced, more distinct, more varied, and perceptions more complex. The perception, for example, that the infant has of an orange before smell and taste are developed is much simpler than the perception of later days, when it is able to distinguish the smell and taste of the orange, these giving rise to new olfactory and gustatory sensations which ally themselves with the pre-existent visual and tactile components, thus furnishing a more complex

psychic product. Side by side with the development of the perceptive process we have the evolution of language, which in its ultimate analysis is but a particular aspect of the auditory and visual perceptive functioning. With the development of language, however, man becomes definitely ideative, or, if you like, intellectual. Ideas are to be regarded as fusions of concrete perceptions, and the more complete and perfect the perception of each concrete object, and the greater the number of these, the fuller and more perfect is the idea. The idea of a clock is compounded of the concrete perceptions of many separate clocks, and it will vary in different individuals in accordance with the richness and completeness of the sum total of the concrete perceptions.

With progressive increase of perceptive, ideative and linguistic acquirements, in accordance with the wider relations ever being assumed with the outer world, man arrives finally at the highest stage of intellectual development, represented by conception and abstraction.

Just as an idea represents a complexus of perceptions, so conceptions, such as are represented by the words Religion, Patriotism, Philanthropy and Humanitarianism, are compounds of many ideas fused together in one single word. The complexity of any of these conceptions varies in different individuals according to the number and complexity of the ideas which form its component parts. The conception of religion, for example, held by an illiterate individual, may be a comparatively simple thing, embracing relatively few ideas, such as of right and wrong, of good and evil, of relation to some higher authority, of churches, priests, chants, prayers and so on; whilst in an educated man it may embrace an infinitely greater number of ideas, including the philosophy and the history of religion, and indeed an infinity of ideas that are altogether outside the consciousness of a less cultured individual.

Perception, ideation and conception are clearly evolutionary grades in the conscious process, which has its beginnings in sensation, but they represent only one of several concomitant aspects of consciousness. I made passing allusion to the fact that when sensation is followed by perception, when there is orientation of the stimulated organism towards the source of the stimulus, when, in other words, the organism senses and perceives the external object, there we witness the dawn of attention. If we desire to study the development and trace the progress of attention from the simple to the complex, the starting-point of our investigation must be sensation. The same is true of every so-called faculty or

aspect of mind—of memory, of will, and of affect and emotion, with which latter aspects I am presently more concerned.

It is rather unfortunate that in studying these various faculties, particularly in their more evolved and complex attributes, we are often apt to lose sight of their common origin, and we tend to regard them as independent things, as units, rather than as concomitant attributes of one individual whole.

The fundamental physiological and psychological law is that every stimulus which penetrates the organism affects it in a beneficial or hurtful manner; but every stimulus received may not arouse sensation. The pupil, *e.g.*, contracts and dilates in response to varying intensities of light, without corresponding sensation. If we are not sensible of the action of external agents, we remain unconscious of their existence. There is no room, however, for doubt about the fact that when a stimulus does succeed in arousing sensation, that sensation has its own peculiar attributes in consciousness, which can be described as pleasurable or painful, integrating or disintegrating, beneficial or harmful. Put in other terms, the proposition can be stated thus: whenever consciousness is aroused, we have not merely consciousness, but a particular tone or quality of consciousness to which those varying terms of pleasure or pain, benefit or harm can be applied. As the late Dr. Mercier well put it, "The individual does not merely exist. He maintains his existence, and he maintains his existence in the face of adverse circumstances that are constantly tending to destroy him and his race. Of the motion that impinges upon him, some is integratory in its effect and helps him in his trouble; some is disintegratory, and tends to his destruction. Neither the reception of motion nor the dissipation of motion is ever without some effect for or against his success in the struggle for life, and according as the commerce between himself and his surroundings is integratory or disintegratory, is beneficial or the reverse, is helpful or harmful to him in his conflict, so also the mental state that accompanies the interaction has its corresponding quality." Again he says, "The life of every organism is a cycle of conflict between integrative and disintegrative processes—between those which lead to a higher, fuller, completer life, in which more accurate adjustments are made to more extended circumstances, and those which, when at last triumphant, end in death or a less accurate adjustment to narrower circumstances."

