## EMOTIONS

# THEIR PSYCHOLOGICAL, PHYSIOLOGICAL AND EDUCATIVE IMPLICATIONS

Bv

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### **PREFACE**

There is a tang to excitement, a vividness to moments of high emotion, a full-blooded sentiment of vital life in a struggle against odds, which engages the mind at once in any dramatic, literary, or musical portrayal of human emotional experience. All of us love a certain measure of this excitement and try to throw ourselves in the way of securing it. Why, then, should schools be such drab places? Have they not produced emotionally undernourished personalities? Should children be schooled to deal with reality only in intellectual terms? What part should aesthetic experience play in the life of the average person? And why are "nervous breakdowns" so frequent? Such were a few of the questions confronting the Committee on the Relation of Emotion to the Educative Process when it was organized by the American Council on Education and granted a subvention by the Josiah Macy, Jr., Foundation.

But such questions are more likely to be discussed with heat than with light, for our own emotional experiences make us feel convinced that our particular attitudes are correct, and the mind is ever ready to supply a rationalization for our felt convictions. For this reason any genuine research in this area must be conceived with a double measure of caution and must be checked by the most rigorous scientific techniques of evaluation. Dr. Frederick H. Lund, at the outset of the work of the Committee, already had spent years in the scientific study of the emotions and was felt especially qualified to assist the Committee in this matter. To him, therefore, was assigned the task of reporting to the Committee the findings of recent researches into the emotions and, in particular, the techniques which had proved effective in measuring emotion. Having found his report useful in its own work, the Committee is very glad that this report is being made available to other investigators of the field.

As Chairman of the Committee on the Relation of Emotion to the Educative Process, I found Dr. Lund quite unselfishly devoted to the discovery of truth in this area. So I am personally happy to see his survey published. This volume brings together and organizes a great mass of research findings which heretofore could be uncovered only by a laborious examination of the periodical literature and of numerous other books. It should be very useful in saving others the expenditure of time which Dr. Lund has had to make.

DANIEL A. PRESCOTT
Chairman, Committee on Emotions and the Educative Process.

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### **EMOTIONS**

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### CHAPTER 1

### IDENTIFICATION OF EMOTIONS

### Difficulties of Identification

The business of science is to identify and to describe—to define and to classify objects and sequences. *Identification* and *description*, these two, are its main objectives. But of these identification is primary; for we must first know with *what* objects and with *what* sequences we are dealing before we can begin to describe them.

Identification, as a first step in analysis, is particularly important in psychology, for here the processes under consideration are frequently less apparent and less tangible than in other sciences. No doubt reams of fruitless discussion could have been spared if proponents of different views could only have agreed in advance upon the nature of their problem—and, above all, if they could have made sure that it was *something* they were discussing, something more than a name or a symbol.

The special conditions which have rendered the problem of identification particularly difficult in the field of psychology will be seen to include: (1) an antiquated and misleading terminology, (2) the highly complex nature of psychological phenomena, (3) the internal and implicit nature of these phenomena, and (4) the very natural tendency to dramatize human events in accordance with human desire.

That terminology has created special problems for the psychologist is apparent when we realize that the terms used to describe some of the fundamental processes had their origin in a day when there was no psychology in a scientific sense, and when man's reflections about himself were highly animistic. These terms with their spiritistic implications the psychologist has had to adopt and incorporate into a system in which their original meanings no longer have any place or significance.

From this a certain ambiguity has resulted. The same words are used by the psychologist with one meaning and by the literary man with another. For the most part the older meanings are preserved in dictionaries and encyclopaedias in which such terms as will, memory, reason, intelligence, consciousness, instinct, and emotion are defined in a manner wholly inacceptable to the psychologist.

Complexity, the second of the difficulties, is apparent in the wide variety of internal and external conditions identified with such behavior forms as the emotional and instinctive. The organism being a unit, and the processes of adjustment being continuous, it has not been easy to find a sound basis for classification. Accordingly, in their attempts to single out certain processes for labelling and classification, authors have differed widely in the features which they have emphasized.

No less troublesome from the point of view of identification has been the fact of the internality or privacy of many of the processes with which the psychologist must deal. The fact that a behavior form such as the vocal may occur in implicit or abbreviated form (usually called mental) makes it all but impossible to secure anything like an objective record. Moreover, the absence in this case of any observable or outward manifestation has led to the injection of all sorts of mystic and spiritistic notions, which have only tended further to confuse the issue. There has been a tendency to conceive of the implicit functions as purely psychic and as wholly distinct from the physical. Out of this has developed the imponderables of philosophic dualism. Having created a gap between the mental and the physical, man has been confronted with the impossible task of bridging it. He has had to find a criterion by which the mental and the physical could be distinguished, and a means by which the one could act upon and influence the other.

