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Emotion Review 2014 6: 4

DOI: 10.1177/1754073913496483

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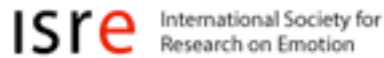
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William James and the Rise of the Scientific Study of Emotion

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Abstract

Recent attempts by philosophers to revive William James's theory of emotions rest on a basic misunderstanding of James's theory. To see why, one needs to see how James's theory completed the transformation of the study of emotions from a study in moral philosophy to a scientific study. This essay charts that transformation.

Keywords

emotion, Hume, instinct, James, motive, passion

Recent Philosophical Interest in James's Theory of Emotions

When the philosophical study of emotions made the turn to cognitivism 40 years ago, philosophers who initiated this turn typically cited William James's identification of emotions with feelings of bodily changes as a clear example of the inadequacy of the then prevailing conception of emotions. James, they argued, in so identifying emotions, had missed the evaluative judgment that an emotion consists in or includes (Lyons, 1980; Pitcher, 1965; Solomon, 1976).¹ By reducing the study to a physiological study he had, in their view, made altogether mysterious an emotion's evaluative import, the sense of loss that sorrow signifies, the recognition of danger that fear implies, the judgment of inferiority or disadvantage that envy entails. And once the turn they initiated was complete, James's view fell into neglect.

Recently, however, a small but influential number of philosophers have revived interest in the view (Prinz, 2004; Robinson, 2005). A major inspiration for this revival is Antonio Damasio's book *Descartes' Error* (Damasio, 1994). Damasio, on the basis of research into brain-damaged people, proposed a theory of emotions and feelings on which physiological processes constituted "the mechanism essential to the understanding of [these phenomena]" (1994, p. 129). This understanding, Damasio maintained, was already present in James's work. James, according to Damasio, anticipated by 100 years the discoveries of late 20th-century neuroscience. Yet Damasio did not follow James in identifying emotions with feelings of bodily changes. Instead, he distinguished such feelings from emotions and took the latter to be the bodily changes themselves (1994, p. 145).² Feelings of emotion, he declared, are

internal perceptions of the bodily changes in which the emotion consists. One's brain registers these changes, as it monitors bodily activity, and the feelings, being perceptions of bodily changes, are its registration of them. And like a thermostat that registers changes in temperature and adjusts the system's output of hot and cold air accordingly, it then sets in motion the appropriate responses.

In addition to this alteration in James's view, Damasio criticized James for eliminating from emotions their evaluative import. They acquire this import, Damasio hypothesized, through learning and socialization. As a result, some emotions, by virtue of being felt, come to serve as signals of prospective benefits and harms that figure into one's practical decisions. Accordingly, emotions that have undergone such education are, to use the term Damasio coined in formulating this hypothesis, "somatic markers" (1994, p. 173). The bodily changes they consist in serve to mark the opportunities and threats with which one's situation presents one. What produces these somatic markers, then, is one's evaluation of that situation. Such evaluations are the cognitive phenomena that James, because he tended to focus narrowly on emotions that result from the excitement of instincts, omitted from his account. Or so Damasio argued. The gist, then, of Damasio's criticism is that James considered only "primary emotions," emotions to which instincts alone make one liable, and failed to allow for "secondary emotions," those the liability to which is the result of learning and socialization (1994, pp. 129–139). These secondary emotions result directly from one's evaluation of one's situation, and in view of the "juxtaposition" of the two, such emotions acquire the cognitive character reflected in their role in deliberation and practical decision-making (1994, pp. 145–146).

Author note: I am grateful to James Russell and two reviewers for this journal for comments on an earlier draft.

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Damasio's departures from James's view set him apart from the philosophers who have revived interest in this view and who are commonly referred to as neo-Jamesians. These philosophers avoid the incoherence Damasio courts in distinguishing emotions from feelings as he did. On the traditional division between mental and bodily phenomena, emotions belong to the former. They are states of mind, however one conceives of the mind, including as identical to the brain or the nervous system. Once one acknowledges this division in classifying the phenomena of sentient life, then saying or implying that anger, sadness, grief, joy, and the like are not mental states is like saying or implying that grass and shrubs are inorganic matter or that roosters, bulls, and stallions are female members of their species. Rather than follow Damasio's unorthodox understanding of emotions, the neo-Jamesians retain James's identification of them with feelings of bodily changes.

They also retain James's exclusion of cognition from emotion. Damasio, though he criticized James for this exclusion, failed in fact to correct the error he attributed to James. Instead, he simply conjoined the relevant cognition to emotion, much as David Hume posited the constant conjunction of ideas and secondary impressions to explain his distinction between passions and sensations (Hume, 1978, pp. 275–276). The conjunction Damasio posits implies only that cognitions accompany emotions and not that they are essential components of emotions. Thus his positing the conjunction is merely an ad hoc expedient, one that he thinks necessary to explaining the evaluative import of secondary emotions. The neo-Jamesians, by contrast, deny any need for such an expedient.

Their signature thesis is that some or all of the very feelings of bodily changes that an emotion consists in are themselves evaluations. Jesse Prinz, in particular, bases this thesis on Damasio's account of such feelings as perceptions of bodily changes (Prinz, 2004, pp. 52–60). Damasio's account, Prinz believes, holds the key to understanding emotions as having evaluative import. Unlike Damasio, however, he thinks one can understand emotions as having such import without conjoining a cognition to the feelings in which emotions consist. No such added vehicle of evaluation is necessary, he argues. Nor, a fortiori, does he think one needs to identify emotions with cognitions or suppose that cognitions are essential components of emotions to explain this import. He rejects all such cognitivist theories. Contrary to these theories, as well as Damasio's, he maintains that understanding the feelings in which emotions consist as perceptions of bodily changes is sufficient to explain it. Accordingly, to use the phrase he introduces to express the neo-Jamesians' signature thesis, emotions are "embodied appraisals" (2004, p. 78).³ The thesis, if sound, would yield a successful answer to the objection from an emotion's evaluative import that many philosophers regard as a refutation of James's view.

