

EDUCATION OF EMOTIONAL BEHAVIOR

The Concept of Emotion

The science of the emotions or feelings constituted the most undeveloped chapter in the old psychology. This aspect of man's behavior proved to be more difficult to describe, to classify, and to relate by means of particular laws than did all the other subjects. Nevertheless, there are entirely valid views on the nature of the emotional reactions which may be found in the old psychology.

William James and Carl Georg Lange were the first to obtain results here, the former emphasizing the broad physical changes that accompany feelings, and the latter noting those vasomotor changes with which they are accompanied. Independently, the two researchers came to the conclusion that the ordinary conception of feelings is the product of a profound delusion, and that, in fact, emotions occur in an entirely different way than is usually conceived.

Ordinary psychology and everyday thinking distinguish three components in the feelings. The first, the perception of some object or event, or a representation of it (an encounter with a thief, the recollection of the death of a loved one, and so on), let us call *A*, the feeling thereby induced (fear, sadness) we will call *B*, and the physical expression of this feeling (trembling, tears), *C*. It was believed that the complete course of an emotion was represented by the sequence *ABC*.

If we look carefully into any feeling, we may easily notice that it always has its own physical expression. Strong feelings always seem to be spelled out on our face, and once we look at someone we can tell without any explanation whether he is angry, frightened, or at peace.

All the physical changes that accompany a feeling may be easily divided into three groups. First is the group of mimetic and pantomime movements, special contractions of the muscles, chiefly of the eyes, mouth, cheekbone, arms, and trunk. This class constitutes the class of emotional motor reactions. The somatic reactions, i.e., changes in the activity of certain organs associated with the most important vital functions of the organism, such as changes in respiration, in heart rate, and in circulation, form the next group. The third group consist of the group of secretory reactions, such as tears, perspiration, salivation, the internal

secretion of the sex organs, etc. The physical expression of every feeling formed from these three groups.

James distinguishes the same three components in every feeling listed although in the theory he suggested these three components occur in a different sequence. Whereas the ordinary schema of the feelings establishes a sequence of three components *ABC*, i.e., perception, feeling, mimicry, the situation, James suggests, is more in accord with a different formula, *ACB*, perception—mimicry—feeling.

In other words, James suggests that various objects possess the ability to induce in us directly, in a reflex pathway, various physical changes, and feeling is, in and of itself, now the second component in the perception of these changes. An encounter with a thief, he suggests, induces in us, reflexively, trembling, dryness in the throat, pallor, heavy breathing, and other manifestations of fear without recourse to any feeling. The very feeling of fear is nothing less than a collection of just these changes, as recognized by the organism. To be frightened denotes a sensation of one's own trembling, one's own heart beating, one's own pallor, and so on. In nearly the same way, the recollection of the death of a friend or relative reflexively induces tears, causes one's head to sink down and so on. Sadness reduces to the sensation of these manifestations, and to be sad means to perceive one's own tears, one's own bent posture, one's own drooping head, and so on.

The common saying is that we cry because we are in distress, we argue because we are irritated, we tremble because we are frightened. It would be more correct to say, according to James, that we are in distress because we are crying, that we are irritated because we are arguing, and that we are frightened because we are trembling. Thus, what had hitherto been considered a cause is really a consequence, and conversely, the consequence turns out to be the cause.

To see that this, is in fact so, consider the following reasoning. First, if we induce various external expressions of some feeling artificially, the feeling itself will be sure to emerge without delay. James suggests as an experiment to try to assume an expression of sadness upon awakening in the morning, speaking in a low voice, keeping your eyes down, taking quicker breaths, arching your back and neck very slightly, in a word, assuming all the signs of sadness—and at nightfall you will be filled with such anguish that you won't know what's gotten into you. Teachers are well aware how easily a prank turns into reality for children, how two boys who had begun by making believe they were fighting suddenly, when their struggle was at its height, and without any animosity towards each other, began to get angry at each other and cannot say whether they are still playing a game, or whether it was no longer a game. Just as easily does a child who is making believe he is frightened suddenly begin to actually experience fear. And in general, every external expression contributes to the

onset of the corresponding feeling, a runner easily becomes frightened, and so on. Actors are well aware of this fact, and know when a particular posture, intonation, or gesture will induce in them a strong emotion.

