00274788

Simply Feelings

Emotions are important and complex aspects of our existence. They often determine the choices we make and guide our interactions with other human beings. Over the years philosophers and psychologists have struggled to make sense of emotions and to define them. The theory I have chosen to support creates a simple definition. I believe William James' theory of emotion to be the most plausible.

James believes that emotions are merely the perception of bodily changes. In simpler terms, he believes emotions to be feelings. His model of a series of events leading to an emotion would be as follows: perception of stimulus -> bodily change -> perception of the bodily change. The perception of the stimulus is the mind registering what is provoking the reaction. In response, the body experiences visceral changes. The heartbeat raises or lowers, various glands begin to secrete hormones and other biological changes occur throughout the body. Once the mind becomes conscious of these changes, the perception, that consciousness becomes the emotion. The awareness of the change in ones overall feeling is the emotion. The bodily response precedes the emotion leading us to believe that one does not cry because they are sad, they are sad because they cry. So emotions are feelings, and a feeling can be defined as an awareness of physical sensations in oneself. A feeling could be your heart racing or your stomach twisting. Most of the time you cannot pinpoint what exactly is different, but you recognize that something in your body is atypical. You then further associate that abnormality as a specific feeling; for example, loss, emptiness, joy, or pride. James' theory that emotions are feelings should only be applied to the "standard emotions", or emotions which have distinct physical manifestations.

These emotions should be easily recognized by their outward appearance though facial expressions and body language. Some examples of standard emotions are, sadness, anger, surprise and happiness. James' theory can be supported by means of both conceptual and empirical evidence. Conceptual evidence refers to evidence which involve forming mental ideas and abstractions while empirical evidence supports with tested and scientifically proven data though experiments. A mix of both types of evidence can be used to convince one that an emotion is nothing more than an awareness of feelings. In the following paragraphs I will show why I believe that James' theory of emotions is most plausible.

First I will discuss conceptual evidence that is in favor of James' view. In James' article, *What Is An Emotion?*, he puts forward the challenge to try and imagine an emotion without any physical sensation. For myself, it is impossible and that is what initially drew me to his theory. Without the physical feeling, an emotion would just be a thought. James explains an emotion without feeling as, "Without the bodily states following on the perception, the [emotion] would be purely cognitive in form, pale, colourless, destitute of emotional warmth." (James 190) Without the awareness of ones' bodily changes, the initial perception becomes an indifferent thought. If one observes a tree and no inner physical response occurs, it is merely an observation. However, If the tree is noticed and it provokes a feeling (physical sensations) within that individual, the new state of being can be considered an emotion. Try to imagine fear without the pounding of the heart and the panicked "gut wrenching" feeling. Without the sensations it just becomes an emotionless thought. The example James uses is laughter and the feeling of ludicrousness. Without laughter or the feeling that one is about to laugh, the ridiculousness and

hilarity of an object or event disappears. Can something ever truly be categorized as funny if it does not provoke the feeling of mirth or actual laughter? And even in isolating laughter one can distinguish several sensations associated with it. The heart fills the chest cavity, posture is improved, muscles loosen and contract, and a smile occurs; however, one would not normally consider 'laughter' itself an emotion. Instead it is a feeling which plays a large part in the emotion of happiness or joy. This idea leads to the question of whether sensations such as pain or hunger fit into James' theory. I believe, in the instances of pain and hunger, they are merely individual, concentrated feelings. Hunger is made up of several sensations such as an empty stomach or a slight headache resulting from a lack of essential nutrients, but it doesn't have the complexity required of an emotion. I would categorize hunger as a singular feeling rather than an emotion. An emotion is an elaborate combination of feelings. To put it simply, emotions are feelings but a feeling is not an emotion. A combination of changes is necessary and the awareness of a singular sensation is not enough to constitute an emotion.

