Abstract

In this article, I integrate pragmatic and contemporary literature to advance a valuative understanding of mind. That is, I argue valuations—taken to include emotions, interests and aesthetics—undergird cognition and perception. In making this case, I focus on James's view that selective interests bring coherence to thought and experience. I further argue that interests are emotion-like. Though substantiated on conceptual, experiential and neurobiological grounds, this gets next to no attention, even among those who claim pragmatic influences and suggest emotion intertwines with cognition, such as Damasio and Schulkin. Extending this from cognition to perception, I go on to offer a valuative account of the latter that merges James and Dewey's positions with Gestalt notions and findings from experimental research, along with Gibson's ideas, which have pragmatic bases. By pushing pragmatism a little beyond what its original authors intended, placing it next to some of its intellectual offspring and highlighting underappreciated aspects, I hope to nudge thinking on mind in new directions, while simultaneously clarifying and rendering a fuller appreciation of classical pragmatism.

Keywords: Affect, Affordances, Cognition, Emotions, Gestalt Psychology, Interests, Mind, Neurobiology, Perception, Reason, Values.

Pragmatism and the Valuative Mind

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Pragmatism is resurging, especially among embodied cognitive scientists. The growing appreciation of the body accompanying this fits with increasing recognition that cognition and perception are valuative, which is to say, emotional, interested and aesthetic. In what follows, I detail how

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classical pragmatic thinking—specifically that of William James and John Dewey—anticipates recent valuative theories of mind and how it can be used to develop them further.

I begin by discussing James's concept of selective interests, how it meshes with contemporary research and how the two together suggest not only that cognition is valuative, but that emotions bring us rationally into touch with our worlds. Recent advocates cite pragmatic influences, with Antonio Damasio proclaiming James an "anchor" of his work (2010, 8). However, Damasio (1994, 1999, 2010) and others such as Jesse Prinz (2004) and Rose McDermott (2004) focus almost exclusively on ideas first delivered in James's famous 1884 paper "What is an Emotion?" They thereby neglect the account offered in his 1879 "The Sentiment of Rationality." This is despite penning works with strikingly similar positions and in at least one instance a virtually identical title, as with McDermott's (2004) heavily cited "The Feeling of Rationality." The historical oversight is worth addressing in its own right, and more thorough exposition and incorporation of pragmatism into contemporary work promises to augment the latter.

One omission in recent valuative theories of cognition—and in fact classic work as well—is failure to emphasize connections between interests and emotions. Neurobiologically, the two overlap; and biological connections aside, the two relate conceptually and experientially, and both bring order to experience, without which coherent thinking is difficult to imagine. This is James's position regarding interests, though he misses the extent to which they are emotional, likely through narrowly identifying the former with the non-visceral and the latter with bodily feelings. This is roughly Damasio's view too, along with the pragmatically inspired neurobiologist and philosopher Jay Schulkin. However, these researchers focus on emotions and neglect interests, and arguably miss the overlap for the same reasons as James. Recognizing that interests are emotion-like significantly expands theories in the vein of Damasio beyond basic decision-making and into areas such as concept formation, accordingly enlarging valuative accounts of cognition.

This same move also accentuates valuative sides of perception. Elaborating, I sketch a valuative picture of perception that exploits kinships between pragmatic and Gestalt accounts and draws on the great American ecological psychologist J. J. Gibson (1979). Gibson, whose ideas bear the imprint of pragmatism, not to mention Gestalt psychology and phenomenology (see Gibson 1979; Reed 1988; Heft 2001; Chemero and Käufer 2016), argued that we see the world in terms of openings and closures for action, or what he called "affordances." Though Gibson did not put it so, it is little stretch to add that this means in terms of possible use-values, deeds and their effects on us, hence in terms of interests, likings and dislikings. A strong case can be made, accordingly, that valuative aspects of perception are as much

about openings and closures for bodily action in environments as about subjective states. James's discussions of interests and Dewey's situational rendering of emotion supply defenses for this. So too do comparable accounts from Gestalt psychology, in company with experimental research pointing to emotional dimensions of affordances.

The account I offer pushes pragmatism a little beyond what its original authors intended, for example, emphasizing overlap between interests and emotions in ways that James could not because he lacked access to neuroimaging devices. It also places pragmatism next to movements unfolding contemporaneously, along with more recent work in its lineage, or else bearing its indirect imprint, as with experimental research on affordance theory. A primary goal in all of this is to prod thinking on mind in new directions. However, the account offered simultaneously broadens the import of pragmatism and exposes underappreciated aspects, thus cultivating a richer understanding and highlighting the continued relevance of the tradition.