Of course, it is one thing to label feelings of bodily changes "embodied appraisals" and another to establish that such feelings are appraisals.⁴ One could, after all, label a thermostat's registrations of changes in room temperature "mechanical appraisals," but they still would not be appraisals. The difficulty with labeling bodily feelings appraisals is that an appraisal is a type of judgment,

and a feeling of bodily change is not (Deigh, 2008, pp. 83–87). Bodily feeling and judging are distinct types of mental events. Indeed, the objection to James's view that it misses the evaluative judgment an emotion consists in or includes, would have had no force if bodily feelings and appraisals were not distinct. So the neo-Jamesians' labeling the former a form of appraisal just looks like verbal gerrymandering that invites confusion.

Prinz, to be sure, does not merely assert that feelings of bodily changes are forms of appraisal. To the contrary, he advances a complicated argument for it.⁵ Here is a brief sketch of his argument. Emotions, he argues, being perceptions of bodily changes, have content analogous to the content of sense perceptions. This content includes the circumstances in the world that produce the changes just as the content of sensory perception includes the objects in the world that produce the sensory experiences. Prinz then characterizes this content as representing these circumstances in the way they produce the changes. Because different emotions, such as fear, joy, and sadness, have distinctive bodily expressions, the bodily changes of which they are perceptions are likewise distinctive. Hence, these changes represent circumstances of the sort that produce such changes, circumstances of danger, good fortune, and loss in the cases at hand. In other words, Prinz concludes, emotions are appraisals by virtue of being perceptions of these bodily changes.

Though Prinz's argument for the thesis is more than mere word-play, one should still have no trouble seeing the misnomer in it. The bodily changes, the perceptions of which are, in his view, emotions, represent the character of one's circumstances in the same way a burglar alarm in a standard home security system represents, when triggered, invasions. The system detects invasions and sets off the alarm. But it does not thereby appraise the invader. Hearing the alarm, one thinks only invasion. There is no object to which one attends and attributes that invasion because at most an alarm calls attention to itself, it does not direct one's attention to an object; that is, it contains nothing representing someone or some distinct thing to be appraised. The same goes for the bodily changes the perception of which Prinz takes as signaling danger, good fortune, loss, and so forth. On his account, emotions do not themselves include orientation toward an object. The account, for this reason, is defective (Deigh, 2010; Hills, 2008). For typically, when one feels an emotion, one's attention is directed at an object, and the appraisals that cognitive theories take the emotion to consist in or include are judgments of this object. Fear, for instance, is typically fear of some object—an oncoming car, a bolt of lightning, an angry boss—which in each case, according to these theories, one judges to be a threat to one's life, limb, or well-being generally.

At the root of the failure of the neo-Jamesians' program is a misguided strategy for rehabilitating James's view. To attempt a reconciliation of the view with the thesis that emotions have evaluative import is to miss the point of James's defining emotions as feelings of bodily changes. It reflects, in other words, a basic misunderstanding of James's view. The neo-Jamesians are not alone in this error. The misunderstanding, I suspect, was present even in the earliest criticisms the view received. In any case, the failure by both James's critics and his champions to recognize how radical a change in our concept of emotion James

was proposing is longstanding. The change he proposed was such as to preclude emotions from having any direct influence on the will. Hence, whether or not they have evaluative import was of no consequence to the proposal's viability. The irony, then, of the neo-Jamesian program is that its principal aim is to show how his definition of emotion yields an understanding of the phenomena that James had no interest in preserving.

To see this, however, requires seeing James's proposal as part of a larger change in the modern conception of emotions that took place over the course of 150 years. A history of this change is the history of how the study of emotions was transformed from a study integral to moral philosophy into a scientific study. It is in part a history of how the modern scientific study of emotions emerged out of the traditional philosophical study of the passions. The history begins with Hume's (1978) contributions to moral philosophy in *A Treatise of Human Nature*, particularly his treatment in that work of the passions as the source of morals.⁶

Hume's Place in the Rise of the Scientific Study of Emotions

Hume divided his *Treatise* into three books. Passions are the subject of Book II, as indicated by its title "Of the Passions." Hume begins his study of the passions by reminding the reader of his taxonomy of mental states. All are perceptions. They divide into two types, impressions and ideas. Hume then subdivides the first type into original impressions and secondary ones. Original impressions are what he earlier, in Book I, defined as impressions of sensation; secondary impressions are, according to a companion definition, impressions of reflection. Original impressions arise from causes outside the mind. Secondary ones, by contrast, arise from prior impressions or ideas. "Original impressions," he writes, "are all the impressions of the senses and all bodily pains and pleasures. Of [secondary impressions] are the passions, and other emotions resembling them" (1978, p. 275). This latter observation echoes an earlier statement, near the beginning of Book I, in which Hume identifies impressions of reflection as "passions, desires, and emotions" (1978, p. 8).