The converse law supports this thesis even more convincingly. One only has to overcome the physical expressions of an emotion, and the emotion itself quickly vanishes. If we keep ourselves from trembling when we are frightened, force our heart to beat evenly, and assume a normal facial expression, the very feeling of fear vanishes. Suppress the expression of some passion and it fades away. One psychologist has told how every time he feels an attack of anger coming on, he flattens his palms out as much as he is able to and spreads his fingers apart until they hurt. This would paralyze his anger every time, because it is impossible to be enraged when one's hands are spread apart, since anger denotes tightened fists and mouth shut tightly. If we were to mentally eliminate from the emotions, as if performing a subtraction, all physical changes, then, as can be easily seen, there would be nothing that would remain of the feelings. Take away from fear the symptoms of fear and you stop being afraid.

There are two facts that are obvious objections to this point of view. If understood correctly, however, they not only do not contradict, but even confirm this approach. First is the well-known circumstance that various reactions often are not absolutely connected in any way with an emotion. For example, the eyes can be easily made to produce tears if we grate an onion, though this does not in the least mean that sadness follows upon these tears. It is easily observed that, in this case, we are inducing only a single, isolated symptom, which, in and of itself, is powerless to induce an emotion, but which would certainly induce it if it were encountered in the necessary combination with all the other symptoms. It is not enough to induce tears in the eyes in order for sadness to appear subsequently, because sadness consists not in a flow of tears, but, even more so, in a whole series of internal and external symptoms which, at this moment, are absent.

Finally, the other objection is that any one feeling is easily induced by means of the internal administration of intoxicants introduced into the blood. Without assuming any of the artificial expressions of a feeling, one need only drink a certain amount of alcohol, or take a certain amount of morphine or opium, in order to induce a host of complex feelings. But it is easily seen that, through the intake of these substances, we are acting upon the very fount of the emotional reactions. We are varying the chemical composition of the blood, varying the entire circulatory system and all those internal processes that are associated with the blood, in particular, internal secretion, and, accordingly, we obtain a distinct emotional effect in the organism without any difficulty.

Thus, everything leads us to assert that emotion is, in fact, a certain collection of reactions which is connected, by means of the reflexes, to particular stimuli.

James fully identifies the schema of the emotions with the schema of behavior and of conscious experience that underlies everything we do. Feelings do not arise by themselves under ordinary conditions. A feeling is always preceded by a particular stimulus, a particular cause—whether internal or external (*A*). What compels us to be frightened or to be happy is, thereby, the stimulus the reaction always begins with. There then follows a series of reflexive reactions, whether motor, somatic, or secretory (*C*). Finally are the feedback reactions, the return of one's own reaction back to the organism as a new stimulus, the second-order perception of the proprio-ceptive field, which also constitutes what was formerly called the emotion itself (*B*).

The subjective nature of feelings is thus not hard to understand, i.e., the fact that a person who is experiencing a feeling and a person who is viewing its external expression will have entirely different ideas of this feeling. This is because, in this case, the two observers are focusing on two different components of the same process. The person looking from outside focuses on component *C*, i.e., the emotional reaction in and of itself. The person looking from within focuses on the proprio-ceptive stimulus emanating from this reaction, component *B*, and here, as was explained above, other nerve pathways are involved, and, consequently, different processes.

Biological Nature of the Emotions

That the emotions arise on the basis of the instincts and constitute closely related branches of these latter is not difficult to see. This has led certain researchers into considering instinctive emotional behavior as a unitary whole.

The instinctive roots of the emotions can be seen especially clearly in the most primitive or elemental, or "lowest" sensations. Some researchers here ascribe the very same reactions at times to the instincts and at times to emotions. Consider, as an example, two elementary emotions, anger and fear, and their possible biological meaning. It is not hard to see that all the physical changes that are accompanied by fear possess a biologically explicable origin.