Emotion and Interest

In his 1884 paper, "What is an Emotion?", William James formulated what came to be known as the James-Lange theory, later elaborating on it in *The Principles of Psychology* (1890ii). There, he asserted that whereas many presume "we lose our fortune, are sorry and weep" or "we meet a bear, are frightened and run," the reverse is so: "we feel sorry because we cry" and "afraid because we tremble" (449–450). In other words, we perceive affairs, then undergo physiological changes such as crying, trembling and tingling, along with overt actions such as fleeing, and only then experience the emotions that go with these affairs.

This was innovative, and while debates have gone back-and-forth, James's hypothesis continues to influence ranking scholars. The success of the theory, however, is also part of its failure since too many focus on it at the expense of other relevant writings. James bears some responsibility for this. He does because his account—like so many that followed—almost exclusively associates emotions with visceral feelings. There is no doubt, of course, that visceral experience is critical to what emotions usually are. This is reinforced by the fact that classically understood emotional brain regions such as the amygdala bulbs closely connect with areas innervated with and relaying information from cardiac, gastrointestinal and other visceral systems (see Schulkin *et al.* 2003). At the same time, emotions do not invariably mirror visceral alterations. This is why we can experience a gloomy landscape when cheerful (Koffka 1935, 326) or deeply love nature without the intense tremblings characteristic of a blooming romance. This is also why spinal injuries do not appear to significantly impair emotional experience (see Deady *et al.* 2010), despite diminished visceral feedback. The argument, again, is not that emotion lacks visceral

components. On the contrary, archetypical instances are visceral, as reinforced by some of the just cited research, along with everyday experience. The argument, rather, is that the term as handed down to us in language and culture refers to something broader that antecedes and in fact makes scientific and philosophical discussion of emotion possible.

Damasio's account neglects this, as did James's for the most part. Though not stipulating emotions inevitably have a visceral character (see Schulkin 2004, Ch. 1), Schulkin's discussions might also leave that impression, and, like Damasio, he mostly ignores interests. A reason for this neglect perhaps relates to James's inadequate recognition that interests and emotions overlap. As James (1884a) put it, "there are feelings of pleasure and displeasure, of interest and excitement, bound up with mental operations, but having no obvious bodily expression" (189). According to the position mounted in the same piece, this means no emotional manifestation. Part of the failure to recognize an unequivocal identity between emotion and interests consequently appears grounded in James's identification of the former with raw sensation, in this case of a bodily sort. The tendency to isolate sensation from cognitive function (see Parrott and Schulkin 1993) that occurred after him arguably amplifies the problem. Such included the neuroscientist Joseph LeDoux up until at least the late 1980s and the psychologist Robert Zajonc (Parrott and Schulkin 1993), both giants in their fields,with the former later going on to develop a more integrated view (see LeDoux 2015).

At the same time, some of James's writings did indicate overlap between interests and emotions. Though not his view *per se*, his landmark 1884 piece cited a patient with diminished emotional capacity complaining that the "lively interest" at hearing her daughter play piano a year ago "exists no more" (200). The connection was more explicitly expressed in "The Sentiment of Rationality," however. There, he elaborated on selective interests, and suggested they might be emotional by virtue of his choice of title. He further argued interests undergird cognition and indeed consciousness, and discussed emotional dimensions of reasoning. For such reasons, neglecting ideas from this article and similarly oriented pieces by James is a considerable oversight for those citing him as a fundamental influence and linking emotion to cognition.

This oversight is compounded by the obvious conceptual and experiential overlap between interests and emotions. Both direct attention, as when focusing on threats or beautiful things, or looking outside because this is more engaging than a lecture. Being in love likewise entails intense interest, and to experience palpable fear is to be viscerally interested in escaping a situation. To be interested in philosophy is similarly to experience an emotional pull towards the topic,

but this can occur without intense visceral feelings. Notice, therefore, that while emotions and interests often involve visceral stirrings, everyday concepts and experiences of them do not make this inevitably so. One can deeply love a cherished grandmother or academic topic without necessarily undergoing intense pangs. Consequently and against scholars such as Damasio, Prinz and even James on occasion, visceral dimensions do not necessarily mark the presence or absence of what we identify as emotional.

