Consciousness and Emotion

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March 31, 2011

Self-actuated human movement is foundational to appreciating the whole complex of issues related to brain, mind, body. Mark Johnson shows that self-actuated movement creates our fundamental sensorimotor schemas that underlay even the highest levels of cognition. Brian Massumi's widely ranging discussion of proprioception is stunningly powerful. We know, certainly it is most obvious, that life seems synonymous with self-actuated movement; yet, I don't think that we necessarily fully appreciate the complexity and profundity of such obviousness.

Raymond Gibbs, in presenting the findings of cognitive science on embodiment, points again and again to the essential role of action, human movement. On the topic of perception he writes that "there is no perception without action."[1] Gibbs later discusses the relationship between action and perception and concludes that "perception and action share a common representational code."[2] In other words perception and action influence one another; they are interactive and interdependent. And the moving body is also always engaged with the environment. So the conclusion is that perception depends on "the dynamics of how certain movements are created from larger patterns of brain, body, and environmental interactions."[3]

There are two important observations I want to make at this point. Again and again when confronted with two-option problematics we have found that old objective of attempting to eliminate one and champion the other is being consistently replaced by dynamic and interactive and interdependent systems. Both/and has replaced either/or. No longer need we choose between nature and nurture, mind and body, action and perception; yet, now our task is to describe the energetics, the dynamics, the structuralities, the reversibilities. And once we have aspired to this task, we are faced with the inadequacies of the arresting impact that such descriptions and explorations produce. And, it seems to me we are inspired to another voyage in order to come home again, to place self-actuated movement as foundational, by trying to trick ourselves into a glimpse of movement-in-self, action-in-itself, play, seduction. This is clearly the era of dynamics, of reversibility, of flesh, as we learned from Merleau-Ponty.

Should we learn no other thing here, it must be this shift. There are no settling conclusions, no final choices, no firm places on which to stand. As Jonathan Smith has long shown us,[4] we have only the choice between inaction and plunging into the chaos; yet, an interesting and amazing chaos it is. This insight must impact every aspect of our studies and lives. We are not free to simply take any position we like without thought or reflection or investigation. No, it means that we must discover the greater contexts and the deeper interdependencies and reversibilities of anything we consider. Furthermore, as

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[1] Raymond Gibbs, *Embodiment and Cognitive Science* (New York: Cambridge University Press, 2005), p. 51.
[2] Ibid., p. 63.
[3] Ibid., p. 53.
[4] Jonathan Smith, "Map is Not Territory."

we are learning, this dynamic is built into our deepest neurological, cellular, physical, and chemical beings.

The second important point follows directly. The brain and body are inseparable. As Candice Pert puts it in her book *Molecules of Emotion*, the mind "doesn't dominate the body, it *becomes* body—body and mind are one … the flow of information throughout the whole organism, as evidence that the body is the actual outward manifestation, to physical space, of the mind."[5] The mind and body are reversible. Body and mind are mobiatic; two-sided and one-sided at the same time, that is, at once separable and inseparable. In terms of action and perception, or self-actuated movement and emotion, the process goes both ways at the same time. Action influences perception as the perceptible influences the action of the perceiver. If we take this relationality seriously, then, should we allow ourselves to have any choice, any opportunity for conscious decision, we must consider an issue that is of growing urgency to me. Life-style impacts what and how we perceive, feel, think, imagine, experience, know, understand. And, of course, the inverse is also the case. This is fairly obvious and widely accepted outside the confines of academia. Any browsing in the self-help section of a bookstore provides endless suggestions on life-style changes to impact emotions, relationships, self-esteem, wealth, happiness.