There is every basis for supposing that all those motor, somatic, and secretory reactions that occur as part of an emotion, as an integral form of behavior, once constituted a collection of useful and adaptive, biological-type reactions. Thus, undoubtedly, fear was once the higher form of a precipitous and sudden escape from danger, and in animals, as in man sometimes, it still bears quite unmistakable traces of its origin. The mimetic reactions of fear usually involve an expansion and preparation of the perceiving organs, whose purpose it is to put one on one's guard, to make one extraordinarily wary and sensitive to the slightest changes in the environment. Eyes wide open, nostrils flaring, ears straining—all these features denote a guarded relation to the world, an attentive

listening for danger. Next a group of muscles becomes strained as if preparing for action, as if being mustered in preparation for jumping, running, and so on. Trembling, which is so typical of fear in man, constitutes nothing less than a rapid muscular contraction, a kind of adaptation for unusually rapid running. In animals, trembling when accompanied by fear turns directly into running. The somatic reactions of our body also have the same meaning and connotation of running from danger. Pallor, the cessation of digestion, diarrhea—all denote a flowing of blood away from those organs whose activity is not of vital and paramount necessity and importance for the organism at the present moment, and a flow of blood towards those organs which, now have the final say. This, in fact, recalls the “mustering of forces” which is observed when the blood, this provender of our organism, shuts down and halts the activity of those organs which seem to be in the background and which are associated with the placid activity of the organism, and throws the full force of all its reserves at embattled sectors, i.e., those which are to be rescued from danger without delay. Respiration, similarly, is altered, becoming deep, spasmodic, and adapted for rapid running. The secretory reactions associated with dryness of the throat and so on seem to point to a similar blood flow.

Finally, recent investigations on animals have shown that the emotions also induce changes in internal secretion. We know that the chemical composition of the blood is altered in a startled cat. In other words, we know that the most intimate of all internal processes are adapted to the basic goal of the organism, i.e., escape from danger. Together with the foregoing, these results lead us to define fear as a mustering of all of the forces of the organism for the purpose of running away from danger, that it is an *inhibition* of running, and to understand fear as a hardened form of behavior that arises from the instinct of self-preservation in its defensive form.

It is easily shown in an entirely analogous way that anger constitutes the instinct of self-preservation in its offensive form, that it constitutes another group of reactions, another form of behavior, an offensive form of behavior, and that anger consists in the mobilization of all the forces of the organism for attack, that it is an *inhibition of fighting* which arises from the instinct of self-preservation in its offensive form.

However, it is not hard to see that both fear and rage in the form in which they are now encountered in man constitute extraordinarily attenuated forms of these instincts, and one is left with the thought that, in the path of development from the animal to man, the emotions would appear to be on the wane and have not progressed, but rather atrophied.

Fear and anger in a dog are more powerful and more expressive than is the anger of a savage; in a savage these sensations are more impulsive than in a child; and in a child they are more striking than in an adult. Hence, we easily arrive at

the general conclusion that, in the system of behavior, the emotions function like vestigial organs that once possessed a significance of their own, but now, as a consequence of the altered conditions of life, are condemned to extinction and constitute an unnecessary and, at times, a harmful element in the system of behavior.

Come to think of it, in the context of education, feelings constitute an unusual exception in the following sense. It is desirable for the teacher to augment and reinforce all the other forms of behavior and reactions. Just imagine there was a way for us to increase a student's memory or understanding by a factor of 10—this, of course, would make the job of education 10 times easier. But just imagine for a moment, if you will, that we could increase a child's emotional capacities by a factor of 10, i.e., that we could make him 10 times more sensitive and that he would thereupon go into ecstasy at the slightest pleasure, and sob and go into hysterics at the slightest distress. Then, of course, we would obtain a highly undesirable type of behavior.

Thus, the ideal of emotional education would appear to consist not in the development and reinforcement of the emotions, but, on the contrary, in their suppression and attenuation. Since the emotions are biologically useless forms of adaptation, because of altered circumstances and of altered conditions of the environment and of life, they are consequently condemned to extinction in the process of evolution, and the man of the future will not know of the emotions in the same way that he will not know of other vestigial organs. Feelings are man's blind gut. Such a view, which asserts that the emotions are entirely unnecessary is, however, profoundly mistaken.