The integration or disintegration, the gain or loss, the degree of success or failure of the organism in the struggle for life, is mirrored in our consciousness in its tremendous experience of pleasure and

pain. Pleasure and pain are the mental accompaniments of experiences that are respectively beneficial and harmful. We have agreed that, beginning with sensation, man rises on stepping-stones of his living self to higher things—to perceptions, ideas and conceptions—and I have alluded to the fact that as the mental patrimony becomes more complete, more complex, so consciousness is ever expanding, ever passing from the more simple to the more complex. The same reasoning applies to the qualities or tones of consciousness. From simple feelings and sensations, man progresses through evolutionary stages to more complex states or "affects" of consciousness, concomitant with ideas and trains of ideas, to attain finally to the highest and most complex "sentiments" concomitant with conceptions. When we speak of the sentiment of religion, we refer to a complex feeling or a complex tone of consciousness that is blended of various "affects" co-ordinate with the numerous ideas that are fused in the conception. The readiness with which the term sentiment is often used as the equivalent of conception (*e.g.*, the "sentiment" of patriotism or the "conception" of patriotism) is a tacit admission of the equal importance of the feeling and the knowing elements involved and of the dependence of one upon the other.

To summarize, it may be asserted that every perception, every idea which enters the field of consciousness, has its own peculiar affective component, which belongs to it and it alone, and the prevailing tone of consciousness at any particular moment is determined by the character of the affective synthesis given by the ideative components.

To speak of transference of the affect from one group of ideas to another group, to which it does not properly belong (and at the same time from the unconscious to the conscious), is surely illogical. The acceptance of the doctrine of specificity of the affect does not necessarily imply that the affect associated with a concrete idea never varies. Let me explain this more fully, because I think it is a point which is fundamental to the clear understanding of some of the problems around which centres a good deal of discussion in psychological circles to-day.

The perception or idea which I possessed of a particular picture a few months ago differs from that which I have of it to-day. Formerly I saw in it nothing more than the representation of an old lady sitting by the kitchen fire in a humble cottage, engaged in reading her Bible. It was a pleasing picture, because it represented a homely scene, and depicted what was evidently a good old type

of Scottish elderly woman, with pleasant features, exemplifying a good old Scottish custom. To-day my perception and idea of that picture is changed because a friend, cultured in art, brought to my notice some features in the picture which had not hitherto previously appealed to me. To him it was not merely a pleasing picture, but a work of art, because of the disposition of the various elements composing it: the lighting of the interior, the disposition of the furniture, the setting of the central figure, the absence of sharp contrasts—in short, because of the artistic arrangements whereby the harmonious whole was made to state its story in a direct manner and without distraction.

My idea of the picture has changed, because it now embraces new perceptive components. The concrete picture has not varied, but my idea of it has, and with the change of idea there is a corresponding change in the accompanying affect.

So it is with all percepts and ideas. They vary, from time to time, in the life of the individual, according as the latter is capable of receiving new stimuli, new sensations, new percepts; but this does not in any way alter the fundamental truth that each idea has its own peculiar, *inalienable*, affective concomitant in consciousness, which belongs to it and it alone.

There is another set of conditions in which the truth of the doctrine which I have enunciated may seem to be open to question, and it is as well that these should be clearly exposed and understood, because they are equally important and fundamental to psychology. They involve the problem of the fundamental tone of consciousness, or basal feeling tone, and this again in turn leads us to the consideration of all those conditions in the organism which may be summed up in the term "kinæsthesia."

Physiologists are agreed that, from the beginning until the end of life, there is a constant flow of nervous impulses, from every tissue and organ in the body, towards the central nervous system. These impulses may be spoken of as internal stimuli; that is to say, stimuli acting from within the body, not penetrating the organism from without, as in the case of ordinary stimuli which awaken ordinary forms of sensation.

In the ordinary course of life, so long as there is harmonious functioning of the various organs and tissues, these organic stimuli do not obtrude themselves upon consciousness. Whilst we are engaged in various occupations, we are not conscious of the activities of the liver, the spleen, the various glands and other organs and tissues of the body.

We are not ordinarily conscious of the pulsations of our arteries or arterioles, or even of the pulsations of the heart, yet there is no denying the fact that these organs and tissues are activated by nervous impulses which pass both from the nervous centres to the organs and *vice versâ*. It is only when there is disturbed harmony of the organic functioning that we become directly conscious of these internal movements and activities, and such disharmony generally obtrudes itself upon consciousness in the form of a feeling of discomfort and pain.