The overlap between interests and emotions is further substantiated by neurobiological research. In his much discussed 1994 book, *Descartes' Error: Emotion, Reason, and the Human Brain*, Damasio observes that patients with damage to areas in and around the anterior cingulate cortex suffer both emotional and attentional deficits (70–72). While Damasio does not emphasize the connection, attention is synonymous with interest in James's scheme and by any standard closely related. A half-decade later, Damasio (1999) elaborated on physiological connections between emotion and attention. Among much else, he pointed out contiguous innervated nuclei in the reticular formation of the brain stem, which in various ways regulate attention, visceral activity and feedback and thus many emotional feelings (244–247; also see Venkatraman, Edlow and Immordino-Yang 2017). Other work by his research team shows that people with damage to emotional brain regions and diminished visceral response, as measured by skin conductance, have problems conceptualizing and avoiding risk (Bechara *et al.* 1997). This make sense, according to Damasio (1999), because "[e]motion is critical for the appropriate direction of attention since it provides an automated signal about the organism's past experience with given objects," therewith also "providing a basis for assigning or withholding attention relative to a given object" (273). Luiz Pessoa (2013), a leader in the neurobiology of emotional-cognitive integration, goes somewhat further than Damasio. Whereas Damasio sometimes suggests emotional neural architecture support other regions dealing with cognition, Pessoa observes that few, if any brain areas, exclusively deal with any one of these processes, which is to say, they are integrated from the start. Thus, for example, while rejecting the simplistic and classic hypothesis that the amygdala bulbs are essentially fear centers, he cites evidence indicating these regions are directly involved in attention and hence cognition and learning.

Despite differences, Damasio, Pessoa, Schulkin and many others do agree that emotion and attention interrelate, which is the key point. As Damasio (1999, 273–274) elaborates, it is expedient that neural architecture governing attention and emotion processing should be physically proximate if not the same. After all, "the consequences of having emotion and attention are entirely related" (274). Other research affirms this, with findings suggesting attention relates to interoceptive

or visceral sensations and further that people with higher interoceptive sensitivity have better focus and superior performances on certain tasks (Gregory *et al*. 2003; Matthias *et al.* 2009). The basal ganglia provide another illustration. Not only do they perform classically ascribed motor and habit functions. This region and closely associated ones are also involved in reward appraisal (Schultz 2016), which is fundamentally emotional, interested and attentive, in addition to intertwining with perception and cognitive judgment, with the basal ganglia in fact active in processing temporal aspects of language (see Kotz, Schwartze, and Schmidt-Kassow 2009; Kotz and Schmidt-Kassow 2015).

Expanding on such observations, Damasio (1999) argues that overlap between emotions and attention makes sense,

> if we regard consciousness as the most sophisticated means at our disposal to regulate homeostasis and manage life. Nature is an expedient tinkerer and since consciousness is a latter-day means of achieving homeostasis, it would have been convenient for nature to evolve the machinery of consciousness within, from, and in the vicinity of the previously available machinery involved in basic homeostasis, in other words, the machinery of emotion, attention, and regulation of body states. (274)

James likewise affirmed a regulatory role for consciousness and emotional processing (see Schulkin 2012, Ch. 5), only adding interests into the mix. In the opening pages of *Principles of Psychology* (1890i), he wrote: "*The Pursuance of future ends and the choice of means for their attainment, are … the* mark and *criterion of the presence of mentality* in a phenomenon" (8). Later in the same work, he added:

> … the rest of this book will show us that consciousness is at all times primarily *a selecting agency*. Whether we take it in the lowest sphere of sense, or in the highest of intellection, we find it always doing one thing, choosing one out of several of the materials so presented to its notice, emphasizing and accentuating that and suppressing as far as possible all the rest. The item emphasized is always in close connection with some *interest* felt by consciousness to be paramount at the time. (139)

Elsewhere James stated that mind is a "teleological mechanism," by which he meant an agency that pursues *teloi* or "*ends* that do not exist at all in the world of impressions we receive by way of our senses" (1881, 544–545) because genuine ends only show up with the arrival of consciousness, albeit in ways requiring a world. In addition to showing up with consciousness, interests—and by extension, emotions—are necessary for coherent experience of both oneself and the world, and are accordingly a pre-condition of rationality too.

Sentiment, Coherence and Rationality

In discussing his landmark 1884 emotion paper, James (1890ii) went on to add that absent visceral changes following perception of an event, "the latter would be purely cognitive in form, pale, colorless, destitute of emotional warmth." In such a case, "[w]e might then see the bear, and judge it best to run, receive the insult and deem it right to strike, but we should not actually feel afraid or angry" (440; also see 1884, 190). These ideas had lasting influence, and James correctly attributed visceral feelings to anger and fear, even though this does not hold for every emotion in all circumstances. However, a good deal of what he got right is missed in literature on affective bases of cognition because of the narrow focus on this account. Specifically, other works suggest that affect-free judgments are barely judgments at all. This is more so given that interests are emotion-like.