Psychological Nature of the Emotions

From simple observation, we know how the emotions complicate and vary behavior, and how far an emotionally gifted, refined, and educated person towers over an emotionally uneducated person. In other words, even everyday observation underscores a kind of new meaning that the presence of emotions brings to behavior. The very same behavior, when emotionally tinged, assumes an entirely different character than its lifeless forms. The very same words, though pronounced with feeling, act on us in a different way than when they are pronounced colorlessly.

What novelty does emotion bring to behavior? To answer this question, it is necessary to recall the general character of behavior as sketched above. From our point of view, behavior is a process of interaction between the organism and the environment. Consequently, in this process it's as if there were always three forms of this relationship, and that these three forms, in fact, alternate. The first case is that which occurs when the organism senses its superiority over the environment, when the goals it sets for itself and the demands placed on behavior

are achieved and satisfied by the organism without any difficulty and without any strain, when behavior proceeds without any internal impediment, and optimal adaptation is accomplished with least expenditure of energy and forces. Here the organism dominates the environment.

The second case occurs when weight and ascendancy are on the side of the environment, when the organism experiences difficulties and considerable stress in adapting to the environment, when there is always a feeling of disharmony between the extraordinary complexity of the environment and the organism's poor defences. In this case, behavior proceeds with the greatest consumption of forces, with maximal consumption of energy and with minimal adaptation.

Finally, the third possible and genuine case occurs when there is a degree of equilibrium established between the organism and the environment, when neither side is preponderant, but the two seem to be balanced in this conflict.

These three cases together serve as a basis for the development of emotional behavior. Just on the basis of the origin of the emotions from the instinctive forms of behavior, it is apparent that they would appear to be the result of the organism's own estimation of its relationship with the environment. And all those emotions that are connected with the sensation of force, contentment, and so on, what are known as the *positive sensations*, should be placed in the first group. Those emotions which are associated with the feeling of depression, weakness, and suffering—the *negative sensations*—belong to the second group, while it is only the third group in which there is relative emotional neutrality in behavior.

Thus, emotion should be understood as a reaction that occurs at the critical and catastrophic moments of behavior, as points of disequilibrium, as the ultimate end and outcome of behavior, having a direct impact on the forms assumed by subsequent behavior at every moment.

Interestingly, emotional behavior is extraordinarily common, and, for all intents and purposes, even in our most primitive reactions it is not hard to discover an emotional component.

The old psychology taught that there is an emotional tinge to every sensation, i.e., that even the simplest experience of all the colors, all the sounds, all the smells inevitably possesses a special perceptible tinge. As regards tastes and smells, everyone knows that very few of them are neutral, emotionally indifferent sensations, that every smell, like nearly every taste, is, most certainly, either pleasant or unpleasant, is a cause of pleasure or displeasure, involves satisfaction or aversion.

This is somewhat more difficult to discover in the visual and auditory stimulations, though here, too, it is not hard to show that every color, every shape, likewise every sound, possesses a unique, intrinsic tinge or sensation. We all know that some colors and shapes are soothing, while others, conversely,

excite us; some induce tenderness, while others repugnance; some make us happy, while others are a cause of suffering. It is only necessary to recall the entirely self-evident emotional value of the color red, this customary companion of every uprising, passion, and rebellion, or the color blue, this cold and peaceful color of distance and dreams, to be persuaded of this circumstance.

Come to think of it, it is only necessary to think a bit about where such forms of linguistic expression as a "cold color" or a "warm color," a "high sound" or a "low sound," a "soft voice" or a "hard voice" come from. Color, in and of itself, is neither warm nor cold, and likewise sound, in and of itself, is neither high nor low, and, in general, does not possess any spatial shape. However, everyone knows what is meant when we speak of the color orange and say that it is a warm color, and speak of a bass voice and say that it is a low, or, as the Greeks put it, a "thick" sound. Obviously, there is nothing in common between color and temperature, or between sound and magnitude, but apparently there is something that unites them in terms of emotional tone, something that tinges both impressions. A warm tone or a high sound denotes that there is some resemblance between the emotional tone of a color and temperature. The color orange, in and of itself, has nothing warm about it, though in its effect on us, there is something that recalls the effect of warmth. Recall that we defined an emotional reaction as an evaluative, secondary, feedback reaction of the proprioceptive field. And the emotional tone of a sensation denotes nothing less than the involvement and participation of the entire organism in each individual reaction of an organ. The organism cannot be indifferent to what its eyes see, it either identifies with this reaction or opposes it. "Thus," says Münsterberg, "'pleasure' or 'displeasure' does not, in fact, precede action, but is itself an action that leads to the prolongation or cessation of a stimulus."