I think the term "kinæsthetic sense" is not altogether a happy one; it is not sufficiently inclusive; by it we are rather apt to be reminded only of the sensations derived from the grosser muscular movements, such as those coming from voluntary muscles, tendons and articular surfaces. If we agree to include in the term not only these, but all those adjustments that arise from the inner impulses and stimuli to which I have already referred, we must agree that the kinæsthesis gives to each individual the immediate sense of his own proper existence, and at the same time a particularly individualistic tone of consciousness which may be described as his basal tone of feeling, colouring, as it were, his outlook upon life. The so-called "humour" of the individual finds its explanation in all that underlies the kinæsthesis. We are all aware of individuals, dyspeptic it may be, in whom disharmony in the digestive function is reflected in a pessimistic outlook upon life, in what we call a dull and sometimes bad humour. Most of us have personally experienced the joyous and pleasant outlook that comes from harmonious organic functioning. Much of that peculiar something which distinguishes the affective condition and mode of reaction to circumstances of one individual from another, has its roots in this basal kinæsthetic sense.

It will readily be admitted that the kinæsthetic sense is a variable thing, varying with altered conditions of organic functioning. In this fact lies the explanation of another seeming contradiction of the law of specificity. If perceptions and ideas which afforded us pleasure yesterday fall upon us to-day, it does not follow that they and their specific affective concomitants have altered; rather may it be that the basal tone of feeling has altered, so that the same idea finds itself in new surroundings, as it were, and the fusion of affect with altered kinæsthesis gives the varying product. After all, it is to be remembered that the kinæsthetic sense, vague and obscure as it is, probably exists before consciousness itself is established. Prior to the appearance of specific sensations, prior to the dawn of

consciousness, prior to birth, the human organism is being subjected to unceasing maternal stimuli and is responding to these—stimuli that are both beneficial and hurtful. At birth the kinæsthesia is already prepared; it progresses and varies throughout the whole period of life. Every sensation, every affect, every sentiment without exception has to become fused with this fundamental feeling.

I have already referred to the confusion which arises from the variable use of the word "feeling" in every-day language, as applied to sensations, affects, emotions and sentiments; but every-day language is here justifiable on physiological grounds because the kinæsthesia or basal "feeling" is common to all these.

Now I wish to make some observations upon current ideas regarding the nature and essence of emotion.

It is extremely unfortunate that the words "affect" and "emotion" are used by different writers as equivalent terms. They are not by any means synonymous. Psychologists themselves are to blame for perpetuating if not creating the confusion. If we agree, as we should agree, to regard "affect" as the "effect upon consciousness" of our experiences, then emotion is that *plus* something more. The additional element is movement or "motion" as suggested by the word itself. I am not going to discuss the various theories of emotion, but I do maintain that too much stress has been laid by a number of psychologists upon the motor element as exemplified by the James-Lange theory, which I refuse to accept as satisfactory, although it is still warmly supported by many writers. I think it is due to the fact that it is only these motor elements of motion that lend themselves to objective examination and measurement that so much attention and importance have been attached to them. They are very obvious elements in the *expression* or external manifestation of emotion, but they are by no means necessary concomitants, nor are they all capable of physiological demonstration and estimation.

We can certainly recognize an affect of joy or happiness that is distinguishable from the so-called emotion of joy. In essential nature, however, the affect and the emotion are not really different. In the affective condition the prevailing tone of consciousness is pleasant, integrative, harmonious. So is it also in the emotional state. The distinction lies not in a qualitative nor even in a quantitative difference, but rather in the adaptation or mode of response to the conscious experience.

As a rule it is only when the outward manifestations are more

or less obtrusive that we speak of the conscious experience as an emotional one. Nevertheless, we cannot estimate the degree of happiness, the emotional intensity, by the obtrusiveness of the external manifestation. It is one of the characteristics of civilized and cultured man that he has learned to regulate his conduct, which, after all, is but the response to his inner state of consciousness. Man can conceal his emotion—that is to say, that he can inhibit the ordinary motor manifestation of it, though he may be none the less deeply stirred and moved in his inner being. The dancing, leaping, gesticulating, singing, shouting or other obtrusive manifestations of joy on the part of the primitive savage may find their present day equivalents in the modern banquet with all its well-ordered *régime*, or in the presentation of an illuminated address or a donation to some charitable fund.

The thesis I wish to support is that which was vigorously maintained by my late master, Leonardo Bianchi, who insisted that in the genesis of emotion the preponderating influence was to be attributed to the element of *surprise*, which involves brusque change in the affective tone of consciousness in the first instance, and secondarily gives rise to those external motor manifestations to which undue importance has too often been assigned.