Inasmuch as James argued emotions and interests underlie thinking, he was in good company with other Modern thinkers such as David Hume (1740). But whereas earlier thinkers tended to see emotion as inescapable in human cognition, they also maintained we should be skeptical of judgments for just this reason. Hume was once again a case in point, Friedrich Nietzsche (1888) another, albeit in this case warning that reason without emotion is antithetical to life. James was accordingly innovative because, rather than viewing affect as an epistemological contaminant, he cited it as a condition of human rationality. Thereby he not only broke with predecessors; he also anticipated recent developments in neurobiological and cognitive sciences, which suggest the same (see Parrott and Schulkin 1993; Damasio 1994; Schulkin *et al.* 2003; Schulkin 2004; Pessoa 2013).

James's concept of selective interests has roots in Darwinism (see Crippen 2010, 2011), discussed in his first two publications (1865a, 1865b), along with prominent ones that came later. James (1878a, 1878b, 1880) was eager to challenge the view, which he saw particularly in Herbert Spencer's Lamarckian variant of British empiricism, that the environment directly and solely molds the mind. Though not exclusive of Lamarckian theory, Darwinism offered an alternative, with James (1880, 622) praising the theory as triumphantly original for its recognition of separate cycles of operation in nature. This means variations arise for reasons independent of the environmental pressures that select or extinguish them. By extending this precept to an ontogenetic level, James arrived at interrelated explanations of how minds adapt to environments without being directly molded.

One way, as James reasoned, is that "accidental out-births of spontaneous variation in … the excessively instable human brain" spawn ideas and therewith novel ways of relating things (1880, 641). Many of these "perish through their worthlessness" (1890ii, 636). Yet some form fruitful connections and highlight relevant things, leading to their

reinforcement. Here the environment "is the cause of their *preservation*, not that of their production" (1890ii, 636). A second way is that varieties of sensory content arise from the environment. A small portion gets absorbed through interested attention, but the majority ignored through lack of it. For this reason, James wrote that different people will nearly always have "selected, out of the same mass of presented objects, those which suited [their] private interest," and "*rationally* … connect them" in different ways (1879b, 12; 1890i, 287).

James had other auxiliary reasons for insisting that selective interests dominate cognition. To begin with, he (1880, 620) noted that in both science and everyday life, raw observations overwhelm and are managed only by narrowing our view. Moreover, even supposing we had the capacity to absorb every phenomenon, it remains that things typically relate in myriad ways (see James 1878b, 921–922). This is even so in simple geometric figures, so that opposing planes on Necker cubes can show up as front or back depending on how we focus our attention, yet never both ways simultaneously (Crippen 2015, 86–89). James concluded, accordingly, that without selective interests, experience would be "utter chaos" (James 1878b, 929; also see 1890i, 402–403).

Adding to these justifications, James offered neurophysiological speculations about the utility of selective interests. He stressed the enormous complexity of the human nervous system. However, whereas the obvious conclusion is that complexity causes highly developed consciousness, James posited the reverse might simultaneously be true. That is, intricate nervous systems may need consciousness to function. He compared the brain to a "hair-trigger" device that ought to have random outputs (1879a, 5; 1890i, 140). After all, complicated devices such as smartphones and computers sometimes freeze, shut down and do other inconvenient things. Yet while much more complicated, few people randomly jump from windows, curl up on floors at weddings or freeze midsentence. For James, it was as if interests, by ordering what we attend to, supply organized stimuli to the brain. So as with children who are wont to behave less chaotically when in settings without random bangs and flashes, or as life becomes haphazard in the absence of interests and goals, James maintained that the same holds with the brain when interests organize inputs.

In addition to Darwinism, James's account had roots in the philosophy of C. S. Peirce's (1878) pragmatic maxim, which holds that ascertaining the meaning of concepts requires considering practical effects that objects of conception might have. An object conceptualized as "hard" conceivably has the effect of scratching things it comes into contact with; one that is "hard" and "heavy," to give a more Jamesian illustration, the effect of injuring toes upon which it falls. In "The Sentiment of Rationality" (1879a), James assimilated Peirce's view, but strayed from it by stressing the degree to which individual interests

such as toes and their intactness determine what effects get attributed to conceived objects. James (1879a) offered an illustration, suggesting a mechanic conceives oil primarily as a combustible or lubricant, and a carpenter as a darkener of wood. In other words, each emphasizes personally valued effects, so that "essence"—the key features making something conceptually what it is—"varies with the end we have in view" (952).