Thus, understood as a secondary reaction, an emotional reaction is a powerful guide of behavior. It is in an emotional reaction that the purposefulness of our organism manifests itself. Emotions would not be needed if they were not purposeful. We saw that emotions arise in an instinctive pathway from the most complex and most vivid movements. Once they had been the guides of behavior in the most difficult, the most fateful, the most decisive moments of life. They arose at the highest points of life, when the organism had triumphed over the environment or had come close to destruction. At every turn, the emotions act as a ruler of behavior.

Now, under altered conditions, because they are not necessary, the external forms of movements that accompany emotion have attenuated and gradually atrophied. But their inner role as guides of all of behavior, what had been their initial role to begin with, still remains. It is just this element of purposefulness in the emotions which constitutes the most important feature in the study of its

psychological nature. It would be wrong to imagine, as some believe, that emotion seems to be a purely passive experience of the organism, and does not itself lead to any sort of activity.

On the contrary, there is every reason for believing that the most correct theory of the origin of the psyche is that theory which associates the origin of the psyche with the emergence of what is referred to as *hedonist consciousness*, i.e., with the primitive sensation of pleasure or displeasure which, as the second component of a feedback reaction, affected the reaction, either by obstructing it or by stimulating it. Thus, the primordial regulation of the reactions arises from the emotions. The emotion associated with a reaction guides and regulates it, depending on the overall state of the organism. The transition to a passive type of behavior undoubtedly occurred on the basis of the emotions. In precisely the same way, there is every reason for supposing that the reactions of pleasure and displeasure, which arise earlier than all the other reactions, are primitive forms of the child's purely mental behavior.

This purposeful character of the emotional reactions is most easily understood on the basis of the three-dimensional theory of the feelings proposed by Wundt. Wundt suggested that every feeling has three dimensions, and in each dimension two directions. A feeling may occur (1) along the axis of pleasure and displeasure; (2) along the axis of excitation and suppression; or (3) along the axis of stress and resolution.

It would seem to be readily apparent that stress coincides with excitation, and suppression with resolution. This, however, is not so. If a person is angry for some reason, his behavior is characterized by an extraordinary degree of stress and tension of every muscle and, moreover, an extraordinary suppression of all reaction. In precisely the same way, the expectation of a prize or the anticipation of a verdict turns into the joyful excitation associated with the utter resolution of all kinds of stress.

It is because there are three dimensions to every emotion that feelings are essentially purposeful. Every emotion constitutes an urge to action or a rejection of action. No feeling can be indifferent and without outcome in behavior. Emotion is also the inner guide of our reactions, a guide that strains, excites, stimulates, or obstructs this or that reaction. Thus, the emotions still function in the role of inner guide of our behavior.

If we do something or other with joy, the emotional reaction of joy does not point to anything other than the fact that we will strive to do the same thing later on. If we do something or other with distaste, this will mean that we will try in every way possible to cease performing these tasks. Thus, the novel component which emotion contributes to behavior is wholly reducible to the organism's regulation of every one of its individual reactions.

That there exists a concerted diversity of emotional reactions, which involves all of the most important organs of our body in the course of each isolated

reaction, thus, should be entirely understandable to the reader. Experimental investigations have shown that, according to recordings of respiratory movements, cardiac beat, and pulse rate, the curves produced in these recordings, which express the course of the most important organic reactions, respond submissively to the slightest stimulus and seem to quickly adapt themselves to the subtlest variations in the environment.

It is not without reason that the heart has long been thought of as the organ of feeling. In this regard, the conclusions of exact science are in full agreement with the ancient view of the role of the heart. Emotional reactions are, above all, reactions of the heart and of circulation; and if we recall that respiration and blood determine the course of absolutely every process, in all our organs and tissues, we can understand why the reactions of the heart could serve as the inner guides of behavior.