A poor man, on the receipt of the good news that he has won a modest sum of money in a lottery or sweepstake, may be overcome with joy and behave in a manner that is altogether unusual with him. On the other hand, an individual in affluent circumstances may win or inherit a considerable fortune without evincing any obtrusive sign of emotion. In the former case the organic equilibrium and the tone of consciousness has been brusquely disturbed. The individual sees in his modest fortune the means whereby obstacles that lay in the way of his further expansion can be removed and his feelings are positively pleasurable. His external manifestations of joy are not inhibited. In the other case the addition of many thousands to the income may not offer the same prospect of expansion. The functional balance remains undisturbed and there is no apparent emotional upset.

I think the reason why there has been so much difference of opinion about the essential nature of emotion is to be found in the fact to which I have already made allusion—that in studying the single aspects, attributes or faculties of mind one is apt to lose sight of the unity of mind as a whole. After all, the human being is something more than a mere receiver of energy from the cosmos. The physical law of the conservation and indestructibility of energy is

universally and psychologically applicable. The human nervous system not only receives energy from the outer world ; it transforms and conserves the cosmic energy, and is ever returning vital energy to the cosmos.

The mode in which energy is extrinsicated varies enormously in various individuals, according to the inherent quality and structure of the nervous mechanism, and according to the phylogenetic and ontogenetic stage of evolution. It can safely be asserted, however, that the extrinsicating mechanism is represented by the efferent or motor pathways.

Titchener (*Text-book of Psychology*, p. 489), referring to the law of dynamogenesis in relation to efferent activities, expresses doubt as to its applicability in any but a very circumscribed way. "Let us write for movement," he says, "the phrase 'muscular tension,' so that movement includes inhibition ; let us extend the meaning of muscular tension to cover glandular activities ; and let us leave out of account the fact of limen. Still it remains doubtful whether every excitation that corresponds to a sensation or image tends to a motor conclusion."

But is Titchener not inconsistent if he is willing to place muscular tension and inhibition on the same plane as muscular movement, while at the same time he refuses to link sensation ultimately with movement? Motion *in esse* is surely dependent upon, and consecutive to, movement *in posse*. Potential movement, again, implies conservation. Further, if we agree to give to the term emotion the significance of "affect" *plus* movement, or tendency to movement, of the threatened or benefited personality, then the *raison d'être* of the disputes that have centred round this vexatious question almost entirely disappears.

If I receive a letter informing me that a certain person has infringed my rights or destroyed my property, I may feel much disturbed and be moved to anger. It is not necessary that I should clench my fist or raise my arm or actually perform movements of retaliation, as James sought to make us believe, before I should be alive to the fact that I am angry. I may plan action with a view to obtaining satisfaction without exhibiting manifest motor reaction. That is potential motion—motion *in posse*. It is not the essential component of my emotion, which is to be found rather in the abrupt alteration of the tone of consciousness concomitant with the inrush of certain hostile notions and ideas. It is the imminent threat to the personality that is at the bottom of the emotion.

Even James himself, when advocating the doctrine with which

his name and that of Lange is so closely associated, with all the vigour and all the arguments he could summon to his aid, made various assertions which he evidently failed to recognize as inconsistent, antagonistic and opposed to his main thesis. "The feeling in the coarser emotions," he wrote, "results from the bodily expression. Our natural way of thinking about these coarser emotions is that the mental perception of some fact excites the mental affection called the emotion, and that this latter state gives rise to the bodily expression. My theory, on the contrary, is that the *bodily changes* follow directly the perception of the exciting fact, and that our feeling of the same changes as they occur is the emotion. Common sense says we lose our fortune, are sorry and weep, we meet a bear, are frightened and run, we are insulted by a rival, are angry and strike . . . my statement is that we feel sorry because we cry, angry because we strike, afraid because we tremble" (William James, *Text-book of Psychology*, 1892, p. 375). It is to be noticed that James, in making his pronouncement, which has had too great an influence upon modern psychology, was dealing with what he called "the coarser emotions." In the same chapter he makes reference to "the subtler emotions" and wrote as follows: "In the æsthetic emotions the bodily reverberations and the feeling may both be faint. A connoisseur is apt to judge a work of art dryly and intellectually and with no bodily thrill. On the other hand, works of art may arouse intense emotion; and whenever they do so, the experience is completely covered by the terms of our theory."