Another branch of conceptual evidence is found by exploring the amount of control over our emotions. James believes that there is very little control because of the lack of voluntary control over most feelings. This idea can first be shown in the fact that one cannot summon an emotion voluntarily. Merely thinking about experiencing or acting out an emotion cannot create a true emotion because the essential physical changes are missing. There are too many feelings, which are necessary for an emotion, which we have no volitional control over. Many organs experience changes that we cannot recreate on command. Also, some changes which we do have control over occur as well but they are slight enough that we do not think to produce them when faking an emotion. An example of this phenomena is spotting a 'real' or 'fake' smile. The most

noticeable difference is that a person's eyes will crinkle with "laugh lines" during a real smile. In contrast, a fake smile only engages the lips while the eyes remain unchanged. While we cannot force an emotion, we cannot prevent them either. This leaves little room for any type of control over our emotions, but we do have ability to slowly change our emotions through our actions. James says in his article that in order to change an emotion, one must change the physical manifestation of it. He advises, "Count ten before venting your anger, and its occasion seems ridiculous... On the other hand, sit all day in a moping posture, sigh, and reply to everything with a dismal voice and your melancholy lingers" (James 197) He tries to explain that emotions can be transformed by altering their physical characteristics. If one does not allow the physical changes to persist, the emotion will fade; "Refuse to express a passion and it dies" (197). While it may take some patience, smoothing the brow, staying alert, improving posture and speaking in a major key will usually transform melancholy into a state of content. This being said, James believes emotions to initially be uncontrollable and automatic. We are not responsible for our feelings; however, we are responsible for our actions springing from those feelings. This responsibility for our actions stems from the fact that we do have control over our long term outward behavior. In other words, we cannot prevent the rage we initially *feel* after being insulted, but we can prevent ourselves from verbally lashing out or striking the offender. This proves that emotions are based solely on perceiving the internal physical changes we recognize as feelings.

Now that I have shown conceptual support for James' theory, I will now describe an example of empirical evidence in favor of James. This empirical evidence is found in Dutton and

Aron's experiment in 1974 concerning misattributed arousal. The purpose of this experiment was to test whether the sexual attraction towards a stranger was affected by the intensity of the situation the interaction occurred in. So, they tested whether people would misidentify the emotion they were feeling. To do this Dutton and Aron constructed an experiment which had two scenarios; A high, swinging, "arousing" bridge and a low, sturdy, "non-arousing" bridge. The exciting bridge was meant to elicit a slight reaction from the subject while the non-arousing bridge acted as a constant. On each of these bridges a group of male subjects had individual interactions with an attractive female interviewer. She approached them and asked if they would fill out questionnaires containing Thematic Apperception Test (TAT) pictures. A TAT requires a subject to tell a story based upon a series of provocative yet ambiguous pictures.) Dutton and Aron then proceeded to measure the number of subjects who called the interviewer back and expressed sexual interest. They also determined the level of attraction based on the level of sexual content in the stories they created. Interestingly, their results showed a much higher attraction rate on the arousing bridge. "Sexual content of stories written by subjects on the fear-arousing bridge and tendency of these subjects to attempt postexperimental contact with the interviewer were both significantly greater" (Dutton/Aron 516). These results tie in nicely with James' theory of emotion because the emotion felt was much higher when more physical symptoms were present. The slight fear felt on the scary bridge was misperceived as attraction because fear and attraction share some distinct feelings and sensations. The subjects heart rate increased out of fear on the arousing bridge but it was slight enough so that the subjects weren't consciously aware of it. Instead, when faced with an attractive woman, the subjects interpreted their elevated heart rate as attraction. Furthermore on the boring bridge, without the elevated

heart rate and other physical changes, the level of attraction (occurrence of emotion) was much lower. While some might see it as a problem that feelings overlap and can be misattributed, I see it as further support for James. The fact that the subjects interpreted their as the wrong emotion proves that in order to determine an emotion at all the perception of one's bodily changes, or feelings, is necessary. In order to misinterpret something, one must first be attempting to interpret, in this case, feelings. Also, if an emotion was purely cognitive one should think that it would be fairly easy to distinguish emotions seeing that they are merely judgements or thoughts, but instead emotions overlap all the time. Why are dramatic and stressful situations sometimes viewed as romantic? Because many of the feelings associated with fear or anger are also associated with love and lust. And so, with this empirical evidence, it can be seen that physical feelings play a very important role in emotions.