Hume was the first philosopher to use the term 'emotion' liberally (Dixon, 2003, p. 104).⁷ It occurs often in Book II. He does not, however, use it as a name for a distinct species of secondary impression. Rather, like other 18th-century writers of psychological treatises, he used several different terms interchangeably, including 'passions', 'sentiments', 'affections', and 'propensities', as names of the various states of mind he classified as secondary impressions. Traditionally, 'passion' was the term writers of such treatises chiefly used for such states, though it was also common for them to apply 'passion' to the more turbulent ones and 'sentiment' to the calmer ones. Hume, however, did not follow this practice. He treated 'passion' as a general term for any of the states that he also called affections, sentiments, emotions, and propensities.

Hume's use of 'emotion' was casual. He did not define it or use it systematically. Nonetheless, one can discern in certain passages in which it occurs a meaning that is distinct from what

he meant by 'passion', and his use of the term with this meaning bears importantly on the later emergence of the scientific study of emotions. Of course, whether Hume's use of the term with this meaning contributed to how emotions came to be conceived as the science emerged and grew, or merely anticipated it, is hard to establish. But given Hume's influence on later thinkers, it is reasonable to treat him as having planted the seed from which the later concept germinated.

Hume's use of the term with this meaning is evident in the opening section of Book II. Having reminded his reader of his taxonomy of mental states, he proceeded to draw two distinctions, that between calm and violent passions and that between direct and indirect ones. The first distinction depends on a passion's turbulence, its agitation of the mind, and in explaining this phenomenon he used 'emotion' with a meaning distinct from the meaning with which he used the term 'passion.' Thus he wrote:

The reflective impressions may be divided into two kinds, *viz.* the *calm* and the *violent*. Of the first kind is the sense of beauty and deformity in action, composition, and external objects. Of the second are the passions of love and hatred, grief and joy, pride and humility. This division is far from being exact. The raptures of poetry and music frequently rise to the greatest height; while those other impressions, properly call'd passions, may decay into so soft an emotion as to become, in a manner, imperceptible. But as in general the passions are more violent than the emotions arising from beauty and deformity, these impressions have been commonly distinguished from each other. (1978, p. 276)

Much later in Book II, when Hume returned to the topic of calm passions, he observed that they are sometimes mistaken for reason:

Now 'tis certain, there are certain calm desires and tendencies, which, tho' they be real passions, produce little emotion in the mind, and are more known by their effects than by the immediate feeling or sensation. These desires are of two kinds; either certain instincts originally implanted in our natures, such as benevolence and resentment, the love of life, and kindness to children; or the general appetite to good and aversion to evil consider'd merely as such. When any of these passions are calm, and cause no disorder in the soul, they are very readily taken for the determinations of reason, and are suppos'd to proceed from the same faculty, with that, which judges of truth and falsehood. (1978, p. 417)

Yet passions of either kind, Hume immediately went on to note, are not necessarily calm:

Besides these calm passions, which often determine the will, there are certain violent emotions of the same kind, which have likewise a great influence on that faculty. When I receive any injury from another, I often feel a violent passion of resentment, which makes me desire his evil and punishment, independent of all considerations of pleasure and advantage to myself. When I am immediately threatened with grievous ill, my fears, apprehensions, and aversions rise to a great height and produce a sensible emotion. (1978, pp. 417–418)

Having thus pointed out that a passion's influence on the will is not a function of how violent the passion is, Hume then distinguished between these two aspects of a passion:

'Tis evident passions influence not the will in proportion to their violence, or the disorder they occasion in the temper; but on the contrary, that when a passion has once become a settled principle of action, and is the predominant inclination of the soul, it commonly produces no longer any sensible agitation. As repeated custom and its own force have made every thing yield to it, it directs the actions and conduct without that opposition and emotion, which so naturally attend every gust of passion. We must, therefore, distinguish betwixt a calm and a weak passion; betwixt a violent and a strong one. (1978, pp. 418–419)

On the evidence of these passages, we may conclude that Hume understood the difference between a calm passion and a violent one to consist in the amount of emotion with which a passion occurs. The more emotion, the more violent the passion. Calm passions are passions that occur with so little emotion as to be “in a manner, imperceptible”; violent ones are passions that occur with enough emotion to create considerable agitation in the mind. At the same time, we can infer from Hume’s observation that calm passions no less than violent ones influence the will, that the amount of emotion with which a passion occurs is independent of the passion’s motivational force. Accordingly, Hume used ‘emotion’ as a term for that feature of a passion that characterizes how violent the passion is and understood this feature to be distinct from the passion’s being a motive or spring of action. He understood it, that is, as a phenomenal property of passions, which as such implies nothing about their motivational strength or power to produce action.

Hume, however, did not consistently use ‘emotion’ in this way. He also used it as a common name for secondary impressions, and indeed for secondary impressions for which he also used the term ‘passion’. Note, for instance, his referring in the third of the four passages above to “violent emotions” which are of the same kind as certain calm passions. This usage complicates interpretation of Hume because it is hard to square with the first way in which he used the term. Indeed, on a superficial reading, the two ways appear to clash with each other, for traditionally passions are understood to be motives. Consequently, it appears that Hume, by using ‘emotion’ in this second way, implied—contrary to what the first way in which he used it implies—that emotion has motivational force. The appearance, though, is misleading. Hume’s concept of a passion is not the traditional one. Passions, as Hume conceived of them, are not necessarily motives. Indeed, some passions, according to Hume, are not motives. So his two ways of using ‘emotion’ do not clash with each other.