In "The Sentiment of Rationality" (1879a), James also specifically discussed how emotional feelings intertwine with decision-making and belief formation. Inconsistencies, for example, thwart thought, this being an irritation we flee, relief and pleasure accompanying movement away. Excessive complexity similarly annoys and inordinate simplicity bores, so parsimony attracts, yet not oversimplification. Some years later James (1884b) added to this account. Quoting Spencer's *Principles of Psychology,* he lauded the work for highlighting that "subjectively considered, 'a relation proves to be itself a kind of feeling,—the momentary feeling accompanying the transition from one conspicuous feeling to another conspicuous feeling'" (989). Then James returned to his customary Spencer-bashing, stating that his older contemporary had not seen deeply into his own idea. In particular, James criticized him for reducing innumerable relations to a minimum, then elaborated on the variety felt: "We ought to speak about a feeling of *and*, a feeling of *if*, a feeling of *but*, and a feeling of *by*, quite as readily as we say a feeling of *blue* or a feeling of *cold*" (990; also see 1890i, 246–247). While not enough to fundamentally change the nature of logic, at the very least James's observation has important semantic implications. For example, whereas traditional logic reduces the statement "P but Q" to the conjunction "P and Q," James's analysis suggests different everyday meanings, even though the truth of both conjuncts is entailed with either connector. "But" has a feeling of uncertainty. The portion following the "but" is often stated with the rising intonation of a question. "And" is less ambiguous and more matter of fact (see Johnson 2007, 2014). With these different feelings, come different nuances in meaning.

In themselves, these various attempts to ground reasoning in emotion are not original to James, for thinkers such as Hume (1740) and Nietzsche (1888) endorsed comparable notions, as discussed. As also discussed, however, James stands out insofar as he did not conclude from this that many beliefs are therefore without basis, instead arguing that sentiments help separate irrational from rational beliefs, motivating us towards the latter. After all, complex beliefs invoking unmanageable numbers of assumptions are not, all else equal, as workable as ones depending on fewer; inconsistency likewise tends to impede progress; and all else equal, it is rational to gravitate towards workable, progress-promoting beliefs. In everyday language, moreover, "and" is not exactly equivalent to "but," just as the double negation in the phrase

"I am not unsatisfied" has a different feel and meaning than the phrase "I am satisfied." It is accordingly rational to treat these phrases and connectors as non-equivalent.

Although James did not have access to resources driving modern neuroscience, his ideas parallel findings advanced in that field nearly 100 years after his death. Schulkin, for example, has for decades suggested emotions are cognitive and more specifically heuristic, which is to say,

> part of [a] rough and ready paradigm and … important problem-solving tools in the armament of adaptation. Emotional information processing can be competent, like other forms of reasoning, and can be fast and accurate or inaccurate, with an imperfect knowledge base. (Schulkin *et al.* 2003, 15–16)

Here Schulkin and colleagues group emotion within the category of reasoning. Moreover, while emotional processing can fail, anything can be bad when carried to the extreme. Accordingly, obsessive logic—or what Nietzsche (1888, 478) thought of as the "absurdly rational"—can be insensitive to realities of everyday human relationships and life. This is just as hateful emotional responses to refugees are harmful in current political contexts. At the same time, when it comes to immediate activities dominating daily life, we do tolerably well. Thus while many enjoy foods that are bad in excess, most have emotional interest and hence inclination towards nutrient dense fare, and are disgusted by pathogen-infected substances. In this case, agreeableness and disagreeableness is consistent with concerns for health. Emotions and interests are accordingly grounded in what colloquially may be called "reality" and tend towards correspondingly rational actions. So similarly with James's ideas about concept formation: that the carpenter conceives oil as a wood darkener because this fits an emotional interest does not undermine the fact that oil is a darkener of wood and that this is important to the carpenter.

In line with this, Damasio (1994) prominently urges that emotions help us engage with our world rationally and productively. Repeating James's idea, albeit seemingly without knowing it, he asserts that having a piece of knowledge in awareness is possible only on the condition that one is "able to draw on mechanisms of basic attention, which permit the maintenance of a mental image in consciousness to the relative exclusion of others" (197), and in Damasio's scheme this requires emotion. As a case in point, he cites a patient known as Eliot, a young man, highly intelligent, who underwent surgery for a brain tumor. Both prefrontal cortices and the axons beneath were damaged, with the right more than the left. One outcome was that Eliot had severely diminished emotional experience, accompanied by reduced decision-making

ability. Eliot discussed the pros and cons of options. He still scored high on IQ tests, and otherwise appeared rational. In fact, he appeared normal until asked to make a decision. Despite detailing advantages, disadvantages and consequences, he knew not what he would do if faced with a decision. He seemed to have little to guide him in choosing one option over another, somewhat analogous to being unable to select items from a menu because of lack of preference and hence emotional pull. As of 1994, Damasio had 12 other patients with similar damage, all displaying comparable deficits in emotion and decision-making.