After establishing various arguments in favor of James' theory of emotion, I will now take the time to address some counter arguments. Most, if not all, major criticisms of James' theory are addressed by Walter Cannon in his paper, *The James-Lange Theory of Emotions: A Critical Examination and an Alternative Theory.* Cannon's main purpose in this paper is to disprove that emotions are perceptions of bodily changes. While James mostly provides conceptual evidence for his theories, Cannon provides strictly empirical evidence which he interprets to disprove James' abstracts. The first of Cannon's objections I will address is that *the same visceral changes occur in very different emotional states and in nonemotional states.* So, he wants to argue that many emotions share feelings or sensations and, in turn, it would be difficult to define each emotion based upon feelings alone. In my opinion, this objection does not prove

James wrong. While many emotions share certain feelings or sensations (such as an elevated heart rate), not all of the feelings are shared. Each emotion is made up of a complex combination of feelings and sensations that can be both conscious and subconscious. Of course there will be overlap because there are only so many bodily changes we can biologically produce. All of our biological parts serve multiple functions to keep us balanced and alive. The same idea applies to our feelings. An elevated heart rate increases blood flow to certain areas and this is useful for most emotions. We cannot pinpoint all of the changes for each emotion exactly because each emotion has it's on DNA of feelings and sensations. While Anger and Fear may have a similar jump in the heart rate, the facial expressions associated are quite different. When one is angry their face scrunches together and their focus is directed akin to a predator. When one is afraid however, their face opens up and their eyes become wide and alert resembling prey. Furthermore, as I discussed with the Dutton and Aron's Bridge experiment, emotions *are* difficult to tell apart. Emotions can be misinterpreted all the time and while all very distinct, they also can be very difficult to identify because of the crossover of visceral changes.

Another one of Cannon's criticisms is that t*he viscera are relatively insensitive structures and that visceral changes are too slow to be a source of emotional feeling.* In several experiments Cannon measured the reaction time of various visceral changes, such as smooth muscle and glands, and concluded that they were slower than the emotional reaction time. But I believe he is mistaken in his measurement of emotional reaction time. What he defines as an emotional reaction I would classify as merely a reaction. The emotion is created from the initial physical reaction and takes time to develop. His reaction time and time for visceral change also only differ by a few seconds which is more than enough time for feelings to sink in and an

emotion to develop. What Cannon was measuring was only individual sensations. And the physical reaction shown on people through facial expressions is only one part of the emotion. An emotion is apparent on ones face long before they are aware they can name the emotion they're experiencing. Emotions are not instantaneous. Cannon also noted that a human's main internal organs are relatively unfeeling and that we are oblivious to the constant changes in all of our various internal structures. He says that "We are unaware of the contractions and relaxations of the stomach and intestines during digestion, or the rubbing of the stomach and intestines during digestions, of the squeezing motions of the spleen, or the processes in the liver..." (Cannon 111). Despite this apparent numbness of our internal organs we are still subconsciously aware of them. In order to maintain homeostasis (a balanced and healthy existence) the brain is aware of any slight change or abnormality in our system. So, whether we are conscious of it or not, our brain still perceives that change. This recognition is then registered in our mind along with the changes we are aware of and the perception of the combination of changes creates an emotion.