Still, they are independent of each other. Neither, that is, derives from the other.⁸ Nor did he try to avoid confusion by restricting his use of ‘emotion’ as a common name for secondary impressions to secondary impressions that were not motives. To the contrary, he readily used it to denote passions that were motives. A good example occurs in the course of his well-known argument for the inertness of reason. “‘Tis obvious,” he wrote, “that when we have the prospect of pain or pleasure from any object, we feel a consequent emotion of aversion or propensity, and are carry’d to avoid or embrace what will give us this uneasiness or satisfaction” (1978, p. 414). In the face of passages like this one, then, we must conclude that Hume used ‘emotion’

with two different meanings without ever explicitly distinguishing them. The potential for confusion was, if anything, exacerbated by Hume’s departure from the traditional concept of a passion.

Hume’s departure from this concept is a consequence of the second of the two distinctions among the passions that he drew in the opening section of Book II. This is his distinction between direct and indirect passions. Direct passions are motives of action. They arise immediately from pleasure and pain or from the prospect of pleasure and pain and, in either case, produce a volition to embrace what gives pleasure or avoid what gives pain.⁹ In addition, Hume identified certain direct passions that “arise from a natural impulse or instinct, which is perfectly unaccountable” (1978, p. 439). These include hunger and other bodily appetites, the desire for revenge or punishment of one’s enemies, and the desire for the happiness of those whom one loves. Like direct passions that arise immediately from pleasure and pain, these too produce volitions to secure their objects. Indirect passions, by contrast, do not. For this reason, they are not in themselves motives. At the same time, some give rise to direct passions and therefore generate motives. These are chiefly love and hatred, which give rise to a desire for the happiness of one’s beloved, which Hume identified with benevolence, and to a desire for the misery of one’s enemies, which Hume identified with anger. Other indirect passions, however, do not give rise to direct passions. These are chiefly pride and humility. They are neither motives nor producers of motives. Hume set out this difference between the two sets of indirect passions in the section of the *Treatise* on benevolence and anger:

The passions of love and hatred are always followed by, or rather, conjoin’d with benevolence and anger. ‘Tis this conjunction, which chiefly distinguishes these affections from pride and humility. For pride and humility are pure emotions in the soul, unattended with any desire and not immediately exciting to action. But love and hatred are not compleated within themselves, nor rest in that emotion, which they produce, but carry the mind to something farther. (1978, p. 367)

The traditional concept of a passion, in modern philosophy, is well illustrated in Descartes’ (1989) *The Passions of the Soul*. Descartes held that all passions give rise to volitions, or as he put it, in keeping with his view that the will is free, they all dispose the will to act as they bid. Thus, in Article 40, Descartes wrote,

The principal effect of all the passions in men is that they incite and dispose their soul to will the things for which they prepare their body, so that the sensation of fear incites it to flee, that of boldness to will to do battle, and all the rest. (Descartes, 1989)

What Descartes described as the principal effect of all passions, a volition, is for Hume the principal effect of direct passions only. By distinguishing indirect passions from direct passions by virtue of their not giving rise to volitions, Hume therefore not only departed from the traditional concept of a passion but rejected as well the understanding of a passion as an inclination to act that, through an exercise of will, a volition, one either follows or resists. Because Hume regarded volitions as secondary

impressions,¹⁰ he rejected Descartes' model of the will as acting on a passion and endorsed instead a mechanical model in which a so-called act of will, a volition, is a secondary impression produced by a direct passion.

Even more instructive, perhaps, for seeing the significance of Hume's departure from the traditional concept is Thomas Reid's objection, in his *Essays on the Active Powers of the Human Mind* (1969), to Hume's notion of a calm passion. Reid objected in particular to Hume's thesis that calm passions are "readily taken for the determinations of reason" (Hume, 1978, p. 417). Hume had advanced this thesis to explain how the great majority of philosophers, both ancient and modern, had come to the false view of reason and passion as combatants that oppose each other in struggles to determine the will. Reason, Hume had argued, is the slave of passion. Being powerless to oppose passion, it is necessarily under its rule. He then, to supplement this argument, gave his explanation of how philosophers had come to the false view of the combat between reason and passion. Both the argument and the explanation, Reid rejoined, were based on an abuse of language. Passions, Reid observed, are, in the most general sense of the term, "principles of action" that are also commonly referred to as appetites and affections (Reid, 1969, p. 70). They are the propensities to action that humans share with brutes and must therefore be understood to spring from the irrational part of the human frame. Yet 'passion', Reid maintained, is more commonly used with a more specific sense that distinguishes passions from other natural desires and affections (Reid, 1969, pp. 177–178). In this more specific sense, its ordinary sense, passions are principles of action whose strength agitates the body and clouds the understanding. Indeed, their strength as motives of action corresponds to the violence with which they occur, for the stronger the passion the more the body is uncontrollable and the mind is clouded. As Reid saw things, Hume's talk of calm passions, passions that prompt action without any sensible agitation, is oxymoronic.

A defender of Hume could, of course, grant Reid's point about common usage without conceding any significant error in Hume's position. Hume's position depends on there being propensities to action that influence the will and produce action without any sensible agitation. Since Reid allowed that there were such propensities, since he allowed that natural desires and affections could be calm in Hume's sense, his criticism of Hume for his sham use of 'passion' appears to be no threat to Hume's thesis that these calm affections and desires are commonly mistaken for determinations of reason. But Reid's criticism goes deeper into Hume's thought than its linguistic surface. It strikes rather at Hume's distinction between the motivational strength of a passion and its violence. The distinction underpins Hume's thesis, and Reid, in assuming a correspondence between the strength of a passion and its violence, thus rejected the distinction. In Reid's view, one could not, *pace* Hume, mistake in a man who resolutely resists temptation a passion for the determinations of his reason, for if the man's will to resist temptation derived from a passion, the violence of that passion would be greater than that of the passion it defeated. Its presence and operation would, therefore, be

unmistakable. And if one were to suppose instead that the man resisted the passion in order to secure a good that he desired and his desire for that good was calm, then its being calm, Reid held, would mean that it neither weakened the man's control over his body nor clouded his judgment. Consequently, his resistance would have to be due to a determination of reason, for the desire, being calm, would have been too weak to check the passion he resisted. Hume's idea that such resistance could be the work of a calm passion was, in other words—given a correspondence between the violence of a passion or other affection and its motivational strength—incoherent.