One such patient had suffered a stroke compromising medial and dorsal areas in the frontal lobe of both hemispheres. Based on lack of speech, movement and expression, one might have supposed she had locked-in syndrome, but interviewing her after she recovered somewhat, Damasio (1994, 73) discovered this was not so. She reported having felt little. Untroubled by her disabled state and accordingly having nothing to express at the time, her passivity reflected the deadening of feeling she underwent. In this condition, no decisions were made or implemented, and normally differentiated thought appears to have been absent, this keeping with James's views not just about reasoning, but also concept formation, which entails interest-based abstraction. Elaborating on the problems these patients faced, Damasio almost exactly repeated James's hypothesis. With Eliot, for example, he reported:

> I began to think that the cold-bloodedness of [his] reasoning prevented him from assigning different values to different options, and made his decision-making landscape hopelessly flat. It might also be that the same cold-bloodedness made his mental landscape too shifty and unsustained for the time required to make response selections. (51)

In Jamesian language, Eliot was unable and uninterested, through lack of emotional engagement, to selectively assign values to different options, and accordingly had no basis for making decisions.

Thus where James regarded mind as a teleological mechanism and thinking as teleologically, that is, goal or interest driven, Damasio (1994) similarly concludes that "there appears to be a collection of systems in the human brain consistently dedicated to the goal-oriented thinking process we call reasoning, and to the response selection we call decision making" (70). This group of systems, he added, is also connected with emotional feeling, and, in turn, reasoning. Other neurobiologists, Schulkin and Pessoa among them, repeat this conclusion. Using the amygdala structures to illustrate, Pessoa (2013) observes it is "certain that decision making is altered in both animals and humans when the amygdala is compromised. One way by which the amygdala

may affect decision making is by biasing the representation of value." In short, affective life "appears to contribute to outcomes frequently linked with reasoning and cognition" (38), perhaps to the point that we cannot think in its complete absence. This is what James's classic views and recent neurobiology combine to suggest.

Valuative Perceptual Space

The foregoing account can be applied to perception. After all, the carpenter in James's illustration not only values and conceives oil as a wood darkener, but arguably sees it this way as well. A hiker likewise might perceive a river as drinkable, cooling, freezing, navigable or obstructive depending on use-values and hence interests. James said some interests remain fairly constant, thus engendering stable conceptualizations (1890ii, pp. 335–336), and it is little stretch to say the same applies to perceiving. Hence we are wont to see flooding rivers as emotionally threatening and thus dangerous because we are nearly always interested in avoiding deadly risk. Other interests vary more, and the Gestalt psychologist Kurt Koffka (1935, 345), quoting Kurt Lewin, observed along Jamesian lines that "a person's world undergoes a fundamental change when his fundamental aims are changed."

Though contemporary scientific research lacks sustained discussion of interests, work here does substantiate this picture, with neurobiological findings confirming the importance of emotion and attention in perception on much the same grounds that it does for cognition (see Petersen and Posner 2012; Pessoa 2013, esp. Ch. 6). A second line of defense comes from Gibson's (1979) ecological psychology. Influenced by pragmatism and other historical schools—most notably Gestalt and phenomenological traditions—Gibson is remembered for affordance theory, which asserts that we perceive in terms of the ease or difficulty of bodily actions we might take in the world. Though not emphasizing interests and avoiding talk of subjective experience, this approaches the pragmatic idea that interests delineate our worlds. Accordingly, if thirsty, the drinkability of water becomes salient; if filthy, it may come forth as a cleanser, just as a rock may be a paperweight, hammer, missile or pendulum bob depending on circumstances (see Gibson 1979, Ch. 8). Along these lines, studies show that glasses of water look taller to the thirsty, cigarettes longer to deprived smokers and tools such as shovels larger to people experiencing positive emotions towards related tasks such as gardening (Brendl, Markman and Messner 2003; Veltkamp, Aarts and Custers 2008). This verifies James's assertion that interests alter experience, more so if increased size is understood as heightened salience.