"We owe all the emotional side of our mental life," writes the Danish psychologist Lange, "our joys and sorrows, our happy and unhappy hours, to our vasomotor system. If the impressions which fall upon our senses did not possess the power of stimulating it, we would wander through life unsympathetic and passionless, all impressions of the outer world would only enrich our experience, increase our knowledge, but would arouse neither joy nor anger, would give us neither care nor fear."¹

Education of the Feelings

"Education always denotes a change." If nothing changes, then nothing has been taught. What are the educational changes that must be introduced into the feelings? Above, we saw that every feeling is nothing other than the mechanism of a reaction, i.e., a particular reaction of the organism to some stimulation from the environment. Consequently, in its general outlines, the mechanism for the education of the feelings is precisely the same as for all the other reactions.

By connecting together various stimuli, we can always form new relations between an emotional reaction and some element of the environment. Thus, altering all those stimuli a reaction is associated with is the first step in education. Everyone knows that the fears we experience in childhood have no analogue in later life. That which has caused us to fear and scared us becomes safe, though on the other hand, we learn to fear many objects and things that we had previously related to with trust.

How does this transfer of fear from one object to another take place? The simplest mechanism is that of the education of a conditional reflex, i.e., the mechanism by which a reaction is transferred to a new stimulus, which occurs every time this new stimulus coincides with the unconditional stimulus of an innate reaction.

If, for example, some event which a child is frightened of is accompanied each time by certain other circumstances, these circumstances will, in and of themselves, be capable of subsequently inducing fear in the child. The child will be scared to go into a room where he had experienced something frightening even once, he runs away from all those objects which were present when he was frightened. Hence, the first rule for the education of the feelings: Try to so organize the child's life and the child's behavior in such a way that he encounters those stimuli between which such transfer of feelings is to be created as often as possible.

At first the child will respond with fear only to the onset of his own troubles, but suppose that every time something unpleasant threatens his friends, his mother, or his sister, this is also associated with personal pain for the child. After a short period of time, a new relation will have been formed in the child, and he will respond with fear to impending troubles and sufferings that do not personally affect him in the least, but threaten those close to him. Thus out of a narrow, self-centered sensation of fear there is created the foundation for broad and profound social feelings.

In precisely the same way, we can easily lift out of the narrow circle of personality all the self-centered feelings, i.e., teach the child to respond with anger not to the wrongs done to him personally, but to the wrongs done his own country, his own social class, or his own craft. It is this possibility for the broadest possible transfer of feelings which also constitutes the surest guarantee of the education of the feelings, which may be expressed as the possibility for the creation of entirely new relationships between the individual and the environment. This is why there can be no unacceptable or undesirable emotions, from the teacher's standpoint. On the contrary, the teacher must always start from what are thought of as the lowest or self-centered feelings, understanding them to be the most primitive, the most basic, and the most powerful of all feelings, and just on the basis of these feelings, lay the foundation of the emotional structure of personality.

The division of the sensations into lower and higher, self-centered and altruistic, should, therefore, be dropped, since absolutely every sensation may be pointed in any direction by teachers and associated with any stimulus. One can teach the child to be frightened of a little pimple on his face or of a spider on the wall, and train him to be frightened of general calamities, of failing his favorite subjects, or of the misfortunes that have befallen those close to him. And what we have said of fear we could just as well have said of all the other feelings. All the emotional reactions can be related with the most diverse stimuli, and this relation may be brought into existence only by creating conflict between different stimuli in the student's personal experience.

In other words, here the educational mechanism reduces to a special organization of the environment. Thus, the education of the feelings is always,

basically, a *re-education* of the feelings, i.e., a variation in the direction of an emotional innate reaction.

There is one more psychological mechanism for the education of the feelings which is inherent only to the emotional reactions and which has its roots in the distinctive features of the constitution of these reactions. According to our understanding of this mechanism, the path pointed out above is not the only way for a relation to form between a reaction and some event. It is also possible for the feeling of, say, fear, to be associated with a stimulus that had not been connected with an unconditional stimulus of fear in the child's experience, though it had been connected with the sensation of pain, with displeasure, and so on in his experience.