Reid, as a result of his rejecting Hume's distinction between the strength of a passion and its violence, denied in effect that the amount of emotion with which a passion occurred was a feature of a passion distinct from its power to produce action. Reid, then, because he held to the traditional concept of passion, did not allow the possibility of a passion's not being a motive. It was for him inconceivable. For Hume, by contrast, it was certainly conceivable. The distinction between the amount of emotion in a passion and a passion's power to produce action guaranteed its possibility. After all, one need only think of a turbulent state of mind that had no tendency to produce action to conceive of such a passion. And Hume, in distinguishing indirect passions from direct ones, did just that. His account of pride and humility as passions that were "pure emotions" fit the bill exactly (Hume, 1978, p. 367). Reid, as we have seen, treated motivational strength as inseparable from turbulence. The term 'emotion' appears nowhere in his chapter on the passions.

Hume's characterization of pride and humility as pure emotions thus reflects his distinction between the violence of a passion and its strength. It reflects, in other words, his use of 'emotion' to denote that feature of a passion that characterizes how violent it is together with his understanding of this feature as independent of a passion's power to produce action. By virtue of this understanding, Hume's concept of a passion departed from the traditional one. Later writers who took up Hume's other use of 'emotion,' his use of it as a general name for secondary impressions, did so without also departing, as Hume did, from the traditional concept of a passion (e.g., Bain, 1875, pp. 383–392; Brown, 1822, I, p. 251).¹¹ Generally, then, while Hume's use of 'emotion,' as a name for secondary impressions, including passions, emerged as the prevailing one in the 19th century, his use of the term as a name for a feature of a passion that is distinct from that of the passion's motivational strength did not acquire a similar following. The notion it expressed disappeared for much of the century. Not until William James published his work in psychology did it—or rather something like it—reappear and come firmly and distinctly into view.¹²

James's Place in the Rise of the Scientific Study of Emotions

To understand the lasting significance of James's work on the emotions, one must attend to writings of his other than the chapter on emotions in *The Principles of Psychology* (1890) or the earlier, more widely read, article "What is an Emotion?" (James,

1884). One must attend, above all, to the famous ninth chapter of *The Principles* (Deigh, 2001). This chapter contains James's attack on the conceptual scheme for mental states characteristic of classical British empiricism, the scheme of Locke's psychology and Hume's, along with that of each of the many minor philosophers who belong to this tradition. The revolutionary import of James's theory of emotions depends on his attack on this conceptual scheme.

In following this scheme, Locke, Hume, and the many empiricist philosophers they influenced divided all mental states into two or three main types according to their origins. Thus Locke divided all mental states into sensory ideas, ideas of imagination, and abstract ideas, and Hume, as I noted above, divided all of them into impressions of sensation, ideas, and impressions of reflection. They then treated the states in each of these types as either simple or complex, and if complex, then analyzable into simple states. And finally they construed mental states as occurring in the mind singly, discretely, and serially. Hume's wonderful description of the mind as "a kind of theatre, where several perceptions successively make their appearance; pass, re-pass, glide away, and mingle in an infinite variety of postures and situations" nicely captures the classical empiricist conception of mental states (Hume, 1978, p. 253). James rejected this conception as both false to our experience, when carefully considered, and inconsistent with any understanding of consciousness as a product of neuro-physiological processes. Conscious experience, which fills our waking lives, does not break down into sequences of individual, recurring impressions and ideas, "mental atoms or molecules" as James liked to call them (James, 1890, I, p. 230). In a seeming rejoinder to Hume, James declared, "A permanently existing 'idea' ... which makes its appearance before the footlights of consciousness at periodical intervals is as mythological an entity as the Jack of Spades" (James, 1890, I, p. 236).¹³

James then applied this attack to the empiricists' program for studying emotions. The traditional program of British empiricism was that of a taxonomic science. It consisted in setting out a general definition of the phenomena to be studied, dividing those phenomena into their several species, dividing those species into subspecies, and so on. James's reaction to this enterprise was sharp. He wrote,

The trouble with the emotions in psychology is that they are regarded too much as absolutely individual things. So long as they are set down as so many eternal and sacred psychic entities, like the old immutable species in natural history, so long all that can be done with them is reverently to catalogue their separate characters, points, and effects. (1890, II, p. 449)

Such treatment of the subject, James observed, has led to flat, profitless descriptions of a seemingly endless variety of emotions:

The mere description of the objects, circumstances, and varieties of the different species of emotion may go to any length. Their internal shadings merge endlessly into each other, and have been partly commemorated in language as for example by such synonyms as hatred, antipathy, animosity, resentment, dislike, aversion, malice, spite, revenge, abhorrence, etc. etc. ... But there are limits to the profitable elaboration of the obvious, and the result of all this flux is that the

merely descriptive literature of the subject, from Descartes downwards, is one of the most tedious parts of psychology. (James, 1892, p. 374)¹⁴

Scientific psychology, James declared, to get to the deeper levels of understanding that "all truly scientific work" achieves, must abandon its treatment of emotions as recurring types to be differentiated and catalogued according to their observable features and typical circumstances (James, 1890, II, pp. 448–449). It must, instead, treat the variability of emotion as what is to be explained:

But if we regard them as products of more general causes (as 'species' are now regarded as products of heredity and variation), the mere distinguishing and cataloguing becomes of subsidiary importance. (1890, II, p. 449)

James, as this passage makes clear, aimed at reorienting the scientific study of emotions away from taxonomy and toward genesis. Progress in this study, he believed, required investigating the origins of emotional variety, and to investigate this phenomenon psychologists must study the different external conditions and events to which emotions are reactions, as well as the bodily processes that mediate those reactions.