But surely James's theory must fall to the ground if it is not applicable, as he himself admits, to emotion in general. His theory, he said, "required that *incoming currents* be the basis of emotion. But whether secondary organic reverberations be or be not aroused by it, the perception of a work of art (music, decoration, etc.) is always in the first instance at any rate an affair of incoming currents. The work itself is an object of sensation, and the perception of an object of sensation being a coarser or vivid experience, what pleasure goes with it will partake of the coarse or vivid form."

Surely these words are a misuse of language and a misapplication of logic. The incoming currents to which James wished to attach primary importance in his theory were those derived secondarily from the bodily reverberations; yet he felt obliged to admit that pleasure might follow directly upon perception of the object of sensation.

"That there may be subtle pleasure too," he wrote, "I do not

deny. In other words there may be purely cerebral commotion independent of all currents from outside. Such feeling as moral satisfaction, thankfulness, curiosity, relief at getting a problem solved, may be of this sort."

Inconsistency could go no farther. Emotion is here confused with affect and sentiment. James seems to have reversed the usual scientific mode of procedure. Having discussed his theory he sought to evolve a suitable law, and when the latter did not suit the circumstances it was altered to fit them.

As an example of conservation, transformation and extrinsication of energy there is an apt illustration at hand. In a crowded English picture-house someone shouts "Fire." This sound, this auditory stimulus—for it is no more than an auditory stimulus—sets free an enormous amount of energy. There is an emotional storm, a panic, a seething and struggling mass of humanity making for safety and for self-preservation. The same word, the same sound, the same auditory stimulus falling upon the ears of a foreign or primitive crowd where English is unknown might produce no more effect than the noise of a breaking stick. In the first case we have the setting free of an enormous amount of conserved energy concomitant with the various ideas, notions and memories of the English-speaking subject; each of these brings into consciousness its own affective component in hurried succession, with ever-increasing nervous potential, so that there is a ready overflow to the efferent extrinsicating pathways. The conscious personality is unduly disturbed. There is commotion and emotion, which is obtrusive in its external manifestation.

In my insistence upon the equal importance and inseparability of the ideative and affective components of consciousness, I may be met by the objection that in our psychiatric practice we meet with states of consciousness that can only be described as emotional, and yet they are not accompanied by any definite ideas in consciousness—those vague fears, for example, with which we are familiar in the neuroses and psychoses to which reference has already been made. Admittedly there are tones of conscious feeling that are pleasant and unpleasant, more noticeably the latter, that have no particular ideative components in consciousness. I maintain, however, that to describe these as emotional is an unwarrantable and misleading use of the term which can only lead to confusion. Strictly speaking we are not dealing here with emotion, but with altered feeling that has its explanation in altered kinæsthesia. It is somewhat akin to what we call malaise—that ill-at-ease feeling

which ushers in an illness and is indicative of disturbed organic functioning, that kinæsthesia which is the fundus of the nascent consciousness in the new-born babe even before sensation is developed, and remains an integrant background of consciousness—a background with which perceptions, ideas and conceptions have to become allied throughout the whole span of life.

I am convinced that this is a field which requires further investigation. With a fuller appreciation of all that is to be comprised in the term "organic feeling" or "kinæsthesia," there should be more general agreement and consistency in the precise significance to be attached to psychological terms.

There is one other aspect of mental functioning which we are apt to overlook, the study of which, however, is capable of throwing a flood of light upon certain obscure psychic alterations, so obscure that to cover up our ignorance of their origin and mechanism we speak of them as occurring in "the unconscious." It is to be remembered that organic feeling is not, in normal functioning, an active element of the waking consciousness. It is normally in the background, and only when there is disturbed functioning does it become an element of conscious experience. Nor should we be unmindful of the important part played by affect in the process of association of ideas. If it is easy for the melancholic to think along painful lines, if it is difficult for ideas with pleasurable affective concomitants to occupy a place in his consciousness, that may well be because the prevailing associative factor in his condition is the affective rather than the ideative or cognitive element. The influence of the affective component upon ideative association does not receive the attention it deserves. It varies enormously in different individuals. The recall to memory of a quarrel or a fight in which one has been engaged in years gone by may in one individual be a rather placid, contemplative affair without much affective memory, whilst in another the recollection may be accompanied by feelings of quickened heart-beat, tense muscles and well-marked organic disequilibrium. In short, a fuller appreciation of all that underlies what has been termed temperament, mood, affective irradiation, affective illusion and affective association along with kinæsthesia will enable us to find an explanation of many psychological phenomena, without transgressing the generally accepted physiological laws, and without the need of resorting to special pleas and arguments, which, though specious and alluring, are found on examination to have no substantial foundation.