It is only necessary to create what is known as a *preventive reaction*. Thus, the first time a child sees a lit candle, he will unsuspectingly try to touch it with his hands, but once he's gotten burned, he will begin to be frightened of fire and will respond to a flame brought near him with a sharply expressed fear. In this case, a new reaction is locked in, although not through the establishment of a conditional reflex, but in an entirely different way—through the creation of an independent relation between two emotions in which the strongly experienced emotion of pain induces the emotion of fear. In other words, the emotional effect of a particular event, of a particular reaction, becomes the cause for the establishment of a whole series of other emotional relations. If you would like a child to be afraid of something, then relate the approach of this something with pain or with suffering for the organism, and the desired fear will arise all by itself.

Thus, the emotions have to be considered as a system of anticipatory reactions that inform the organism as to the near future of his behavior and organize the different forms of this behavior. For the teacher, therefore, the emotions become an extraordinarily valuable tool for the education of various reactions. No form of behavior is so vigorous as when it is associated with an emotion. If you would like to induce in a student certain desirable forms of behavior, therefore, always be sure that these reactions leave an emotional trace in the student. No moral sermon educates like real pain, like a real feeling, and in this sense, the apparatus of the emotions seems like an expressly adapted and subtle tool by means of which behavior may be influenced effortlessly.

Emotional reactions turn out to have a substantial influence on absolutely all forms of our behavior and on all the components of the educational process. Whether we wish to help students achieve a better memory or whether we wish thinking to proceed more successfully—in either event we must take care to stimulate the particular activity emotionally. Experience and research have shown that an emotionally tinged fact is remembered more strongly, more firmly, and longer than one that is neutral. Every time you tell a student something, take care to engage his feeling. This is needed not only as a tool for better recall and better assimilation, but also as an end in itself.

Education in pre-revolutionary times rationalized and intellectualized our behavior in infinite ways, resulting in that frightful hardheartedness, in that utter absence of all feeling, which became an inevitable trait of every person who passed through the educational system. In modern man, everything is mechanical to such an extent, his individual impressions are so associated with concepts, that life passes in tranquility, neither engaging nor affecting his psyche, nor tinging his relations with the emotional, and this joyless and untroubled life, without serious catastrophes, but also without great joys, creates a foundation for that fastidious gradation of feelings which, in literary language, has long been known as narrow-mindedness or Philistinism.

Everything that we lost as a consequence of this education, the spontaneous sensation of life and, incidentally, the lifeless, uninspired method of teaching all the different subjects played no small role in this disengagement from the world and in this destruction of feelings. Who among us has not thought of what an inexhaustible source of emotional stimulation is concealed in an ordinary course of geography, astronomy, or history, all we have to do is think of ways of teaching these subjects that go beyond all dry logical schemata and make of teaching not only an object and labor of thought, but also a labor of feeling.

Emotion is no less important a tool than is thinking. The teacher must be concerned not only that students think about and learn geography, but also feel deeply about it. Such a thought usually does not come to mind for one reason or another, and teaching that is emotionally felt is a rare visitor to our schools, and is associated, for the most part, with an impotent love for one's own subject on the part of a teacher who doesn't know of any way of imparting this love to his students and, therefore, usually has the reputation of being eccentric.

Meanwhile, it is precisely the emotional reactions that have to serve as the foundation of the educational process. Before communicating a particular piece of knowledge, the teacher should induce the appropriate emotion in the student, and take care to associate this emotion with the new knowledge. Only new knowledge that has passed through the student's senses may be inculcated. Everything else is lifeless knowledge that diminishes every vital relationship to the world. Of all the subjects taught in school, only in the teaching of literature, and there only to an insignificant degree, was the presence of an emotional component recognized as an essential element of the educational process in the classroom.

The ancient Greeks said that philosophy begins with wonder. Psychologically, this is true with regard to all knowledge, in the sense that every bit of new knowledge must be preceded by a certain sense of craving. A certain degree of emotional sensitivity, a degree of involvement must, of necessity, serve as the starting point of all educational efforts.

There is a short, though profoundly meaningful comic story of Chekhov's that may serve as the best example of the sterile indifference we spoke of earlier.