To this end, James redefined emotions as the feelings of bodily changes, as they occur, which changes directly follow upon perception of an exciting fact (1890, II, p. 449). Plainly, he did not put forward this definition to establish a category of things whose "separate characters, points, and effects" can be catalogued. He put it forward so as to turn our attention in the study of emotions to the general causes of the bodily changes that occur in episodes of emotion. While the feelings of those changes, as they occur, are what 'emotion', as he defined the term, means, they are not, he held, isolable, recurring units of consciousness whose nature and composition is the subject of scientific study. They are, rather, like rapids and eddies in a river, to be understood as disturbances and agitations in an unbroken stream of thought, which one studies by examining the forces and conditions that produce such changes in the flow. The study of emotions, in other words, in James's view, is the study of the causes of bodily changes that are made manifest in the mind through turbulent or stirring feelings.

Because these bodily changes include the movements of muscles and limbs behind the voluntary behavior of which passions, on the traditional concept of them, are motives, James's definition of an emotion departs from this concept. James, to be sure, was aware of his definition's unorthodoxy. Indeed, he regarded its being contrary to common sense on this point as its hallmark. Immediately, after giving his definition, he wrote,

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. The hypothesis here to be defended says that this order of sequence is incorrect, that the one mental state is not immediately induced by the other, that the bodily manifestations must first be interposed between, and that the more rational statement is that we feel sorry because we cry, angry because we strike, afraid because we tremble, and not that we cry, strike, or tremble, because we are sorry, angry, or fearful, as the case may be. (1890, II, pp. 449–450)

Two things are noteworthy about this passage. First, it shows that James, by defining an emotion as the feelings of bodily changes, not only took an emotion to be the sensible agitation in the soul that Hume had identified as the determinant of a passion's violence, but also understood that, as such, an emotion was not a motive of action. To this extent, his definition recovers the notion Hume had in mind in using 'emotion' to denote the feature of passions that characterized how violent they are. Second, it spells out the chief implication of James's definition, its incompatibility with the classical empiricist taxonomy of mental states. For by pointing out that, contrary to common sense, an emotion is not the direct consequence of a perception or thought but rather arises only after the interposition of those bodily changes that a perception or thought excites, James jettisoned one of the principal categories of mental states on the classical empiricist taxonomy. On that taxonomy, emotions, passions, affections, and the like all belong to the category of states of mind that arise from antecedent sensory or intellectual states. For Locke these were internal sensations; for Hume, they were secondary or reflective impressions. James's definition in effect removes such states from the study of psychology since its implication is that physiological processes and not prior states of mind are the immediate cause of the feelings with which we identify emotions, passions, affections, and the like. Consequently, his definition differs from the notion Hume had in mind in that it does not represent an emotion as a feature of some mental state that may also have, independently of that feature, the power to produce action. In James's account of human psychology, there are no such mental states.

The question, then, given that James had removed passions, as traditionally conceived, from human psychology, is how he accounted for human motives. The answer is found in the chapter in the *Principles* on instincts, Chapter xxiii, which immediately precedes the one on emotions. This chapter and the one immediately preceding it—Chapter xxii, "The Production of Movement"—concern the bodily actions the feelings of which James identified as emotions. Many of these bodily actions are autonomic. Shortness of breath, a palpitating heart, and shivering are examples. James discussed such actions in Chapter xxii. He then dealt with voluntary actions in Chapter xxiii. Each instinct, according to James, is an innate tendency to act, a tendency built into the nervous system of human beings and other animals as a result of natural selection.¹⁵ Each such tendency, each instinct, operates through an impulse to action (1890, II, p. 385). While instincts originally operate blindly, which is to say, reflexively, in response to certain sensory stimuli, they become in animals capable of foresight the source of voluntary actions through repeated experiences of their operation. An animal's familiarity with its circumstances enables it to anticipate the impulses they excite and to encourage or resist them by thinking of objects that strengthen or counter them. In this way, the animal gains some measure of control over its muscular movements and so its actions. Correspondingly, while the earliest operations of an instinct, being entirely reflexive, produce actions of whose ends the animal is incognizant, later operations produce actions whose ends it cognizes and, to the extent the actions fall within its

control, it consciously pursues. Accordingly, instincts qualify as motives of these actions. As principles of or propensities to action that humans share with other animals, they replace passions in James's account of human psychology.