A broader message is that we experience the world as affectively qualified. The late psychologist Nico Frijda (1986, 188), elaborating on Gibsonian and phenomenological thinking, asserted that "[e]

motional experience is primarily a perception: a mode of appearance of the situation." He went on to add that it is "objective" insofar as "it grasps and asserts objects with given properties," which are "out there," so that emotional experience is "perception of horrible objects, insupportable people, oppressive events" and the like. In everyday life, we indeed talk this way. Koffka (1935) remarked that a book may look "proud, a young birch shy" and daffodils gleeful; "we may see a gloomy landscape," and do this "even when we ourselves are perfectly cheerful" (326), indicating emotion is more that internal representations of visceral states. A year earlier, Dewey (1934) similarly observed that we say: "Situations are depressing, threatening, intolerable, triumphant," so that emotions—save in breakdown, as when pathologically angry—are "*to* or *from* or *about* something objective" (67). Here one might consider the emotional tug to familiar faces in crowds; or serene or angry cloudscapes; or dull classroom settings; or again a cozy scene with a Christmas tree and cat warming itself by a fire.

Gibson (1979) nicely condensed much of this by summarizing the Gestalt suggestion—developed out of the psychological work of Heinz Werner (e.g., 1927)—that environments have a "physiognomic quality." On this view, "the meaning and the value of a thing seems to be perceived just as immediately as its color" (138). Quoting from Koffka's 1935 *Principles of Gestalt Psychology*, Gibson went on to say:

> "Each thing says what it is.... a fruit says 'Eat me'; water says 'Drink me'; thunder says 'Fear me'; and woman says 'Love me.'" These values are vivid and essential features of the experience itself. The postbox "invites: the mailing of a letter, the handle "wants to be grasped," and things "tell us what to do with them." Hence, they have what Koffka called "demand character." (138)

At first blush, this seems an inversion of James's account insofar as it speaks of the world projecting interests and emotions on us rather than the reverse. Notice, however, that this is only possible in the presence of an organism with biological requirements, desires and interests, thereby squaring the position with James's.

At the same time, the demand characters of Gestalt psychologists and situational emotions of Dewey are of the environment as much as they are from the organism, so that the emotional "to me" or "for me" dissolves into worldly properties, as Frijda added (1986, 188). This is meant experientially. It also holds literally and in fact echoes Dewey's general view that "perception and *its* object are built up and completed in one and the same continuing operation" (1934, 177); and that perceptual qualities are consequently "qualities of interactions in which both extra-organic things and organisms partake" (1925, 259). Thus when fingers glide over a glassy surface that does not bite

flesh, smoothness is realized. When hands adjust to a bottle, roundness manifests as an outcome of what we can do and what our surroundings afford, to use Gibson's term. As Gibson maintained, therefore, essentially repeating Dewey:

> An affordance is neither an objective property nor a subjective property; or it is both if you like. An affordance cuts across the dichotomy of subjective-objective and helps us to understand its inadequacy. It is equally a fact of the environment and a fact of behavior. It is both physical and psychological, yet neither. An affordance points both ways, to the environment and to the observer. (Gibson 1979, 129)

Although Gibson further insisted that affordances remain whether or not organisms are attentive to them, the theory implies interests. It does insofar as it is grounded in bodily life, which relates to biological needs, hence emotions, interests and attention. A wooden post affords scratchability for cats, less so for humans. This being so, cats are emotionally interested in scratchability in ways humans are not.

Experimental research reinforces emotional aspects of affordances, and with a little tweaking, also the claim that this depends on both the organism and its environment. Studies find people judge grades steeper or more distant when suffering fatigue, poor health, low blood sugar or the burden of heavy backpacks (Proffitt *et al.*, 1995; Bhalla and Proffitt, 1999; Proffitt, 2006; Schnall, Zadra and Proffitt, 2010; Zadra *et al.*, 2010). Lowered energy is common to all these situations, as is emotional deflation upon perceiving steepness or distance when suffering fatigue. Decreased energy also characterizes sadness, and not surprisingly this emotion likewise increases perceived steepness (Riener *et al.* 2010). Depressed and therefore lethargic moods also correspond to desire for closed and hence action restricting spaces, whereas happy and hence energetic moods correspond to desire for open and thus explorable spaces (Mealey and Theis, 1995). All these emotional tones relate squarely to the difficulty or ease of navigating ones body. Consequently they are not purely in the head, but are ways of registering bodily capacities relative to environments—or, in other words, affordances.

The notion that everyday environmental perception entails emotionality and that this relates to action recurs in Rachel and Stephen Kaplan's experimental research on aesthetics. For example, they report trails disappearing around bends are especially enticing (e.g., Kaplan, Kaplan and Wendt 1972). Such settings possess mystery or allure arising from things partially hidden, and this "tempts one to explore further" (Kaplan and Kaplan 1989, 58). Some Japanese gardens employ this principle. That the whole garden is never visible from any single location entices one continually through the setting. The Kaplans accordingly propose aesthetic perception reflects an immediate evaluation of

what it is possible to do (Kaplan and Kaplan 1989, 37) and that it accordingly falls within what Gibson called affordances (Kaplan 1987; Kaplan and Kaplan 1989, 32).