There are then two sub-issues. First, in the academic literature I don't know of a single paragraph or even a sentence that would suggest that a scholar's personal life-style impacts what she or he thinks, or sees, or understands, or knows. I suppose there are relevant implications in the insider-outsider discussion.[6] I suppose the closest foray into this is presented by academic feminists. There was that wonderful French feminist "writing the body" movement[7] which, I think, amounted to the same. It embraced the feminine body the writer already is which I would think to be quite a different matter than embracing the male academic body we all have become. It argued that women's experience as women's bodies constitute a shaping of perspective, an alternative understanding, indeed, perhaps something entirely different from the traditional male views, shaped by academic male bodily experience. "Writing the body" was an effort to practice the quotidian obvious that life-style is reversible with emotion, insight, perception, action, awareness. Recalling Jean Baudrillard's gender associations with seduction and production[8] we can appreciate the entrenched nature of this issue. Yet, we can no longer avoid the likelihood that there is a widespread occurrence of what Gibbs referred to as "change blindness," the condition in which people fail to notice changes in the environment that are quite large and in full view. Change blindness occurs because our sensorimotor experiences dispose us to experience only certain aspects of the world. We attend to the world through these predispositions. It is even more likely that academics suffer also from "inattentional blindness," which

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[5] Candice Pert, *Molecules of Emotion: The Science Behind Mind-body Medicine* (New York: Touchstone, 1998), p. 157.

[6] See Russell McCutcheon, ed. The Insider/Outsider Problem in the Study of Religion: a Reader (New York: Cassell, 1999.

[7] Ann Rosalind Jones, "Writing the Body: Toward an Understanding of l'Écriture feminine" in *Feminisms: An Anthology of Literary Theory and Criticism*, Robyn Warhol and Diane Herndl, eds., (Rutgers University Press, rev ed. 1997). See also Katie Convoy, et. al. eds., *Writing on the Body: Female Embodiment and Feminist Theory* (New York: Columbia University Press, 1997)

[8] See Baudrillard, *Seduction*, pp. 6-7.

occurs, according to Gibbs, when we are "engaged in attention-intensive tasks and fail to notice when extraneous stimuli are presented."[9] The very scientific process that we operate under is an intentionally attention-intensive process. We construct a hypothesis and then limit all our observations to the process of supporting the desired conclusion and this method blinds us to what might be rather obvious alternatives. Can we continue along this darkening alley? The challenge is really for young scholars to incite a revolution and it will need to be on a scale larger than was feminism, because female scholars themselves have largely given themselves to production.

The second sub-issue is this. In reversibility, in a mobiatic structure, how can change be introduced? If action shapes perception which, in turn, shapes action, where does change enter? If the feed forward is as influential as the feedback, the result would be to be trapped.[10] This surely is what drives discussions of free will and choice and agency and power and even meaning. What prevents this reversibility from being an infinite closed loop as might be depicted by the coiled shape of the infinity sign that is taken by a mobius strip when left to itself? Alicia Juarrero (1999), as reported by Gibbs, criticizes philosophers for failing to provide coherent answers to the question of what causes intentional behavior. And her response is to characterize intentional behavior as "a fluid, dynamic process taking shape through the interactions between brains, bodies, and their environments."[11] Surely environment is a key player which we might grasp in such terms as time and space, community and society and history and experience. This suggests that reversibility is not consistent or bidirectionally equal. As we have discussed in an earlier lecture it is the incompleteness of reversibility that we locate its power. Should greater explanation be needed, we need only remind ourselves how utterly complex are the brain, the proprioceptive system, the chemistry of emotion based in neurotransmitters and receptors, and almost every other aspect of the brain, body, movement triad to appreciate that the interactions among all the determinative elements is so utterly complicated as to be far beyond determination or even comprehension. This is yet a further dimension of the dynamics of dynamic systems. It is a daunting, yet exciting, task of grasping incomplete reversibility and structuralities that are identified by such terms as play and seduction.

For many years I have believed that traditional academic life-styles are severely limiting to the field of vision (taking this phrase metaphorically) and to the cognitive processes academics use. If our self-actuated movement is an influential factor in our perceptions, our emotions, our cognitive processes, then what must be the impact of a severely sedentary male life-style that excludes most experiences beyond reading and writing and talking all directed towards producing reason-based documented knowledge, publications, student clones? In the study of religion I feel that, due to change and inattention blindness, much of the world of religious action and behavior and life is virtually invisible to religion scholars. Religion understood as what happens every day in the lives of religious people, is simply imperceptible. The study of religion must then be progressively self-referential where most interest is in what other scholars write in reference to what yet other scholars have written, and so on. And the overwhelming majority of sources for the study of religion are textual. The sciences, both social

[9] Gibbs, p. 66.
[10] I think it interesting that feed forward is two words whereas feedback is but one.
[11] As quoted in Gibbs., p. 74.

and natural, seem to make advances by directing attention primarily to aberrancies. Bring us your sick and deformed and we will discover the nature of the healthy and normal. For the study of religion to maintain some place of value in the world accelerating in change in the twenty-first century, it too must change and the order of change must be dramatic. There are many clues and inspirations offered by these brain, body and movement studies.