In this story, an elderly official who had never studied anything would recollect the meaning of all the punctuation marks from experience; he knew that a colon is placed before a listing of pages or references, that a comma separates a list of names, that, in other words, in his life and his experience there were always times whose emotional meaning was represented by these punctuation marks. In all his years of work only the exclamation point had never turned up even once. From his wife, he learned a rule she had memorized in her boarding school, that the exclamation mark is used to express delight, enthusiasm, anger, indignation, and other feelings. But it was just these feelings that were missing in the life of the official, and the feeling of infinite grief for the life he had so foolishly led. His resentment and indignation, forced him to experience a strong outburst for the very first time, and, in the office supervisor's book of congratulations, he wrote three large exclamation marks following his signature.

If you would prefer that your students not repeat the pitiful life of Chekhov's official, take care that delight, indignation, and other feelings do not pass them by in life, that there are exclamation points in their lives that are just a little bit larger.

In our society, there has developed, for one reason or another, a one-sided view of the human personality, and everyone, for one reason or another, thinks of natural gifts and talent as applicable only to intelligence. But one may not only possess a talent for thought, one may also possess a talent for feeling. The emotional aspect of personality has no lesser a value than all the other aspects, and constitutes a subject and a concern of education just as much as does the mind and the will. Love can involve just as much talent and even genius as the discovery of the differential calculus. In both, human behavior presents exceptionally and monumental forms.

The extreme and falsely exaggerated sensitivity that must be rigorously distinguished from feeling is another result of emotional education, though no better than an extreme result. By "sensitivity," we should understand all those forms of the emotional reactions that are observed when emotion is not associated with any action and when everything without exception is resolved in the internal reactions that accompany it. To give an example of a false feeling. James points to those sentimental Russian plantation owners who would cry in the theater while watching some sensitive drama without it ever crossing their mind that their coachman was out in the street freezing in the 40 degree weather. As much as emotion is powerful and important for action, so is sentiment sterile and of no value.

As regards the education of the emotions in the proper sense of the term, here the essential pedagogical task is to teach the child to become ruler of his emotions, i.e., to teach him to incorporate the emotions into the general network of behavior, to make them intimately related to all the other reactions and not burst into the course of these reactions in a disruptive and disorderly fashion.

The ability to master one's feelings through psychology means nothing less than the ability to master their external expression, i.e., the reactions associated with them. Feelings are conquered, therefore, only through the mastery of their motor expression, and he who learns not to make a grimace and wince when tasting something disagreeable or disgusting conquers disgust itself. Hence that extraordinary power over the education of the feelings that belongs to the development of conscious movements and the control over these movements.

A coward who strikes an attitude of pride and approaches a foe boldly, openly and with a warlike demeanor has thereby already conquered his cowardice. We know that famous warriors such as Peter the Great and Napoleon were as scared of mice (and insects). Consequently, they knew of the feeling of fear, and emotional reactions were natural to them. However, in a battle they could stand under fire without trembling because they were able to master their fear.

Such a mastery of the emotions, which constitutes the task of every form of education, might at first glance appear to consist in a suppression of all feeling. In fact, it denotes only the subordination of feeling, in which the feelings are bound up with the other forms of behavior and guided in the appropriate directions. One example of such rational employment of the feelings we might cite are the intellectual feelings, i.e., feelings such as curiosity, interest, wonder, and the like which arise in immediate association with intellectual activity and which guide this activity in most explicit fashion, though, in and of themselves, these feelings possess an extraordinarily imperceptible physical expression, confined for the most part to slight movements of the eyes and the face.

Games, which we spoke of as constituting the best educational mechanism of the instincts are, in addition, also the best means of disciplining emotional behavior. The child's games are always emotional, there are always strong and vivid feelings in these games, though they teach the child not to follow emotions blindly, but to make them conform to the rules of the game and to the ultimate goal of the game. Thus, games are the first forms of conscious behavior, arising on the basis of instinctive and emotional behavior. They are the best tool for the integrated education of all these diverse forms of behavior and for the establishment of the proper coordination and interdependence between them.

Emotions, translated by Istar A. Haupt from the German translation by Dr. H. Kurella of the Danish original, New York, Hafner, 1967, page 80.