Despite vacillating somewhat on the emotional character of affordances and not emphasizing it to this extent, Gibson (1979, 142) expressed the same point when he remarked that a cliff-edge affords falling and accordingly looks dangerous and in fact is so. This again relates to both the environment and the organism since precipices pose little danger to animals that can fly or with low mass. Dewey (1925) exactly captured the same idea a half-century earlier. "It is an old saying," he wrote, "that the gods were born of fear." However, this perpetuates a misconception, suggesting an individual first endowed "in isolation with an instinct of fear," only after "irrationally ejecting that fear into the environment." Fear, as Dewey summed up, "whether an instinct or an acquisition, is a function of the environment," which is to say, people fear when they exist "in a fearful, an awful world" (42).

Dewey (1934) beautifully captured the gist of all this in another passage characterizing the emotional thickening of space and time accompanying constricted sense of movement:

> Space is room, *Raum,* and room is roominess, a chance to be, live and move. The very word "breathing-space" suggests the choking, the oppression that results when things are constricted. Anger appears to be a reaction in protest against fixed limitation of movement. Lack of room is denial of life, and openness of space is affirmation of its potentiality. Overcrowding, even when it does not impede life, is irritating. What is true of space is true of time. We need a 'space of time' in which to accomplish anything significant. Undue haste forced upon us by pressure of circumstances is hateful. (209)

For Dewey, this means organisms do not typically project emotions into perception. They do not because nature is immediately "kind and hateful, bland and morose, irritating and comforting, long before she is mathematically qualified or even congeries of 'secondary' qualities" (16). This means perception is inherently emotional, but the claim entails more than just this. As Dewey continues:

> Even such words as long and short, solid and hollow, still carry to all, but those who are intellectually specialized, a moral and emotional connotation. The dictionary will inform any one who consults it that the early use of words like sweet and bitter was not to denote qualities of sense as such but to discriminate things as favorable and hostile. (16)

In short, approaching and avoiding—for example, reaching for nutrients and withdrawing from noxious substances—are fundamental to living processes. This accordingly stands as a more primordial iteration

of what Gibson (1979) said when he characterized environmental interactions as "process[es] of perceiving … value-rich ecological object[s]. Any substance, any surface, any layout has some affordance for benefit or injury to someone" (140). This is a way of saying and explaining why emotions, interests and aesthetic attractions and aversions are central to perception.

Conclusion

In this article, I have offered a synthesis of classical pragmatism and contemporary work. I have done so to advance a valuative understanding of mind, articulating emotional, interested and aesthetic underpinnings of cognition and perception. Yet I have also done so as a way of explicating pragmatism.

In making this case, I focused on James's view that selective interests bring coherence to thought and experience, arguing further that interests are emotion-like. Though substantiated on conceptual, experiential and neurobiological grounds, this receives little attention among those such as Damasio and Schulkin who claim pragmatic influences and suggest emotion intertwines with cognition. Some of the fault, as I explained, rests with James. His missteps aside, the lapse remains glaring given that interests obviously overlap with emotions and offer significant insight into affective theories of cognition.

A second main point was that what researchers such as Damasio say about cognition applies to what Gibson says about perception. The entry point again was James's concept of selective interests. The Jamesian notion, in turn, seems a variation of Gibson's theory of affordances, albeit in ways the latter did not fully acknowledge despite citing James as an influence in the opening pages of his 1979 *The Ecological Approach to Visual Perception*. In explicating affordances as valuative, I leaned on Dewey's situational rendering of emotion, also drawing support from Gestalt and experimental psychology. As with emotional-interested underpinnings of cognition, which foster rational thought, grounded in what may colloquially be called "reality," I made the case that affective perception is as much about openings and closures for bodily actions in environments as about subjective states.

In developing my account, I have nudged classical pragmatic ideas a little beyond what their original authors intended. This is inevitably so when putting traditions to work and treating them as living philosophy in the context of more recently evolved theoretical perspectives, research tools and bodies of knowledge. At the same time, I have endeavored to be respectful of pragmatic ideas and believe my approach in fact clarifies their original intention. For example, considering Gibson in the context of pragmatism—a movement to which he owes debts—highlights Dewey's situational rendering of emotions as a statement about fundamental living processes that entail approach and avoidance. Examining

pragmatism in the context of resonant movements unfolding contemporaneously with it likewise serves expository ends, this time by reinforcing the views of James and Dewey. Accordingly, in pushing ideas of mind in new directions, the account offered simultaneously promotes a fuller understanding of pragmatism while underscoring its continued relevance.

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