Emotion, feeling, sensation, pleasure, pain, conviction, passion, ownership, consciousness … these are all interrelated terms. These are the invisibles of the body, the other side of the body, the body inside. The studies we are reading show abundantly that they are body-inseparable. More than that, they are fundamental to perception, to cognition, to self, to body image, and thus surely these invisibles are fundamental to meaning and value. Traditionally emotions, feeling, pain, and passion have not only received short shrift by academics (and interestingly scientists as well as humanists), they have been maligned. We look down on the emotional. We consider weak those who admit to feelings, to being influenced by feelings in any way. In 2008, the media gave about a week's attention and analysis when they observed Hillary Clinton shed a tear. Those in pain are quickly dismissed or simply not comprehended. Those convicted with passion are shunned as being too strong, one-sided, unbalanced. These attitudes are found in the public arena. In academia, these invisibles are carefully avoided, hidden behind more acceptable invisibles such as thought, ideas, concepts; all of which are traditionally more associated with the brain, with the male brain at that, and they are believed to be controlled by means of reason and objective distance.

If we allow ourselves the surgery to remove the cataracts that have prevented us from seeing emotion, we have much to consider. The interplay of emotion and touch is powerful. The interplay between vision and emotion is as well. Indeed, emotion is synaesthetic in integrating and responding to all sensual information. Emotion seems to differ from feeling in most discussions, such as Antonio Damasio's,[12] of how we approach all this. Feeling is simply an awareness of general bodily arousal. Such arousals become emotions when we provide cognitive attributions to the cause and nature of these arousals, that is when we know that we are feeling them.[13] Indeed, isn't it a rather common experience to have some persisting emotional arousal? When we give attention to these arousals we are often able to identify, through a process I call "personal archaeology," vague feelings as emotions and to discover the experiences that give rise to them. "Oh, this feeling is anger and I am feeling it because so-in-so made an unfair and rude judgmental statement to my friend about me." "Background feelings" tend to color our lives yet often are known only with vagueness, that is, as a elusive sense of pervasive feeling.

Yet, what initiates emotion? There is the longtime discussion centering on views held by William James and Walter Cannon. James held that emotion begins in bodily sensation; Cannon believed that emotions initiate in the head and trickle down to the body.[14] Yet, Gibbs and Candice Pert report that

[12] Antonio Damasio, *The Feeling of What Happens* (1999)
[13] It seems to me that mood is a sort of halfway point where feelings begin to lean toward identifiable emotions.
[14] Gibbs, p. 253 and Pert, pp. 35-37.

both are correct and one position does not exclude the other. It is fascinating that when Pert came on this idea she found it quite a revelation.[15] This is yet another example of reversiblity structurality.

It is important to incorporate in our discussion Candice Pert's identification of "molecules of emotion" and how they work. Explanations of emotion parallel the other neurophysiologial discussions we have had regarding perception and consciousness. I believe this biochemical grounding of emotion and the complex relationship this biochemistry has with other body systems provides a powerful basis on which to argue that emotions, feelings, sensations are not ephemeral, are not subjectivities that need to be factored out. Rather emotions are at the heart of our convictions, our passions, our guesses, our stories, our beliefs, our images—all of which underlie meaning, value, hypothetic inference, and authority. Pert describes the molecules of emotion as ligands, a term designating any of a variety of small molecules that specifically bind to a cellular receptor and in so doing convey an informational message to the cell.[16] Students of religion may take special interest in ligands for the term is from the Latin *ligare* which is also the root for the word religion. It means "that which binds."