Cannon describes an experiment in his paper that, I feel, backfired severely on him. His purpose was to prove that *the artificial induction of the visceral changes typical of strong emotions does not produce them.* To artificially induce visceral changes he injected his subjects with adrenaline and then proceeded to measure their emotional levels through personal reports and observation. His results showed that most people reported that they "feel as if" they had an emotion (afraid, anxious, joyful). Also, actual emotions were produced if the emotion was encouraged before the adrenaline (talk about a recent death of a close family member before the injection). Cannon interprets these results to mean that emotions cannot be merely physical. I, on the other hand, view this as strong support for James' view that emotions are perceptions of

feelings. The reason many of the subjects felt "as if" they had an emotion was because not all of the sensations required were present. They didn't experience an actual emotion because an emotion requires a collection of feelings not just a spike in adrenaline (one sensation). Cannon did prove that *artificially* inducing physical changes doesn't produce true emotions, but that is also one of James' main arguments. Emotions cannot be artificially produced. You cannot fake or bring about an emotion by just changing one or two sensations. Also, the variation of emotions reported is the result of the body registering a change but lacking the ability to pinpoint which emotion it is. Each individual *perceived* the bodily change to mean a different emotion because of the crossover of common bodily changes. The next factor which coincided with James' view was that when the emotion was already present, the adrenaline only intensified the physical response and emotion. The fact that the emotion intensified with the addition of the adrenaline proves that the emotion heavily depends on the bodily changes associated with it. Essentially, while Cannon was trying to disprove James, his experiment ultimately ended up supporting James' theory.

The final counter-argument from Cannon I will address is his claim that *total separation of the viscera from the central nervous system does not alter emotions.* He describes horrific experiments in which they severed "the spinal cord and the vagus nerves of dogs so as to destroy any connection of the brain with the heart, the lungs, the stomach, and the bowels, the spleen, the liver, and other abdominal organs indeed to isolate all the structures in which formerly feelings were supposed to reside" (Cannon 108). Similar experiments were performed on cats as well. Then the animals were stimulated (usually provoking fear or anger) and observed to see if they showed the same emotion reactions as before. There are several problems with these

experiments. Besides the obvious lack of ethics involved, Firstly these experiments were performed on animals. There is no proof that animals experience the same level of emotion as humans, or if they experience any emotion at all. Second, even if the animals did experience similar emotions to humans, what they might be experiencing, after their sensations are surgically removed, may no longer be an emotion. Perhaps they are merely reacting and not feeling anything. After all, it is the physical reactions which cause the emotions. The experiments only show the stimulus and physical reaction; perhaps, there is no perception of that physical change thus no emotion. The final problem is that we will never know the answers to all of these questions because animals cannot articulate their feelings/emotions or communicate the actual results.

Expanding further on the challenge that *total separation of the viscera from the central nervous system does not alter emotions,* Hohmann's experiments pertaining to spinal cord injuries actually provide more empirical evidence for James' theory and against this particular criticism. In 1966 Hohmann investigated the emotional states in people with spinal cord injuries. His results were that reduction in emotions were reported throughout the group and that reductions became more acute with injuries higher in the spinal cord (more loss of bodily sensation). Here is a quote from one man who suffered a high spinal cord injury, "Sometimes I act angry... But it doesn't have the heat to it that it used to. It's a mental kind of anger." So without the physical sensations, the man knew that in certain situations he should be angry but he was not truly feeling an emotion anymore. It was just a thought. Hohmann's conclusion was that there were "Significant decreases in experienced feelings of anger, sexual excitement, fear, and an over-all estimate of change were found when the nerves were damaged (therefore not transmitting signals

from the viscera)" (Hohmann 150). This directly contradicts the findings of the experiments Cannon related to involving the animals.

Ultimately, it can be seen that James' theory of emotion is most plausible both conceptually and empirically. Emotions can be simply defined as *perceptions of bodily changes*. The physical reaction occurs before, and causes the emotion. 'We don't cry because we are sad, we are sad because we cry.' Defining emotions is quite simple, it is the complexity of the sensations and feelings and what provokes those bodily changes that is the confusing part. Despite this apparent simplicity, emotions will forever remain a complex issue which will be debated and redefined as long as humans are around to experience them. They play such a large part in our daily lives and our existence as a whole, it is certain that the quest to solve the complex puzzle they are entangled in will last eternally.

References

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