Dualism, as an accepted philosophy of the individual, has been kept alive by the fourth of the conditions we have enumerated—the disposition to *color* and to *dramatize* human events in accordance with prejudices and desires natural to man. The emotion aroused by any opposition to the dualistic conception is itself evidence of the basis upon which it rests.

#### Points of Reference in Identification

Identification of emotions involves all the difficulties enumerated above and a few additional ones. The terminology is particularly perplexing. Not only is it obsolescent, but it suffers from the additional weakness of being external in its reference, of being descriptive less of emotional states than of the situations giving rise to them. No close inspection of such terms as pity, sympathy, envy, and jealousy is required to realize that their distinguishable features are to be found chiefly in the implied social relationships.

This objective reference, however desirable from a social standpoint, is most unsatisfactory from the standpoint of the psychologist, whose interest is in the mental and bodily conditions. In his attempt to employ existing terms to identify these bodily conditions much disagreement has resulted, not merely because the terms have gained external rather than internal reference, but because the bodily responses are much less varied than the situations responsible for them. This being the case, a given emotional response might be identified equally well by any one of several terms.

The possibility for conflict and misunderstanding inherent in this situation will become clearer from our description of typical experiments dealing with identification. But before turning to these, we shall first consider some of the historical as well as the more recent accounts of emotions.

### Emotions as Conceived by the Mentalist

The oldest and most widely held views of emotions are those of the mentalist, or of the individual who accepts philosophic dualism. According to the mentalist, emotions are states or processes belonging strictly to the mind or to consciousness. They arise directly through the perception of the emotion-inducing object or situation. The physiological changes which follow upon such perception are conceived merely as *effects*, not of the inciting stimulus, but of the emotional state. Or, if not effects, they are conceived merely as accompaniments or concomitants of the emotional process.

As illustrations of mentalistic interpretations we may cite the following: "An emotion is a highly complex mental process, or mental formation, belonging to the affective side of mental life."12 "By emotion is understood a sudden boiling up of feeling, which for a time overwhelms the mind and prevents the free and natural combinations of the cognitive elements."21 "Instinctive reactions are accompanied by consciousness . . . . consciousness which is of a kind commonly called emotional."2 "The ingredients of emotion are only sensations and images." 38 "It may be said that on the side of consciousness the feelings of pleasantness and unpleasantness are the core of emotion: that the former is an attribute of the latter." 15 "Emotion is consciousness attendant upon other forms of consciousness (as perception or ideation) to which it gives their feeling tone; and the emotions are separable and classifiable apart from these other forms because the same object of thought may at different times have different feeling tone."42

### Emotions as Affective Phases of Specific Instincts

So far as identification of emotions is concerned, the early mentalists were content to name the various emotions and to state that they were qualitatively distinct forms of mental content. Realizing the inadequacies of this conception, some of the more recent mentalistic accounts have linked the "psychological content" of different emotions with the internal and external behavior forms attending them. The best known of these attempts have been associated with the names of McDougall and of James and Lange. We shall consider these briefly.

William McDougall, in his discussion of emotions as the affective phases of specific instincts, defines instincts as "inherited reactions of the sensori-motor type, relatively complex and markedly adaptive in character, and common to a group of individuals." These instincts, he says, "always have an affective aspect. . . . In the case of the simpler instincts, this affective aspect of the instinctive process is not prominent. . . . But in the case of the principal powerful instincts, the affective quality of each instinctive process and the sum of visceral and bodily changes in which it expresses itself are peculiar and dis-

tinct; hence language provides special names for such modes of affective experience, names such as anger, fear, curiosity; and the generic name for them is 'emotion'." Thus, in his enumeration of "powerful instincts" and the primary emotions with which they are associated, McDougall points out the following relations:

Instinct Emotion Escape Fear Combat Anger Repulsion Disgust Parental Love and tenderness Mating Lust Curiosity Wonder Submission Humility

Elation

### Emotions as Complexes of Organic Sensations and Feelings

Assertion

William James, an American psychologist, and Carl Lange, a Danish psychologist, while adhering in all essentials to mentalistic interpretations, went much further than McDougall in admitting the importance of bodily changes. They were unwilling, however, to regard these changes as mere effects. Rather were they inclined to view them as primary. Emotional consciousness, they held, was not a cause but an effect of bodily changes—it was a composite of the sensations and feelings arising from physiological processes set in motion by an inciting stimulus.

James's own statement may make his position clearer. "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 of mind gives rise to 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." In support of his view James urged that "if we fancy some strong emotion, and then try to abstract from our consciousness of it all the feelings of its bodily symptoms, we find we have nothing left behind, no 'mind-stuff' out of