Antonio Damasio attempts to chart the neurology of the brain that is most functional at the various levels of feeling, knowing that we are feeling, feeling what we know, and so on. He allows for the body to have a function in feeling, yet it seems it is largely in the enabling or impairing of the brain centers he isolates as being involved. Emotion for Damasio is largely an efferent process, that is, proceeding from the brain to the body. While he acknowledges that there are signals sent from the brain to the body (and he names the viscera and the endocrine glands) it seems to me that he clearly finds the brain in the skull the emotion/feeling center. He understands emotion largely as serving a mechanism for solving problems that arise. And these studies seem rather skewed toward severe types of emotion such as fear.

The major contribution of Damasio as well as Gibbs is their linking feeling and emotion with consciousness and his discussion of the implications of consciousness in terms of emotion and feeling. Should we allow that consciousness is inseparable from feeling, feelings of self, something not distant from our discussion of coenaesthesis, we at least have a position from which we might seek to embrace emotion and feeling.

What I find missing in most of these analyses is to follow the Jamesian perspective more carefully, which is that emotion and feeling begin in our bodies or at least that it is a bodily kind of feeling that is most fundamental in "sensing" emotion. And here is an area of study I have yet to find adequate satisfaction. While Massumi and many others have made us aware of proprioception and the many neurophysiological and philosophical implications, there is much greater confusion about visceral perception. While Massumi discusses visceral feelings or perception, as does Damasio and Gibbs, Leder assures us that the viscera are perceptually dead, that is, there are no sensory receptors in the viscera. So while we can point to proprioceptors to understand mesoperception and its implications, we have no neurophysiological counterpart for the viscera; at least to my limited knowledge. Yet, our quotidian

[15] Pert, p. 137.
[16] See Pert, pp. 23-24 for a nice description of this process.

experience often locates feeling and emotion in the viscera as commonly referred to as our "gut feeling." Further, feelings are located in the body, sometimes seemingly pervading the body, yet the question remains how we perceive these feelings. How is it that we are often able to pinpoint specific feelings to a specific region or area (say chest or throat) and other feelings tend to pervade our entire bodies, seemingly felt in every limb and pore? What is the relationship between certain kinds of feelings and specific body locations? Is there a correlation between background feelings and whole bodied feelings, or can we locate background feelings in specific body parts? It seems to me that the types of body locations of feelings, that they are so clear and so location specific, is foundational to a whole area of inquiry about how we perceive localized emotional feelings.

I am interested in the relationship between posture and emotion. Here again is a dynamic system. Emotions are expressed in postural affects. We slump down when we feel sad and depressed. Even the word "depressed" corresponds with a postural attitude. Yet, we also know that intentional postural conditioning has emotional consequences.[17] To forcibly take on a postural effect is often accompanied by the initiation of corresponding emotions or affects. It might be valuable to ask about human postural values. We need also recall here that posture is the support for gesture and to recall how constituitively fundamental is gesture. I think that technically good posture would be defined as the body with all of the musculature balanced and closest to being at rest. Our musculature is designed so that the articulation of our movement is even possible because it is controlled by sets of opposing muscles. In every movement one set of muscles is tightened and shortened and the corresponding ones are relaxed and lengthened. Indeed, most movement engages triangulated musculature. Posture is rooted in movement and movement mechanics. So-called "good" posture occurs when the muscles throughout the body are equally engaged. So-called "bad" posture is when muscles in opposing sets are not equally involved. Bad posture then corresponds with added effort, even at rest, a sense of imbalance, and often pain. When we feel bad, we often describe it in such terms as "I feel weighed down." Of course, we feel this way because one is actually weighed down by one's own body. To mechanically correct posture corresponds with lightness of being, balance, relief from pain. I think that the kyphotic head-forward posture so common to today's computer users[18] surely has significant emotional affect. This posture, the posture of academic practices, closely resembles the posture associated with depression.

[17] We looked recently at an essay on "Affective Proprioception" and one might expect that one important dimension of this should be affective posture. I recall that Erin Manning warns against anyone who would pay attention to suggestions regarding postural adjustments. I feel quite the opposite.

[18] We can look forward to a shift in device types that will accompany the advancement of technology. Google CEO Eric Schmidt predicts that in the very near future, most computing/communicating devices will be handheld and this shift has postural implications.