James's discussion of the instincts special to human beings confirms this observation. Human beings, James maintained, possess an enormous variety of instincts. He included among them tendencies to attack what opposes one, to flee what threatens one, and to comfort one's kin and conspecifics. In each case, one perceives some exciting object, and the perception then mobilizes one to action. James characterized the operations of these instincts as anger, sympathy, and fear. Later in the discussion, he took up the human tendency to acquire or appropriate things that please and noted how this tendency can turn into the impulse to harm others who possess things that one covets. He characterized such impulses as those of envy and jealousy. Finally, he added the tendency of parents, mothers in particular, to cleanse and feed their young, and characterized the operations of this instinct as parental love. Each of these characterizations identifies an instinct by the type of emotion that the action it tends to produce typically expresses. These characterizations suggest a correspondence between the feelings of bodily changes that the operations of certain instincts produce and the different types of emotion that theorists of the mind since Plato had distinguished and studied. If James had affirmed this correspondence, then his distinction between emotions and the instincts whose operations produced them would have mapped on to Hume's distinction between a passion's degree of violence and its motivational strength or power to produce action.

James, however, denied it. Specifically, he denied that one's feeling an emotion of one of these types—fear, anger, joy, or the like—necessarily resulted from one's undergoing a bodily movement or syndrome of bodily movements that the operations of the corresponding instinct produced (1890, II, p. 442). Indeed, he denied that it necessarily resulted from one's undergoing a bodily movement or syndrome of bodily movements of any determinate type. Because of the indefinite variability among people in their reflex responses to the perception of the same exciting object, James argued, no determinate type of bodily change or syndrome of bodily changes corresponds to any of these types of emotion. A frightening object may induce flight in one person and paralysis in another. Triumph may cause one person to jump and another to prance. And a similar variability among people holds of autonomic responses as well:

[T]he moment the genesis of an emotion is accounted for, as the arousal by an object of a lot of reflex acts which are forthwith felt, *we immediately see why there is no limit to the number of possible different emotions which may exist, and why the emotions of different individuals may vary indefinitely*, both as to their constitution and as to objects that call them forth. (1890, II, p. 454)

It follows, therefore, in James's view, that motives of voluntary action originate in instincts that can have no more than a statistical association with the emotions to which he referred homonymously. James's separation of emotion from the springs of action was thus even greater than the one Hume implied in

using ‘emotion’ to capture the feature of a passion that characterized how violent it was as distinct from how powerful a motive it was.

Hume, in so using ‘emotion’, identified a distinctive feature of passions, their sensible turbulence or agitation, which, departing from the traditional concept of passion, he took to be independent of a passion’s motivational strength. He did not, however, treat this feature as a special object of psychological study. His purpose in identifying it as a feature distinct from a passion’s motivational strength was to secure his notion of a calm passion whose operations were commonly mistaken for determinations of reason. Passions were the object of his study. James, by contrast, went further. Not only did he identify emotion with sensible turbulence or agitation that had no motivational potential and was therefore independent of whatever had motivational strength, but he also, by removing from the study of psychology the type of mental state to which passions, on the classical empiricist taxonomy, belonged, made such turbulence—turbulence directly produced by bodily changes and not prior mental states—the object of psychological study. A major consequence, then, of his applying his attack on the classical empiricist conceptual scheme for mental states to the empiricist program for studying emotions, was to redefine the study of emotions as the study of such states of arousal. His redefinition represents a significant change in how emotions, as the object of scientific study, are conceived. He thus brought to completion the transformation of the study from one in moral philosophy to one in experimental psychology.

Why James’s Theory Cannot Be Sustained

In the traditional concept of passion, a passion influences the will by virtue of a cognition that guides action through a representation of something good to be realized or bad to be avoided by doing that action. Modern philosophers, from Descartes forward, typically explained this cognition as arising in conjunction with the passion. Their predecessors, the Scholastics, typically explained it as an essential element of the passion. In either case, it is the vehicle of evaluation that, together with or as an element of the passion, moves the subject accordingly in a direction to which the will either consents or sets itself in opposition. As such, it is built into the very way passions are understood as motives of voluntary action. Since to give a theory of passions entails giving a theory of these motives, and since one could not give such a theory without distinguishing at some level of differentiation the variety of motives to which human beings are subject, the theory perforce must include a taxonomy whose types are defined at least partly by the different types of evaluation that accompany or give essential form to a passion. Hence, taxonomic studies of the sort characteristic of the writings on emotion that James pronounced “one of the most tedious parts of psychology” are integral to the study of emotion on a concept of the phenomenon that is or derives from the traditional concept of passion (1890, II, p. 448).¹⁶ While James may have been fully warranted in deploring the amount of minutiae found in these writings, his criticism of

their aim of expounding a taxonomy of emotions masks how radical the change is he introduced in how the phenomenon is conceived.

His criticism, then, of these taxonomic studies as superficial, and at best secondary to a proper scientific study of emotions, is due to his conceiving emotions as states of arousal only. It is due, that is, to his excluding evaluation from his conception of the phenomenon. Having explained motives as originating independently of emotions and as merely correlated statistically with them, owing to the overlap of the class of bodily movements and the feelings of which an emotion consists in and the class of bodily movements that initiate voluntary action, he rendered pointless any conception of emotions as entailing evaluations. Hence, to construe feelings of bodily changes as vehicles of evaluation is likewise pointless if it is not done for the purpose of assigning these feelings a role in the production of voluntary action. Yet to identify emotions with such feelings, and at the same time assign them such a role so as to preserve the concept of an emotion as a motive, is to miss completely James’s point in identifying emotions with feelings of bodily changes. It leads, moreover, to theories of emotion of the very sort James meant to discredit. The neo-Jamesians, who put forward such theories in the interest of rehabilitating James’s theory, thus profoundly misunderstand it.

The question that confronts anyone who wishes to revive James’s theory is whether his proposal to treat emotions as states of arousal that are independent of states of motivation represents an advance or a dead end in the scientific study of emotions. It would represent an advance only if giving up our understanding of anger, fear, envy, and the like as states of mind that both contain feelings and serve as motives were feasible. Perhaps it seemed feasible to James because he took introspection to be as reliable a method of observation in science as unaided perception of external things. Introspection, he thought, was the primary method of gathering the facts about the mind that psychology studies. It is, he said, the “first and foremost” form of observation on which psychologists rely (1890, I, p. 185). And, he later added, though it is “difficult and fallible ... the difficulty is simply that of all observation of whatever kind” (1890, I, p. 191, italics removed). Such confidence in introspection undoubtedly led him to assume that the subjects of emotion could identify what emotion they were feeling even if they could not describe it fully. Hence, he could believe that, owing to the reliability of introspection as a method of observation, one can directly identify a state of arousal as fear, anger, sorrow, joy, or the like without applying the criteria specified in a taxonomy of such states and therefore one can rely on this method to study emotions as exclusively states of arousal.

Introspection, however, has long since lost its place in psychology as the primary method of observation. It fell as experimental psychologists came to adopt canons of scientific investigation which require that the facts gathered as evidence for or against a hypothesis be intersubjectively confirmable. Without confidence in introspection as a reliable method of observation, then, it is hard to see how giving up our understanding of anger, fear, and the like as states of mind that both contain feelings and serve as motives could be sustained. The

prospects, in other words, for reviving James's theory of emotions are dim.

Notes

- 1 For an account of this turn in the philosophical study of emotions, see Deigh (1994).
- 2 "If an emotion is a collection of changes in body state connected to particular mental images that have activated a specific brain system, the essence of feeling an emotion is the experience of such changes in juxtaposition with the mental images that initiated the cycle" (italics removed; see also p. 129, where Damasio appears to misread James as "stripping emotion down to a process that involved the body").
- 3 Jenefer Robinson, who does not tie her account as closely to Damasio's, uses "affective appraisals" and "noncognitive appraisals" to express the thesis (see Robinson, 2005, pp. 28–57).
- 4 I use 'appraisal' and 'evaluation' interchangeably to mean a judgment of something as good or bad, either absolutely or relative to the subject's interests.
- 5 Robinson's argument for the thesis, by contrast, is transparently verbal. Finding herself stuck between her subscription to the thesis that emotions entail appraisals and her acceptance of the evidence from experimental psychology and neuroscience that an emotion can occur without an intermediate or concomitant cognition, she invents the category of noncognitive appraisals to resolve her dilemma. But it takes more than an oxymoron to go through the horns of a dilemma.
- 6 The two sections that follow are drawn from Deigh (2013).
- 7 I put a word within single quotation marks to indicate that what I am referring to is the word itself and not what it denotes (see Quine, 1972, pp. 43–44, for discussion of this convention and the confusions it serves to avoid).
- 8 Nor is there any evidence that Hume meant to be using 'emotion' metonymically when he used it as a name for secondary impressions.
- 9 Hume first characterizes direct passions as "aris[ing] immediately from good or evil, pain or pleasure" (1978, p. 276; see also p. 399). Sometimes, though, he speaks of them as arising from the prospect of pleasure or pain (see 1978, p. 414). He also describes volitions as impressions that arise immediately from pleasure and pain, while at the same time excluding them from being passions: "Of all the immediate effects of pain and pleasure, there is none more remarkable than the will" (1978, p. 399; see also, p. 574). Later, however, he implies that the will is determined by passions: "Beside these calm passions, which often determine the will ..." (1978, p. 417). I believe the latter thesis best fits his argument and have interpreted him accordingly, that is, by presenting as his view that volitions are produced by direct passions. Note that in either case, Hume excludes volitions from the category of passions: "tho', properly speaking, [the will] be not comprehended among the passions, yet ... we shall here make it the subject of our enquiry" (1978, p. 399).
- 10 "The impressions, which arise from good and evil most naturally, and with the least preparation are the direct passions of desire and aversion, grief and joy, hope and fear, along with volition" (Hume, 1978, p. 438).
- 11 Bain, in introducing the category of states of feeling that are neutral in the sense of being neither pleasurable nor painful—surprise is his example,—may seem to be departing from the traditional concept of passions since he takes their neutrality to imply that they are not motives to action. But his explanation of them as fixing one's attention on an object so as to require effort to turn one's attention elsewhere shows that he still conceives them as states that influence the will (see Bain, 1875, pp. 13–14, 390).
- 12 C. G. Lange, independently of James's publication, published a similar account of emotion around the same time (see James & Lange, 1922).
- 13 That James has Hume in mind is then made explicit on the next page. "[A] necessary consequence of the belief in permanent self-identical psychic facts that absent themselves and recur periodically is the Humian [sic] doctrine that our thought is composed of separate independent parts and is not a sensibly continuous stream.... [T]his doctrine entirely misrepresents the natural appearances" (1890, I, p. 237).
- 14 The passage is a more pithy restatement of the same points in James (1890, II, pp. 447–448).
- 15 James, in the chapter on instinct, does not explain instincts as the result of natural selection, but treats them as innate and the result of adaptation. In the last chapter of *Principles*, however, in the section "The Origin of Instincts," he argues for the superiority of Darwin's theory of natural selection to Lemarck's theory of the inheritance of acquired traits (see 1890, II, pp. 678–688).
- 16 James's dismissal continues with even harsher criticism. In the next sentence, he wrote, "And not only is it tedious, but you feel that its subdivisions are to a great extent either fictitious or unimportant, and that its pretences to accuracy are a sham" (1890, II, p. 448).

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